

S. Paul. 1873.

An Abundant Supply of Pure and Wholesome Water.

TO THE EDITOR OF THE NEWS:— Permit me the use of your columns to point out a few bearings of this public question; it is by far the most important which has ever been placed before the people of this fair city for their decision, and although the question is not a new one, it has really been brought before our eyes in an apparently practical way, by the report of Mr. Bishop, only within twelve or fourteen days.

I wish to ask my fellow citizens how practical is this report—; is it sufficiently so in all cardinal points to warrant their hasty and snap action in making an expenditure of six hundred thousand dollars as a corporate body—; and before this expenditure can be utilized by individuals, will it not require a large expenditure between the middle of the street and the service faucets in every dwelling?

Have we yet before us, any reasonably accurate estimated lump of the outlay, the municipality must make for the sewers attendant upon the distribution pipes, which must go with them everywhere, else the introduction of plenty of water can hardly benefit the general health of this attractive city?

Has any plan or suggestion for the outlet of such sewers yet been duly considered and estimated, which shall ensure the removal of the offensive matters from the windward city front, and prevent their clogging our wharves and harbor, where the water has not grown any deeper in the memory of man?

I confess I have no opinion on these subjects, for I am in utter ignorance upon all the points above mentioned; possibly many of my neighbors may be better informed, yet I doubt their proper knowledge of them.

The full and precise report of Professor Walter N. Hill, a most able chemist, upon the analysis of the waters, perfectly establishes the unwholesome nature of some of the wells in crowded localities, and the sufficient purity of Green End water in the sample analyzed. His report is dated May 30th, and allowing time for his labor, we may suppose the sample was taken near the end of April, when after the close of winter the springs and streams are fullest, and thus

with a larger proportion of water, the suspended and dissolved impurities, especially of an organic character. Mr. Hill was not requested to give the result of average purity at different seasons of the year.

Is it not prudent, before we force the council to expend more than half a million of dollars, that we shall know the average of what we are to get? Do not think me disrespectful, if I here quote Artemas Ward, who said, at a boarding house, he always ate hash, because he then knew what he was eating!

Now let us examine the report of Mr. Bishop, whose ability and experience I have no intention to question, for I believe he is entitled to the highest respect. Mr. Bishop tells us the area of the water shed, and I have no doubt that with equal accuracy he gives us a yearly rainfall of forty-two inches upon it. Besides this, he says on page 4— "In a district like Newport, underlaid by retentive impermeable clay the surface will carry off much more water in its streams, allowing less to sink into the ground, * * *." Merely noting that this remark, if correctly applied to our locality, has a very important bearing upon common and artesian wells; I next desire to call attention to the vital fact, that it is upon this opinion, as to the "retentive clay," that our engineer bases his estimate that Green End can yield the supply calculated by him. He may have bored the ground and satisfied himself that his opinion is founded in fact;— while I, in the habit of shooting over that region in spring and autumn, since my youth, have wondered at the general dry and bibulous character of most of the surface, except just in the small swamps it contains. *

In fact from Wrentham, southward to the sea, including Newport, lies the only coal field known in the United States, east of Penn. It is thus a region without analogy in all New England. Just here, it is a series of trough like structures, of tilted and laminated slate rock, very much separated in its seams, with many turned up and open edges exposed; often full of faults and cross fractures, and pinched in many places.

into confusion like a troubled sea. Water which reaches this rock permeates it freely in various directions, I have seldom seen it covered with a retentive impermeable clay, except in rare and very narrow limits. Lying upon the rock we often have a hard pan of stony and sandy material, without much clay, so that it is not decidedly retentive of water, but generally allows the wells and springs to rise very quickly after heavy rains. Many wise men think the salubrity of our neighborhood is ensured by this remarkable surface drainage. For these reasons it seems peculiarly unsafe, to act upon general analogies, while no special local measurements of surface water, or investigation of the actual bottom, have been made to determine the condition of the watershed and the actual supply it will surely give.

The best engineer in such a coal field, might find himself sadly at fault without systematically proving the surface.

Before we compel our Council to spend more than half a million of dollars upon a project, ought we not to be sure of what we are about? Give an affirmative vote and the Council cannot help spending the money. Why force so important a matter so fast and half blindfold, beyond and out of the power of the tax-payers! The responsibility rests wholly with the tax-payers, for Mr. Bishop distinctly tells us the grounds of his expecting abundance of water. Neither Mr. Bishop nor Mr. Hill, both competent authorities, have yet told us anything about the pure and

wholesome character of water (the average result in large part, as Mr. Bishop warns us, of surface wash during the entire year), when stored in the best reservoir proposed in the end of Easton's pond. They have not told us their opinion that such water would not be in every sense of the word stagnant pond water digesting or festering upon all the impurities brought down during the whole time it lies upon the undredged dirty bottom of that pond. It is not a pure lake with a silver sand for its bottom.

I do not wish to throw difficulties in the way of a reasonably perfect plan, but the one submitted with the highest recommendation for our final approval, seems in its very words and methods to be imperfect, and to leave open perhaps all three of the vital questions, abundance, purity and wholesomeness.

Let us be sure we are right, and then go ahead! Do not let us jump out of the frying-pan into the fire. Newport is still prosperous and free of debt, and it is today the most healthy city in the world. In proportion to its population I firmly believe it has more old people, and raises more of the children born in it, than any other city.

In conclusion let us not feel desperate about securing, with due deliberation, a supply of water adequate to all probable emergencies.

Very respectfully yours.

SAMUEL POWELL.

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