

*Water for our city.*—We observe, and we rejoice as we observe, that the public attention is at length seriously engaged in the highly interesting project of furnishing, without unnecessary delay, this great city with an adequate supply of good and wholesome water; and that the legislature have afforded every practicable facility towards accomplishing so desirable an end; one so manifestly contributory to our daily comfort and convenience, but what is more, so conducive to health itself, the greatest of earthly blessings. By this morning's mail, we have received from a former and highly esteemed correspondent, a letter pregnant with what we consider so very valuable and so very interesting information on this subject, and written in so easy and conspicuous a manner, that, although we are told it was not intended for publication, but only to furnish facts for an editorial article, we cannot reconcile it with our sense of duty to our fellow-citizens, to withhold it from their perusal, just as it comes, simply suppressing names; for which we rely upon the liberality of the writer for the liberty we take.

March 23d, 1825.

Dear Sir,—I observe that a company is forming to furnish the city of New-York with good water. I have just succeeded in obtaining a spring of delicious water by means of boring; and notwithstanding Professor Mansfield's remarks, I have no doubt but that water may be obtained in many places where there are no such indication as he (Mr. Mansfield) supposes must exist. The whole globe is intersected by veins of water; those that lie deep are the most copious and durable, for they are not subject to exhaustion by drought. Mr. L—D—, has bored no less than four wells in this vicinity, and has succeeded with them all. At Mr. B.'s distillery he went down 170 feet, and at Mr. S.'s distillery, he bored 150. At another well, they went 130 feet, and at mine 253 feet. There are a number of phenomena attending this boring principle. The most important one, however, is that the stream after being once set agoing, increases in volume and height. Had I been aware of this fact, I might have saved the expense of boring 150 feet. When we had gone down 100 feet, we intersected a number of springs, and the water, from time to time, as we touched them, rose until it was but 6 feet from the surface. Had I at that time put down a copper tube to the depth of 50 feet, the water would have risen as much above the surface as it now does. When we had bored to the depth 253 feet, we stopped. We did not perceive that we had gained a drop in 100 feet.—We put down a tube to the depth of 80 feet, so as to exclude all the upper, or as I call them, *superficial* springs, and then left the well. The water did not rise at first in the tube higher than it did without it. In three weeks, however, from that time, it rose 2 feet in the tube, and now it has risen to the height of 5 feet above the surface. I have built a milk house over my spring; from the main tube I have laid horizontal tubes to my house, and have brought the water into the kitchen, where it discharges nearly two gallons a minute. In the milk house I have two large trough tables, capable of holding pans enough for a dairy. A cock empties itself into the upper table, fills that to a certain height, and then runs into the lower table; when that is full, the surplus water runs into a pipe which is conveyed under ground to my cattle yard and fills two large troughs, and the surplus water from these runs through a pipe into the piggery, and, lastly, the surplus from this at present falls into a drain. I have just completed it and it is really a beautiful and wonderful sight. The Manhattan company I perceive are engaged in boring, but have not yet obtained water although they have gone 250 feet. It has been an unfortunate thing for them that their first attempt has been so tedious and expensive, but I have no doubt of their ultimate success if they will only persevere. I wish your corporation would either give them or some one else leave to bore in a well that is situated at the corner of Maiden lane and William st. I happen to be acquainted with that extraordinary spring. Twenty-two years ago when that well was dug a curious circumstance occurred. The well digger had gone down to the depth of 14 feet and had not then broached a spring. Mr. C. G. a gentleman living in the neighbourhood, was looking at the man, when the latter observed that from appearances he was soon coming to water, and had only struck a stroke or two with the pick axe when a column of gas and water rushed out with such force as to oblige him to call loudly for a ladder, and he had barely time to reach the top before the water had not only filled the well but was overflowing the street. In a few hours the water, having found other vents, subsided to within a few feet beneath the surface, where it remained stationary. It was as fine water as ever was drank until the filth of the streets percolated through and spoiled it.—Had boring been resorted to and a proper tube inserted it would have been a fine stream of pure water at this day. I think that if the boring apparatus were now placed over that well fine water might be obtained, provided the bored well were tubed down to a certain depth, so that water percolating from the surface might be included.

The expense of bringing water in an open canal from the Bronx is tremendous, to say nothing of other objections, and if any cheaper and easier and better mode could be devised it would be entitled to a preference, and is at any rate well worth the experiment.

I have subjoined a little calculation that I made a few days since, by increasing or diminishing the figures you can make it suit any city. I do wish that this mode of procuring water should have a fair trial in New York, and hope you will be so much of the same opinion as to urge it upon the notice of the Corporation or the Manhattan company. I hope they may be induced to turn their attention to the well I have just spoken of at the corner of Maiden lane and William street.

130,000 inhabitants make 18,571 families, each family paying \$5 a year—\$92,855.

12 wards, each 30 wells, each well \$1000—\$360,000 at 6 per cent., \$21,600.

360 wells, producing 6 gallons a minute, will give 3,110,400 per day; which divided among 18,571 families is nearly 3 hogsheads a day each.

In 5 years the capital will be returned. Income 92,855; interest on the investment, 21,600; profit, \$71,255. Deduct of annual repairs \$3255, and the yearly profit will be \$68,000.

In the above you perceive I have made a large allowance for the price of each well: mine, with more than 230 feet of copper pipe, cost only \$500, but I have allowed \$1000.

Boring has been seriously commenced in Alexandria. A Mr. Disbrow is likewise, I hear, boring at Powles Hook. Boring for water is not a new thing. In Italy, and in the south of France, and in Yorkshire in England, it is an affair of every day occurrence to bore; but bringing the water above the surface, so as to flow spontaneously, has never, I believe, been thought of until now. The method of boring in Europe is, to dig a well 40 or 50 feet deep; to wall it around, and secure it with cement, so as to exclude drip water, and then bore down 8 or 10 feet, as it may happen.—The well by this means is kept filled with pure water. B—'s well has been flowing nearly a year, and is evidently increasing. Mine has been running six weeks, and is increasing likewise."