









City Document.-No. 11.

REPORT

OF A

JOINT SPECIAL COMMITTEE

ON

SEWERAGE.



ROXBURY: L. B. & O. E. WESTON, PRINTERS, GUILD ROW. 1858.

CITY OF ROXBURY.

IN COMMON COUNCIL, JAN. 25, 1858.

ORDERED, That so much of the address of his Honor the Mayor as relates to Sewerage, be referred to a Joint Special Committee.

Committee on the part of the Council — Messrs. Ryerson, Batchelder and Mayall.

IN COMMON COUNCIL, Feb. 1, 1858.

Passed and sent up for concurrence.

FRANKLIN WILLIAMS, Clerk.

IN BOARD OF ALDERMEN, Feb. 1, 1858. Concurred, and the MAYOR and Ald. LEWIS joined.

JOSEPH W. TUCKER, City Clerk.

IN BOARD OF ALDERMEN, Feb. 8, 1858.

ORDERED, That the JOINT SPECIAL COMMITTEE ON SEWERAGE be and they hereby are authorized to employ an Engineer, to cause levels taken and plans made in furtherance of the duties enjoined on them.

Sent down for concurrence.

JOSEPH W. TUCKER, City Clerk.

IN COMMON COUNCIL, Feb. 8, 1858.

Concurred.

FRANKLIN WILLIAMS, Clerk.

IN BOARD OF ALDERMEN, Oct. 25, 1858.

THE Report of the JOINT SPECIAL COMMITTEE ON SEWERAGE was read, laid on the table, and six hundred copies ordered to be printed for the use of the City Council.

JOSEPH W. TUCKER, City Clerk.

City of Roxbury.

IN BOARD OF ALDERMEN, October 25, 1858.

The Special Joint Committee to whom was referred the Orders, dated January 25, and Feb. 8, relating to the subject of Sewerage, and authorizing the Committee to employ an Engineer to take levels, and make plans, in furtherance of the duties enjoined upon them, have attended to their duty, and respectfully ask leave to

REPORT:

Your Committee, aware of the importance to the City of Roxbury, of the establishment of a proper and well arranged general system of sewerage, the want of which is felt daily by all our citizens. believed that their first duty would be to cause levels to be taken of the most important streets by an Engineer, and their relative heights above tide water determined with mathematical accuracy: also the distances measured from certain points to the most expedient outlets: and these facts and figures noted and marked on plans, which would give on inspection, the information which might be required for the prosecution of the work. Accordingly, Mr. T. B. Moses has been engaged from time to time in ascertaining, by measurement, the various heights and distances, and executing the plans for the same, - which accompany this Report. There appear to be three important natural channels for drainage

and sewerage from the City of Roxbury — viz: Muddy Brook, Smelt Brook, and Stony Brook.

Muddy Brook forms the western boundary of the City, and when that part of the City, including a portion of Washington Street, Heath Street, Francis Street, and the villages in the neighborhood of Longwood depot, increase in population, the value of this brook as an outlet for drainage and sewerage will be inestimable.

Stony Brook now drains a large tract of the City, forming the valley between the Highlands on the East, and Parker's Hill on the West. After it crosses the highway at the junction of Washington and Tremont Streets, it passes through a part of the City, which is densely populated-and along its margin are situated manufacturing establishments of various kinds. This brook crosses the "Stony Brook Lands" in a large stone culvert built by the City, and empties into what may be called an arm, or lagoon, of the full basin, westerly of Tremont Street. The expense of constructing a stone culvert, arched with stone, of sufficient size to carry off all the water at all times, with the right of the City, from the abuttors, to use it, or allow it to be used as a Common Sewer - and extending from Washington Street to the Culvert on the Stony Brook Lands, already built, would not be large, compared with the many advantages the City would derive from such an undertaking. A considerable portion of this expense should be borne by the abuttors and the manufacturing establishments along its borders, which are now dependent on this brook as the only means for carrying off their impurities.

Into the Culvert, through which Stony Brook crosses Tremont Street, a Common Sewer three feet by two in diameter, may be carried along Tremont Street from Heath Place on the one side, and from Milford Place on the other — and thus furnish an efficient channel for sewerage, not only for that considerable portion of Tremont Street, but for streets and avenues leading into it. North of Milford Place, it will doubtless be found expedient to carry a similar Sewer along the street to enter the canal at the Boston boundary line.

If any legal objection to the above arrangements should be made and sustained, which your Committee think hardly possible, on the part of the owners of the low lands and marshes, westerly of Tremont Street, there will still remain the mode of sewerage, pointed out by a Committee of the City Government in 1852, viz: to construct a large Sewer commencing at Culvert Street, and extending along Orange Street into Cabot Street, thence across the marshes easterly to Washington Street, and into the South Bay, into which a part, or perhaps the whole of Stony Brook may be turned. This undertaking, however, would be attended with serious disadvantages. The inclination of the Sewer would be only 1 1-4 inches in a hundred feet: if constructed beneath a street, across the "marshes," it would in all likelihood require to be built on piles, and the work would be prosecuted at a very great expense. the distance being about 5550 feet.

Smelt Brook, takes it rise in May's Pond, near the junction of Quiney and Warren Streets; traverses and drains the low lands, belonging to the Roxbury Land Company; crosses Walnut Street near Dale Street, and runs through the valley between the Catholic Church and Shawmut Avenue, entering said Avenue from Circuit Street. A culvert constructed by the City conveys the water of this stream from Circuit Street along Shawmut Avenue to Washington Street, where it enters the "Sumner lot"—thence crossing Vernon Street, and traversing and irrigating several gardens, it enters the premises of Hon. Linus B. Comins, and running through the extent of marshes between Mr. Comins's estate and the Boston line, enters the Creek, which is the boundary between Boston and Roxbury, and is connected with the full basin of the Mill Dam Corporation.

If an arrangement can be made with the owners of land through which this brook passes, by which it can be used as a Common Sewer, as well as a means of drainage of surface water, it will serve as an important outlet for the sewerage of a populous district, embracing all the streets bordering on the valley through which it passes, and that portion of Washington Street extending from Eliot Square to the Boston boundary line. Or if the consent of the abuttors can be obtained, and the brook be partially, or at certain times only, diverted from its present course, and carried down Washington street, thence through Hunneman Street, or Eustis Street, to the Canal in the South Bay, it will serve as a scourer to an important outlet for drainage, and will be of much value. If neither of these plans should prove practicable, it will be seen that Dudley Street and the streets which lead into it, can be drained by a trunk sewer extending from Eliot Square to Guild Row, thence through Washington Street, and Eustis, or Hunneman Streets. Or if circumstances should render it more expedient, it may be carried through the whole of Dudley Street, and connected with a large Sewer, which it may be advisable to construct immediately, for draining that portion of the City in the neighborhood of, and including, Mount Pleasant.

The City is now proprietor of a parcel of Land on the Point, bordering on the Canal, and also of the City Dock, which is well located as an outlet for a Common Sewer; and a large Sewer can be easily constructed through a gravelly and sandy soil, with a solid foundation, leading from the corner of Eustis and Dudley Streets through Davis Street to the City Dock; and into this Sewer a brook, which now enters the Williams and Sumner estate at the corner of Dearborn and Eustis Streets, can probably be turned, if expedient, which may prove of much advantage as a scourer. This Sewer, with connecting branches, can drain all Mount Pleasant, a large portion of Eustis Street, a part of Warren Street, Zeigler Street, Mall Street, and, as already stated, the whole of Dudley Street, if considered desirable.

The plans accompanying this Report give the heights of many of the principal streets, (through which it is desirable that Sewers should be located,) above the level of the surface of the City Dock, which is 2.38 feet above mean low water mark. They will be found valuable for reference whenever the question of Sewerage is brought before the City Government.

It will be seen by these plans, that the height

of Eliot Square, above the City Dock,	71.97 ft.
Post Office,	30.65
Corner of Elm and Dudley Streets,	25.16
Corner of Washington and Eustis Streets,	21.61
Corner of Washington and Webster Streets, .	18.10
Corner of Shawmut Avenue and Vernon Street,	
Bed of Stony Brook at Culvert near Culvert St.	6.27

Profile plans are given of the route from the Post Office through Washington Street to Hunneman Street; thence through Hunneman Street and Davis Street to the City Dock. Also from the corner of Eustis and East Streets, through East Street, to the City Dock. Also from the Post Office, through Dudley Street, to Elm Street; thence through Dearborn and Davis Streets to the City Dock. A profile plan is also given of Tremont Street, showing that an efficient Common Sewer for that street, and the streets adjoining, entering into the Culvert which crosses the street at Stony Brook, and into the Canal at the boundary line, will be attended with no difficulty beyond the expense.

Your Committee, after taking into consideration the foregoing circumstances and facts, would respectfully recommend that some decided action be taken, and the work of Sewerage, according to some established system, commenced as soon as practicable. For obvious reasons, the outlets must first be secured, and the work there begun. They would recommend, as an early step, that a Common Sewer be constructed of an oval form; horizontal diameter $3\frac{1}{2}$ feet; vertical diameter 4 feet; built of brick laid in cement, and reaching from the corner of Elm, Dudley, and Eustis streets, through Davis Street to the City Dock - a distance of 2.346 feet: with an inclination from a level of 3 inches to a foot, or greater if required; and which will, probably, cost from 12 to 14,000 dollars, - a just proportion of which expense should be assessed upon the abuttors, in accordance with the provisions of the Act of 1841, p. 196 of Supplement of Revised Statutes. When this work is accomplished, an outlet will be established for Sewers and Drains, which will be of manifold advantage to different populous sections of the City, as has already been stated.

Your Committee would also recommend, that arrangements be entered into, as soon as practicable, with the abuttors on Stony Brook, by which that portion of it between Waitt's Mills and the Culvert built by the City, or a part of the same, may be walled up, covered, and used as a Common Sewer. This, as has been shown, will prove of great advantage to the public; and in this way an intolerable nuisance, which has existed for years, and acted as a barrier to the improvement of estates in that section of the City, will be removed.

Thus two valuable outlets will be secured; and when

the work is judiciously commenced, it will, beyond a doubt, be steadily prosecuted, until a good and sufficient system of Sewerage is established over the City.

Your Committee would further recommend, that the owners of land through which Smelt Brook passes, should be consulted in relation to the use of that brook as a Common Sewer, as soon as circumstances may render action necessary. And if no satisfactory arrangements can be made, by which it can be so used, those portions of the City which would be benefitted by such arrangements, can be drained by the outlets through Stony Brook or Davis Street, as has already been suggested.

Your Committee are not prepared to designate any definite plan for the drainage of the low lands in Roxbury, situated in the neighborhood of Fellows Street, as that subject, in consequence of the action of the Board of Aldermen of Roxbury last year, has deeply engaged the attention of the City Government of Boston the present year, and it is manifest that a joint action and co-operation of both Governments, if that can take place, will be more efficient than the action of either Government separately. A system is suggested by the City Government of Boston. to drain those low lands by a Common Sewer leading from Eustis to Northampton Street, through Plymouth Street. It may be that this mode of drainage will be approved by the City Government of Roxbury, after due examination and inquiry by the Committee having that matter in charge, and that immediate action may be determined on, which seems to be required by the exigency of the case. A Sewer can be constructed to remove the nuisance in that quarter without any alteration in the system of drainage suggested in this Report.

The season is now advanced, and the Municipal year is drawing to a close, therefore it may not be advisable to take any definite action in relation to the above matters at the present time, other than to express a decided opinion that the work should be commenced and carried forward without further delay, and your Committee would therefore recommend the adoption of the accompanying Resolve.

> JOHN S. SLEEPER, GEORGE LEWIS, ALBERT BATCHELDER, EBEN. RYERSON, THOS. J. MAYALL,

CITY OF ROXBURY.

IN BOARD OF ALDERMEN, Oct. 25, 1858.

Resolved, That the interests of the City require that a sum of money, of not less than Ten Thousand Dollars, be annually appropriated by the City Council, after the present year, and expended for the construction of Common Sewers, until a regular system of Sewerage shall be established and carried into effect, through the principal public streets. .

:

•









