

Lead Pipes.

MR. EDITOR: An article appeared in your local columns of Saturday, condemning in strong terms the use of lead pipes in connection with the introduction of water from the aqueduct. That the prejudice existing against the use of lead for service pipes is entirely unfounded has been demonstrated very clearly of late years. In the city of Boston, after examining the subject thoroughly and subjecting it to a chemical analysis, the engineers in charge of the works, and the board of water commissioners for that city in their report for 1853, make the following statement:

"The service-pipes are connected with the distributing-pipes, and are carried through the outer walls of the buildings at the expense of the city, provided the distance from the line of the street is not more than thirty feet. They are almost all of lead, and generally five-eighths of an inch in diameter. There are some, however, of iron, of one and a half or two inches in diameter, which were laid in compliance with the wishes of individuals. The objections to that metal (iron) arising from their filling up with accretions, discoloring the water with rust, and being easily fractured, have been found quite serious. Some objection, also, was made to the employment of lead for this purpose, on the supposition that it might communicate a deleterious influence to the water. The subject was submitted to the consideration of the consulting physicians, and investigated with great care by Prof. Horsford, of Harvard College, and the result at which they arrived seems to be sufficiently decisive to relieve the anxiety which had been expressed. The whole number of service-pipes laid to January, 1852, is 16,049, of which 13,519 are of lead."

This report but confirms the experience and reports of engineers and all reports throughout the principal cities of the Union. In but one or two inconsiderable towns is any other description of pipes used; and the statistics of the various water companies throughout the United States show that nine-tenths of the water supplied to their consumers is through lead service pipes. None other is so durable, none other suited so well to the purpose; and the ill-grounded prejudice against the use of this article is fast being rooted out by the practical experience of consumers. PRACTICAL.

In reference to the above remarks, we will state that the report quoted from covers only so much ground as relates to the water brought into the city of Boston from the Cochituate pond—water which has never been discovered to contain a particle of lime. It is a well-settled fact, that water strongly impregnated with lime corrodes the lead to a very considerable degree; and it is equally well-known that the Potomac, from whence our supply is to be derived, traverses a limestone region before being so distributed. The force with which we are given to understand this water will flow, must necessarily detach and convey the corroded particles to our tables and kitchens.

A continuous flow of water through leaden pipes diffuses the detached or corroded particles through a greater mass of fluid, and is consequently less dangerous; but if the water be shut off, or the pipes become dry, the first flow thereafter should be avoided as so much strychnine, for its effects are frequently as fatal.

If leaden pipes must be used, they should at least be lined or plated with some non-corroding metal, such as block-tin; but we are convinced that it would be better to dispose with them altogether and substitute iron in their stead. The force with which water will flow through them will in a great measure obviate or remove the incrustations, and the addition of a few feet of the same metal to the long iron mains cannot add much to the discoloration.

Of the deleterious effects of imbibing lead into the human system, the public need not be told. The painter's, or lead cholic, is a disease to be dreaded by all who have experienced it, or have witnessed sufferers writhing days and nights, without sleep or cessation, under its torturing agonies. There are many friends of the writer who will recollect an occasion where many of the employees of a large establishment were attacked with this disease from imbibing water brought into it by leaden pipes; nor was the cause of their sickness discovered until it had nearly proved fatal to some of them. Those only escaped who did not drink the water.

We are assured by respectable physicians and chemists, that water flowing through lead pipes cannot be otherwise than injurious to the human system, although some constitutions are more easily affected by it than others. The latter may use it for years, and attribute the pains they suffer in the lower limbs, where its effects are generally first developed, to rheumatism or gout; while in the former it produces, in addition to these indications, constipation of the most stubborn kind, frequently baffling the skill of physicians, and operation of medicine.

This subject is of high importance to our citizens, and should be referred to a commission of physicians and practical chemists, before the practice of attaching leaden pipes becomes general; and we sincerely hope that the Council will take the subject into consideration as a great sanitary measure.