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SEVENTH ANNUAL MESSAGE

OF

ALEXANDER HENRY,

Mayor of the City of Philadelphia,

WITH THE

ACCOMPANYING DOCUMENTS.

*APRIL 6th, 1865.*

## DEPARTMENT OF SURVEYS.

DEPARTMENT OF SURVEYS,  
*December 31, 1864.* }

Hon. ALEXANDER HENRY,  
*Mayor of Philadelphia.*

SIR: I take pleasure in submitting the usual annual report as to the condition of this Department, with an exhibit of the expenditures for the past year.

The appropriations for the year 1864 have been as follows:

General appropriation, approved Jan. 26, 1864,	\$22,520 00
Special " " Nov. 12, 1864,	
for survey of Delaware front for wharf line,	3,000 00
	<hr/>
	\$25,520 00
	<hr/>

Which has been expended as follows :

Expenses of General Office, - - - -	\$9,659 00
Salaries of District Surveyors, - - - -	6,000 00
New surveys and landmarks, - - - -	4,663 50
Revision of old surveys, - - - -	1,051 00
Balance unexpended to merge, - \$1,146 50	
“ “ carried over, - 3,000 00	
	4,146 50
	\$25,520 00

The District Surveyors have during the past year filed the following plans among the Records of this Department :

No.	Title	Approved by Board.	Confirmed by Court.
194.	Adjustment of grades, 1st Sec., Nineteenth Ward.		
195.	“ “ 2d “ “ “		
196.	“ “ 3d “ “ “		
197.	“ “ 4th “ “ “	1864,	
198.	Lines and grades, 4th “ Germantown,	June 6.	1864.
199.	“ “ “ First Ward,	April 4.	Oct. 22.
200.	“ “ 7th “ “	Jan. 25.	Mar. 22.
201.	“ “ 4th “ “	Aug. 23.	Oct. 22.
202.	“ “ 4th “ Twenty-sixth Ward,	Jan. 25.	Mar. 22.
203.	“ “ 5th “ “ “	Dec. 5.	
204.	“ “ 9th “ Germantown,	June 6.	
185.	“ “ 3d “ “ “	“	
99.	“ “ part of Twenty-sixth Ward,	June 20.	
205.	“ “ 4th Sec., Bristol Town'p,	“	
8.	Revision of grades on Dock street,	July 1.	
46.	“ lines Baltimore avenue,	Sep. 19.	
42.	“ “ Thirty-first street,	Sep. 5.	Oct. 22.

The work for new surveys, or the extension of the City plans beyond the built limits has been continued with energy during the last year, but confined for the most part to the First, Second, and Ninth Districts, where the progress of improvements has required that lines and grades should be established for the benefit of individuals, by enabling them to erect buildings without fear of injury by a change of elevation ; and of the City, by obviating future costs for damages should the lines extended encroach upon improved property.

Since the presentation of the last annual report there has been a change in the system of building sewers. The Act of Assembly approved April 8, 1864, annulled the Act repealing the authority under which the City charged the properties

fronting on sewers a portion of the cost of their construction, since which time there have been a number of sewers constructed taking advantage of the law, thus distributing the expense, where frequently a few were from the force of circumstances required to bear the burden. The following is a list of sewers built, which, under a settled condition of financial affairs, would have yielded a revenue, but have now cost the

City, - - - - -	\$23,164 99
And individuals, - - - - -	6,828 96
<b>Total cost, - - - - -</b>	<b>\$29,993 95</b>

	LOCATION.	Size.	Length.	Cost.
Eighteenth street,	Wallace to Coates,	2' 6"	447	\$1,069 60
Christian	" Twenty-third st. to R. Schuylkill,	4'	2,667 $\frac{1}{2}$	7,796 64
Spruce, Locust, and Forty-first streets,	24th Ward,	4'	1,060	
		3' 6"	772 $\frac{1}{2}$	4,006 55
Wallace street, west from Andress street,		2'	263	888 60
Market	" at Twelfth,	3'	868 $\frac{1}{2}$	1,493 34
Wallace	" Eighteenth to Nineteenth,	2' 6"	411	783 53
Twelfth	" Girard avenue to Thompson,	2' 6"	596	1,835 04
"	" Thompson to Jefferson,	3'	980	2,420 60
"	" Jefferson to Oxford,	2' 6"	525	1,896 00
Brown	" Ridge avenue to Seventeenth,	3'	916	2,575 40
Memphis	" Norris street northward,	2' 6"	498 $\frac{1}{2}$	1,619 75
Vienna	" Belgrade to Memphis,	3'	929 $\frac{1}{2}$	3,117 50
Broad	" at Master, Jefferson, and Oxford sts.,	2' 6"	150	815 00

The following is a list of sewers authorized, some of which are in progress of construction :

Twenty-fifth street,	Green st. to Pennsylvania ave.,	10"
Green	" Twenty-second to Twenty-fourth,	3'
Frankford road,	Allen to Wildey,	3'
Twenty-second st.,	Wood to Callowhill,	3'
Callowhill street,	Twenty-first to Twenty-second,	2' 6"
Tenth	" Girard avenue to Poplar,	2' 6"
Bridge	" Penn'a R. R. to River Schuylkill,	3'
Wallace	" Ridge avenue to Broad street,	3'

And the following is a list of those authorized by the Board of Surveyors to be constructed at individual expense :

Front street,	Girard avenue to Thompson st.,	3'
Hamilton	" Thirteenth to Broad,	2' 6"
Walnut	" Twentieth to Twenty-first,	2' 6"
Lombard	" Fifth to Sixth,	3'

Hurst	street,	Lombard to South,	2' 6''
Ninth	"	Vine southward,	10''
Barnwell	"	Pine to Lombard,	2' 6''
Spruce	"	Front to Little Dock,	3'
Front	"	Spruce to Dock,	3'
Cherry	"	Fifteenth to Kershaw,	2' 6''
Kershaw	"	Cherry to Race,	2' 6''
Montgomery	"	Twenty-third to Woodstock,	3'
Woodstock	"	Montgomery northward,	3'
Pearl	"	Twentieth to Twenty first,	2' 6''
Twenty-first	"	Pearl to Vine,	2' 6''
Marshall	"	York to Dauphin,	2' 6''
Dauphin	"	Marshall to Sixth,	2' 6''
Sixth	"	Dauphin to Diamond,	3'
Medical	"	Tenth street westward,	10''
Broad	"	Walnut to Chestnut,	2' 6''
Palethorp	"	Norris street northward,	8''
Eleventh	"	Nectarine northward,	8''
Amber	"	Cumberland to Sergeant,	3'
Bond	"	Ninth westward,	12''
Thompson	"	Mascher eastward,	12''
Chestnut	"	east from Fifth,	12''
Fourth	"	Walnut street to Willing's alley,	2'
Jones	"	Fifteenth to Sixteenth,	2' 6''
Twelfth	"	Arch to Filbert,	2' 6''
Front and	Coral to	Otis,	3'
Broad	street,	north of Thompson to Oxford,	2' 6''
Brown	"	Fourth to Third,	12''
Whitehall	"	west of Thirteenth,	2' 6''
Race	"	" Eleventh,	10''
Tasker	"	" Seventh,	10''
Barclay	"	east of Seventh,	12''
Market,	"	west of Sixteenth,	2' 6''
Berks	"	Second to west of American,	3' 0''
Oxford	"	Fifth to Mifflin,	8''
Washington, ave.,		Fourth street westward,	12''
Chestnut street,		Hudson's alley and Fourth st., *	12''
Sixteenth,	"	Thompson to Master,	3'
Seventh	"	Reed to Wharton, and on Wharton	
		east,	2' 6''
Hanover	"	Richmond st., to River Delaware,	3'

By the act alluded to we are yet to a certain extent trammelled; for the judgment of the Board of Surveyors cannot be exercised as to the necessity of a sewer for the interest of the City, unless it be a main. The requirements of the Act are that no *branch sewer* shall be built and have its proportion of cost paid for by the residents on its line, unless a majority of the owners fronting upon it may consent or request it to be done. This delays the building of many important branch sewers which are needful for surface drainage, but lie in front of that class of property which the owners will not think requires underground sewer connections. Owing to the high price of materials and labor, it has been necessary for Councils to appropriate for the construction of many of these branch sewers, as the \$1 50 per foot linear charged under the act to the property adjoining has not during the past year covered more than 60 per cent. of the cost. In some instances the parties interested have, on account of Councils declining an extra appropriation, been forced to undertake the construction themselves, by contracting for the work at the limit allowed by law, after going through the usual form of advertising, and thus bearing the extra cost themselves. This arrangement enables them to take advantage of the law, and assess the property its entire length.

Nothing has been done during the past year in the construction of the main sewers noted in the report of 1863, the necessity of which is now greater than then. I allude to the Cohocksink, from Front street to the river, and its auxilliary on Norris street; Federal street emptying into the Schuylkill, and the sewer for the drainage of the southern section of the City, below the prison, with several branches, all of which are minutely described in my last report.

The Pennsylvania avenue and Cohocksink sewers have not been cleaned, as has been repeatedly recommended, and fears may well be entertained, that unless the mud is cleaned out of the Cohocksink and Canal street sewers, which now fills half its area, the result will be a repetition of the floodings so much complained of. This should be done during the winter, and a channel-way cleared out down the creek to low water. The importance of this cleansing I cannot impress too strongly upon Councils.

By building the upper end of this sewer, from Berks to Norris street, on Ninth, a large and valuable area will be opened for

improvement; the increased assessment upon which will more than pay the interest on the cost of the work. This matter has been before Councils, having been examined and reported favorably upon, both by the Board of Surveys and the Committee on Surveys and Regulations.

The sewers across Thompson street, and under the Reading Railroad, near the Spring Garden Water Works, are yet unimproved, and unless these sewers are enlarged, as has been suggested, the grading and paving of the streets within the water shed of stream emptying at the point will throw the drainage so much more rapidly into them that much injury to property may result.

Among the sewers that will be called for at an early day, is that proposed for Broad street, northward from Allegheny avenue, which should be constructed before the improvement of Broad street, which is now so much desired, is commenced. This sewer is upon the head waters of Gunner's Run, and must be about eight feet diameter, and, at present prices, will cost about \$18,000.

There has been no change in the law regulating sewer connections from private property, and the same evils so frequently alluded to in previous reports still exist. A bill was presented to Councils, during the past year, which it was thought would correct them; but owing to the objections made to some of its features, by the Board of Health, it was withdrawn; and as it has opened up a most important question in city hygiene, it will be a subject for a future report; the want of time to make proper investigations alone preventing its presentation before this.

The Bridges over the Schuylkill are in much better condition than at the date of last report, except the Girard avenue, which has had but little attention during the year, and needs a new roadway and painting.

Market Street Bridge has had extensive and important repairs; the southern roadway has been strengthened by the introduction of a larger number of floor beams, with an improved system of lateral bracing, and the plan of laying the railroad track and flooring has been so changed that any repairs can now be performed without interference with travel—the track being entirely independent of the flooring. The use of the new floor beams was not only to strengthen the roadway and render the bridge more stable, but to allow



a widening of the southern footway, which has proved to be most acceptable to the public. This bridge yet requires painting, and a new roof upon the eastern half. The old roof was patched and repaired during 1863, but now should be renewed; but owing to the high price of metallic roofing, it would be better to adopt, as a temporary matter, a cheaper plan, which may be done at but little cost, over and above the value of the old material.

The Penrose Ferry Bridge has for several months during the past year been out of use, owing to the breaking of the main bolster of the draw, and afterwards by the settling of the main permanent span, to such an extent as to call for the interposition of this Department, and require that the bridge be closed to public travel; since that time a new span has been erected, and the draw placed in such working order as to be easily thrown off and on by a single watchman. The old permanent span was light in all its proportions, and had settled upon its arches, which were slowly but surely throwing over the piers; and had not the trusses been injured by a vessel, thus compelling the erection of a new span, most probably the expense of repairs would have been double. The new span is a Howe truss of large proportions, without an arch, as the masonry is not suited for arches. During the coming year the trusses will require adjusting, as the timber seasons, and should be attended to by one familiar with the operation, and then be whitewashed or painted. The guards at the pivot and north draw pier, as asked for by the Tow Boat Company, and which by an agreement with the Schuylkill Navigation Company, the City is called upon to build, have not been erected, and the recommendation of last year is repeated, as a protection to the bridge.

The Wire Bridge itself has not required attention during the year, but it should be painted at the earliest day. The approach from the west is now being placed in good condition, by the erection of side retaining walls, which will allow the street to be raised to grade level of full width and have protecting cells made for the west shore ends of cables. The cost of this work will probably exceed the appropriation made, owing to the difference in the character of foundation from that anticipated, and the consequent increase in size of walls.

The Bridge over the Cohocksink, on Delaware avenue,

which was destroyed in 1863, has been replaced by an Iron Pratt Bridge, and is a substantial structure.

The masonry of the Chestnut Street Bridge is very near completion, and has been ready for the iron superstructure since June last; the only work to do is turning the arches in the western approach, and adding a few feet of elevation to the retaining walls; all of which can be completed in about two months after the opening of spring.

The iron work has been delayed by the necessity of building proper machinery for fitting, which is now in successful operation. The erection will commence as soon as the river is free from ice, and we are enabled to build the necessary frame work upon which the iron work can be placed in position. The contractors, Messrs. Willcox & Whiting, have transferred their interest in the bridge to the "National Iron Armor and Ship Building Company;" and in reply to a note referring to the necessity of its completion, I am advised that they will commence operations at the bridge site on or about the 10th of March; but they have not yet answered my queries as to the probable time of completion, and I have been met by so many disappointments in the prosecution of this work, owing to the peculiarity of the times which commenced with its beginning, that I withhold expressing any opinion as to when it will be open to public use; but I must add that the delays are not peculiar to this structure, as all works of magnitude, now in progress, are retarded by the same causes.

The appropriations made for the bridge, and the expenditures to December 1, 1864, are as follows:

Total appropriation,	-	-	\$317,000 00
Estimates paid, Masonry,	\$247,178	51	
Iron Work,	48,210	00	
Salary,	4,522	50	
Incidentals,	939	58	
		<hr/>	\$300,850 59
Balance of Loan,	-	-	\$16,149 41

There is about \$28,500 worth of work yet to do upon the approaches, and exclusive of advances made upon the contract prices, rendered necessary by the rise in labor and ma-

terials, the total cost of structure will be several thousand dollars less than the estimate presented to Councils at the allotment of the work.

The surveys for establishing a wharf line north of Bridesburg and south of the Point House, are now in progress, and will be advanced by spring, should the ice in the river allow the necessary soundings to be taken from its surface.

The demands for a new bridge at South street, on the Schuylkill, have been so urgent, as to call for plans and estimates therefor by Councils; these are now being prepared; but it has been necessary to wait for the plan of the proposed arrangement of streets upon the Alms-house property before a location for the bridge can be determined upon, and the necessary soundings taken.

This structure will be costly from the fact of the necessity of crossing three lines of railroads overhead, thus giving a safe thoroughfare.

The bridge itself, unless otherwise ordered, must be designed as a draw-bridge; but I earnestly trust that so great an obstacle to the public convenience will not be insisted upon for the benefit of the very few.

The approaches will be very costly, from the great length upon each side of the river, that it is imperative to bridge or wall, to avoid the railroads on the west, and obtain a good gradient on the east.

I would call your attention to the importance of having proper surveys and plans made of the property owned by the City, which plans should be bound in atlas form, and deposited among the City archives in this office; it is very certain that there is much property belonging to the City the ownership of which is not known, and much although known where the lines are not properly recorded.

There are some very old plans of wharf property within the Old City, which are in atlas form, but so many alterations and changes have taken place since their preparation, that although valuable for the boundary lines, their position can hardly be recognized. The expenditure for such work, I believe, would soon be repaid in rents now uncollected.

Respectfully submitted,

**STRICKLAND KNEASS,**

*Chief Engineer and Surveyor.*

## DEPARTMENT OF PUBLIC HIGHWAYS.

OFFICE OF THE CHIEF COMMISSIONER,

S. W. corner of Fifth and Walnut Sts.

PHILADELPHIA, January 13th, 1865.

HON. ALEXANDER HENRY,

*Mayor of Philadelphia.*

DEAR SIR:—In complying with your request, I take pleasure in laying before you a general statement of the operations of this Department for the past year. The receipts have been, as per Statement A, hereto annexed, \$24,503 88, being \$1,940 07 increase over the receipts for the year 1863.

The license due from the West Philadelphia Passenger Railroad Company, amounting to about \$1,000, has not been paid as in former years; the question of its liability to the City being in litigation.

The amount of general appropriation by Ordinances of February 20th and November 21st, 1864, was \$357,625 00, of which \$320,257 13 has been expended, leaving a balance of \$37,357 87 that merged as per Statement B.

The amount of special appropriation during the year, together with the unexpended balances of special appropriations, brought forward from 1863, make \$119,931 02. The amount expended during the year was \$93,564 62; of which \$56,635 37 was paid for deficiencies of 1863, and work contracted for in that year, and partly completed; so that the actual expenditure of special appropriations for the year is \$36,929 25, making the total amount of expenditure during the year, \$357,186 38, exclusive of \$85,257 12 disbursed for the construction of the Chestnut Street Bridge, which is exclusively under the direction of the Chief Engineer and Surveyor, as per Statement C.

Market Street Bridge has been thoroughly repaired by replacing the entire southern roadway and widening the southern footway, and by a general adjustment of the entire

superstructure, at an expense of \$19,199 20, \$3, 404 39 of which was paid by the West Philadelphia Passenger Railway Company. This bridge is now in good condition, and will need no further expense, excepting for painting and probably slight repairs to the roof.

Penrose Ferry Bridge has been put in good condition by a new permanent span in place of the old one removed, and general repair of the draw, at a cost of \$16,325 56. It is now a substantial structure, and will require no further expense for several years, excepting at the approaches.

A number of the smaller bridges have been repaired, but owing to the high prices of labor and material, others that should have been repaired have been left for attention during the present year. The most important of these are the Girard Avenue Bridge, over the Schuylkill river, which will require new roadways; the Girard Avenue Bridge, over Pennsylvania avenue, and the Bridge on Girard avenue, over the Aramingo canal, both of which need early repairs.

The present system of paving streets is objectionable. The authority given by Councils to pave streets directs this Department to contract with the paver having the highest number of signatures on the line of the street to be paved, which, in many cases, are secured by promises to do the work at very low prices. A contract once made, the contractor selects his own time for doing the work, and, in fact, his own mode to secure the largest profit from it; involving the City, in many cases, in large expense for intersections and crossing stone on the streets or portions of streets not required to be paved.

If Councils would pass a general Ordinance, authorizing the Chief Commissioner to contract for streets or portions of streets, (authorized to be paved,) as the wants of the City might seem to require from time to time, to be paid for by assessment bills against the property fronting on the street, I think the work would be more substantially done, and the Department could control the appropriation for intersections and for crossing stone.

The numerous breaks in culverts and inlets requiring immediate attention of the Department, at a season of the year when the Department is out of means to make the necessary repairs to save the City from loss or damage, cause serious annoyance to the Department, in consequence of

Councils not making the appropriation in proper time to enable the Department to perform the duty devolving upon it.

The Passenger Railway Companies having taken charge of many of our principal streets, as they occupy the middle thereof, and have the right of way, necessarily divert all other travel on either side, and their gutters having been paved with brick are fast wearing out; and I am of opinion that those Companies having bound themselves to keep the street in good repair from curb to curb, should, in repairing them, pave the gutters with good substantial stone.

Very respectfully,

W. W. SMEDLEY,  
*Chief Commissioner of Highways.*

### STATEMENT A.

*Receipts of the Department of Highways for the year 1864.*

From January 1st to February 20th, 1864,	\$9,280 40
“ February 20th to December 31st, 1864, viz:	
For Sewer Permits, - - - -	1,590 00
“ Permits for Repaving, - - - -	593 00
“ Sewer Rents, - - - -	5,258 73
“ Dray, Cart, Wagon and Barrow Permits, -	1,298 25
“ Building Permits, - - - -	306 00
“ Vault Permits, - - - -	283 08
“ Hotel, Private and Hackney Coaches and Drivers' Licenses, - - - -	761 00
“ Miscellaneous Receipts, - - - -	2,453 92
“ Passenger Railway Car Licenses, - - - -	2,634 50
“ Omnibus Licenses, - - - -	15 00
“ Railroad Turn-outs, - - - -	30 00
	<hr/>
	\$24,503 88

## STATEMENT B.

*Appropriations to the Department of Highways for 1864.*

Item.		Amount Appropriated.	Expended.	Merging.
1	Salaries of Officers.....	\$17,150 00	\$16,196 33	\$953 67
2	Paving Intersections.....	15,000 00	10,150 17	4,849 83
3	Repairing Streets.....	78,000 00	77,997 84	2 16
4	Repaving Streets.....	8,500 00	5,780 00	2,719 50
5	Repaving Streets over Water Pipe.....	6,500 00	5,494 82	1,005 18
6	Gutter, Crossing and Tram- way Stone.....	17,000 00	16,952 20	47 80
7	Repairing Roads and Un- paved Streets.....	60,000 00	59,996 05	3 95
8	Grading Streets and Roads,	17,000 00	11,896 26	5,603 74
9	Repairing and Building Bridges.....	27,000 00	26,862 10	137 90
10	Repairing Culverts and In- lets.....	40,000 00	40,000 00	
11	For Improving the Ap- proaches at the west end of the Wire Bridge.....	16,000 00	4,435 08	11,564 92
12	Repairing City Railroad...	3,000 00	2,875 98	124 02
13	Repairing Pumps and Wells,	1,200 00	1,161 00	39 00
14	Opening Streets.....	200 00	114 50	85 50
15	Printing, Advertising and Stationery .....	2,700 00	2,700 00	
16	Insurance on Bridges.....	1,600 00	1,500 00	100 00
17	For Rent of Offices, Yard Expenses, and the Pay- ment of Five Watchmen..	4,000 00	3,944 53	55 47
18	Incidental Expenses.....	1,800 00	1,800 00	
19	Sign Boards for Street Names.....	200 00	199 80	20
20	Repaving and Repairing Railroad Streets.....	3,200 00	1,552 33	1,647 67
21	Salaries of Supervisors.....	19,575 00	19,525 00	50 00
22	Construction of Branch Cul- verts.....	15,000 00	9,622 64	5,377 36
23	Paving and Repairing Foot ways.....	2,000 00		2,000 00
24	Repairing Delaware River Banks.....	1,000 00		1,000 00
	Total of General Appropria- tion.....	\$357,625 00	\$320,257 13	\$37,367 87

## STATEMENT C.

*Special Appropriations.*

	Amount Appropriated.	Expended.	Balance.
Total of Special Appropriations made during the year 1864.....	\$93,219 92	\$77,283 71	\$15,936 21
Total of Special Appropriations made during the year 1863, and whose balances have been brought forward,.....	26,711 10	16,280 91	10,430 19
Grand Total of Special Appropria- tions.....	\$119,931 02	\$93,564 62	\$26,366 40
Chestnut Street Bridge Loan, bal- ance brought forward.....	\$103,923 23	\$85,257 12	\$18,666 11

## DEPARTMENT OF STREET CLEANSING.

PHILADELPHIA, January, 1865.

HON. ALEXANDER HENRY,

*Mayor of Philadelphia.*

SIR:—I have the honor to present the following statement of the affairs and condition of this Department from its organization on the 1st of March 1864, to the 31st day of December last.

The several items of appropriation made to this Department for the year 1864, were as follows, to wit:

Item 1. For salaries of Chief Inspector and			
Clerk, - - - - -	-	-	\$2,500 00
Expended, - - - - -	-	-	2,083 33
Balance, - - - - -	-	-	<u>\$416 67</u>



Item 2. For rent of office and purchase of furniture,	-	-	-	\$1,050 00
Expended,	-	-	-	1,023 59
Balance,	-	-	-	<u>\$26 41</u>
Item 3. For light and fuel for office,	-	-	-	\$100 00
Expended,	-	-	-	50 00
Balance,	-	-	-	<u>\$50 00</u>
Item 4. For stationary, books, printing and incidentals,	-	-	-	\$1,300 00
Expended,	-	-	-	1,260 60
Balance,	-	-	-	<u>\$39 40</u>
Item 5. For purchase and repair of tools &c.,	-	-	-	\$2,250 00
Expended,	-	-	-	1,783 66
Balance,	-	-	-	<u>\$466 34</u>
Item 6. For rental of wharves, and dumping ground,	-	-	-	\$1,800 00
Expended,	-	-	-	757 56
Balance,	-	-	-	<u>\$1,042 44</u>
Item 7. For pay of laborers for cleaning streets,	-	-	-	\$33,900 00
Expended	-	-	-	33,631 61
Balance,	-	-	-	<u>\$268 39</u>
Item 8. For hire of horses, carts and drivers,	-	-	-	\$75,100 00
Expended,	-	-	-	74,270 75
Balance,	-	-	-	<u>\$829 25</u>
Total appropriation,	-	-	-	\$118,000 00
Expended,	-	-	-	114,861 10
Balance,	-	-	-	<u>\$3,138 90</u>

The appropriation of February 15, 1864, was,	\$100,000 00
“ “ “ October 31, “ “	18,000 00
	<u>\$118,000 00</u>

The above items of appropriation are not in amount as originally passed by Councils, but in accordance with the transfers made during the year to equalize said appropriations.

Amount received and paid to the City Treasurer.

For street dirt, - - -	\$7,280 88
For ashes, - - -	2,818 92
Total, - - -	<u>\$10,099 80</u>

Which, deducting the above receipts from the amount paid out, makes the entire cost of cleaning the streets and removing the ashes, from the 1st day of March to the 31st day of December 1864, including expenses of organizing the Department, - - - - - \$104,761 30

Number of loads of dirt and ashes removed from the 1st day of March to the 31st day of December, 1864.

	Loads of dirt.	Loads of ashes.	Total loads.
First District, First, Second and Twenty-sixth Wards:	12,249	4,698	16,947
Second District, Third and Fourth Wards:	7,543	5,892	13,435
Third District, Fifth Ward:	4,840	3,279	8,119
Fourth District, Sixth Ward:	3,089	6,591	9,680
Fifth District, Seventh and Eighth Wards:	7,170	7,775	14,945
Amounts carried forward,	<u>34,891</u>	<u>28,235</u>	<u>63,126.</u>

	Loads of dirt.	Loads of ashes.	Total loads.
Amount brought forward,	34,891	28,235	63,125
Sixth District, Ninth and Tenth Wards :	3,726	8,819	12,545
Seventh District, Eleventh Twelfth Wards :	3,567	6,838	10,405
Eighth District, Thirteenth and Fourteenth Wards :	2,623	9,974	12,597
Ninth District, Fifteenth Ward :	6,011	4,100	10,111
Tenth District, Sixteenth and Seventeenth Wards :	4,597	7,058	11,655
Eleventh District, Eighteenth Nineteenth and Twenty- fifth Wards :	7,939	2,638	10,577
Twelfth District, Twentieth Ward :	5,847	4,012	9,859
Fifteenth District, Twenty- third Ward,	912	00	912
Sixteenth District, Twenty- fourth Ward :	2,017	330	2,347
	<u>72,130</u>	<u>72,004</u>	<u>144,134</u>

## COST OF LABOR AND CART HIRE.

	Labor.	Cart Hire.	Total.
First District, First, Second & Twenty- sixth Wards—	\$3,778 65	\$8,828 00	\$12,606 65
Second District, Third & Fourth Wards—	3,339 22	8,167 50	11,506 72
Third District, Fifth Ward—	2,423 74	4,976 25	7,399 99
Fourth District, Sixth Ward—	2,214 51	4,869 50	7,084 01
Fifth District, Seventh & Eighth Wards—	3,319 39	8,482 25	11,801 64
Sixth District, Ninth & Tenth Wards—	2,683 19	7,931 25	10,614 44
Seventh District, Eleventh & Twelfth Wards—	2,119 69	5,589 00	7,708 69
Eighth District, Thir- teenth & Fourteenth Wards—	2,652 53	7,299 50	9,952 03
Ninth District, Fif- teenth Ward—	2,177 10	3,904 50	6,081 60
Am'ts carried forw'd,	\$24,708 02	\$60,047 75	\$84,756 77

	Labor.	Cart hire.	Total.
Amt's brought forw'd, Tenth District, Six- teenth & Seven- teenth Wards—	\$24,708 02	\$60,047 75	\$85,355 77
	2,654 00	5,775 00	8,429 00
Eleventh District, Eighteenth & Nine- teenth & Twenty-fifth Wards—	2,983 77	4,134 75	7,118 52
Twelfth District, Twentieth Ward—	1,761 03	3,418 50	5,179 53
Fifteenth District, Twenty-third Ward—	244 19	156 00	400 19
Sixteenth District, Twenty-fourth Ward—	495 45	738 75	1,234 20
	<u>32,846 46</u>		
Labor on dumping ground, wharves, &c.	785 15		
Total,	<u>\$33,631 61</u>	<u>\$74,270 75</u>	<u>\$107,902 36</u>

Number of laborers and carts employed in the several Districts, and cost per load for sweeping the streets and removing the dirt therefrom.

	Laborers.	Cost per load for sweeping.	Carts.	Cost per load for removing dirt.
First District, First, Second & Twenty- sixth Wards—	12	30 cts.	12 carts.	53 cts.
Second District, Third & Fourth Wards—	10	44	12	60
Amt's carried forward,	<u>22</u>		<u>24</u>	

	Laborers.	Cost per load for sweeping.	Carts.	Cost per load for removing dirt.
Amt's brought forward, Third District, Fifth Ward—	22		24	
	8	50 cts.	6	61 cts.
Fourth District, Sixth Ward—	8	71	7	50
Fifth District, Seventh & Eighth Wards—	12	46	12	55
Sixth District, Ninth & Tenth Wards—	10	72	10	63
Seventh District, Eleventh & Twelfth Wards—	8	59	8	53
Eighth District, Thir- teenth & Fourteenth Wards—	10	101	11	57
Ninth District, Fif- teenth Ward—	8	36	6	38
Tenth District, Six- teenth & Seventeenth Wards—	9	57	8	49
Eleventh District, Eighteenth, Nineteenth & Twenty-fifth Wards—	12	37	6	39
Amt's carried forw'd,	<u>107</u>		<u>98</u>	

	Laborers.	Cost per load for sweeping.	Carts.	Cost per load for removing dirt.
Amt's brought forw'd	107		98	
Twelfth District, Twentieth Ward—	7	30 cts.	4	34 cts.
Fifteenth District, Twenty-third Ward—	3	25	1	17
Sixteenth District, Twenty-fourth Ward—	3	24	2	31
	<u>120</u>		<u>105</u>	

Average number of loads swept per day by each laborer 3; wages \$1 35 per day. Average cost per load for sweeping 45 cents.

Average number of loads removed per day by each cart employed 6; cart hire \$3 00 per day. Average cost per load for carting 51 cents.

From the date of the organization of this Department, March 1, 1864, until the 31st day of December following, a period of ten months, *seventy-two thousand and four* loads of ashes were removed.

In consequence of the more tedious work of collecting and loading ashes, and the greater distance they have to be conveyed to reach the dumping grounds, the cost per load for removing them is greater than for removing the street dirt, being about fifty-seven cents, which makes the amount expended for that service alone during the last year, forty-one thousand and forty-two dollars and twenty-eight cents.

The ordinance under which this Department is organized provides for the removal of ashes from workshops and other places where large quantities are daily made. The delay caused by the removal of these ashes, which amount frequently to cart loads in a day, and placed there at irregular periods, prevents at times the prompt removal of those put in

front of the residences of citizens on the days appointed by the Department.

This delay is the cause of frequent complaint. For this reason, and for the better one, that the public should no more be compelled to remove the ashes from a factory or foundry than the shavings from a carpenter's shop or the rubbish from a building after the contractor has finished his work, I would suggest the repeal of so much of the ordinance as requires the removal of ashes from establishments of this kind, and the adoption of an amendment to the effect, that this Department shall not be required to remove them from other than private residences, and then only when placed on the footway in front of the premises, in vessels convenient for loading, and not weighing with the contents more than forty pounds.

The ordinance further requires that the ashes shall be removed in covered carts. The City owning no carts, the Department has to depend upon hiring them. It has been found impossible to get them with covers, or those that are in any way calculated to do the work properly and without annoyance to the citizens. The owners of carts are unwilling to incur the expense of covers, as they are liable at any time for cause or want of employment, to be discharged; in that event their covered carts would be unfit for any other kind of work.

In order to enable the Department to comply with this wise provision of the ordinance, I would recommend that Councils provide carts properly constructed for this service, and for the removal of street dirt, kitchen garbage, and offal. There would be economy in the use of carts of this kind, as a much greater quantity could be taken at a load, and the cause of frequent complaint entirely removed.

Twenty-eight thousand nine hundred and forty-three loads of ashes were sold during the past year, for the average price of nine cents per load. This shows that forty-three thousand sixty-one loads were, for want of purchasers or suitable dumping grounds, thrown away or entirely lost to the City.

In order that the City may have the benefit of these ashes, I would suggest that the grading of streets, when ordered by Councils, and the filling of ponds and low lands, when directed by the Board of Health, be given to this Department.

The City has on the Alms-house grounds a river front of several thousand feet, which to low water mark contains many



acres of land, now entirely useless. This land, if wharfed, could be made the receptacle for years to come of all the ashes taken up in the southwestern part of the City.

The completion of the Chestnut street bridge will render this a convenient dumping ground, and by its close proximity to the work make a great saving to the Department in the cost of carting.

The union of all the principal railroads connecting this City with the north, south, east, and west, at or near this point, with the improvements now in progress, or those contemplated in this locality, justifies the belief that these wharves and landings will be required long before the work here proposed could be completed.

There were seventy-two thousand, one hundred and thirty loads of dirt removed from the streets during the ten months of last year, ending December 31. Of which amounts, twenty-nine thousand six hundred and eighty-eight were sold, the average price obtained for it being a fraction over twenty-four cents per load. It is estimated that there were on the dumping grounds on the 31st day of December, four thousand loads, which shows that thirty-eight thousand four hundred and forty loads being unsaleable, were thrown away.

When this Department commenced operations, the streets had not been cleansed for a period of nearly eight months. There was an accumulation of mud, filth, ashes, and other refuse matter, such as was never before witnessed in Philadelphia. In some of the smaller streets in the lower part of the City, hundreds of cartloads of this disease-engendering filth were removed from a single square. It was no unusual thing to find in the larger and more frequented thoroughfares and business streets piles of dirt, ashes, and filth, containing twenty or thirty cart loads.

The greater part of the dirt taken up in March, April, and May, being mixed with ashes, was unsaleable, and was thrown away, or received by the purchaser as half loads only. So very offensive was some of this stuff that at times great difficulty was experienced in finding places to deposit it.

Seventy-four thousand two hundred and seventy dollars were expended for cart hire during the first ten months of the existence of this Department.

With carts properly constructed for this service, and placed in the care of sober, industrious men, under the faithful su-

pervision of the officers detailed by the Mayor for that purpose, this work could have been done for a much less sum.

The Department is compelled at times, when there is full employment on other work for carters, to take those that have neither horses or carts in any way fitted for the business.

It frequently occurs that the carters, finding employment more congenial or profitable elsewhere, leave without giving notice of their intention to do so; in this case the ashes or dirt, as the case may be, remains on the street for days, or until another carter can be employed to fill the vacancy, the Department meanwhile receiving the censure of the public for this seeming neglect of duty.

After the experience of the past year, I am convinced that the work of cleansing the streets can never be done promptly or satisfactorily, and with due regard to economy, with carts temporarily employed for that purpose.

The cost of labor in cleaning the streets and inlets was thirty-three thousand six hundred dollars, and for purchasing and repairing tools one thousand seven hundred dollars, making a total of thirty-five thousand three hundred and eighty-three dollars.

With the view to lessen this expense, experiments were made during the summer with the sweeping machine invented by Critcherson, of Boston. The result of these trials, which were continued for several days upon some of our roughest streets, was very satisfactory, as far as its capability to do the work is concerned. There was not sufficient time to test the economy of its use, Councils having made no appropriation to pay the expense of employing machinery upon the streets.

Those who witnessed the working of this machine were convinced of its superiority over hand sweeping, as it performed the work thoroughly and expeditiously.

Councils having in the appropriation for this year included an item for the employment of machinery in cleaning the streets, a further trial of Critcherson's machine will be made, in order to test its economy over hand labor, as soon as the condition of the streets will permit.

The greater portion of the dirt taken from the streets in the outer Wards, being clay or loam carried there by the wheels of the vehicles from the adjacent roads and unpaved streets, is unfit for manure, and of course unsaleable.

The removal of the gravel spread upon the streets by con-

tractors and railroad companies has been a heavy expense to this Department. I would recommend that Councils pass an ordinance requiring parties placing gravel upon the streets to remove it at their own cost when notified by the Mayor or Chief Inspector of Streets.

Much difficulty has been experienced in keeping the inlets to the sewers properly cleansed and free from obstructions. They are frequently out of repair, and so filled with the falling of the bricks of which they are constructed, or with the rubbish washed from the streets that they cannot be cleansed without removing some of the masonry. In this case it is necessary to notify the Commissioner of Highways, whose duty it then is to examine the place complained of, and, if he thinks it necessary, send men to make the required repairs. There is necessarily some delay in this routine, and meanwhile the citizens are suffering a great annoyance, and the property in the vicinity liable to damage from overflow.

In order to remove this evil, I would suggest that all repairs to inlets and sewers should be placed under the Chief Inspector of Streets.

When it is remembered that on the first day of March, 1864, the time the Chief Inspector and those delegated to assist him entered upon their duties, there was no kind of organization for cleansing the streets, no laborers, carts, tools, or implements with which to begin operations; that all these had to be procured, and forces organized for the various police districts, and that there were more than three hundred miles of paved streets, with the accumulated mud and filth of eight months upon them to be cleansed, that those to whom this duty had been assigned, were inexperienced, that time was required to establish system and bring order out of confusion, some degree of allowance will be made, if the Department has not fully realized the expectations of the public.

I acknowledge myself under deep obligations to your Honor for the advice and assistance you have at all times so kindly rendered me, in organizing and conducting this Department.

I remain yours,

Very truly,

MAHLON H. DICKINSON,

*Chief Inspector of Streets.*