

UNITED STATES PATENT OFFICE.

LEOPOLD BRANDEIS, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN PROTECTING LEAD PIPE AGAINST THE ACTION OF WATER.

Specification forming part of Letters Patent No. **40,904**, dated December 15, 1863.

To all whom it may concern:

Be it known that I, LEOPOLD BRANDEIS, manufacturer of lead pipe, of Brooklyn, county of Kings and State of New York, have invented a new mode of making sanitary lead pipe, or lead pipe on which water will not act and be left entirely free from contamination in running through this pipe, the same as if the pipe were coated with glass.

The nature of my invention consists in passing a strong solution of the sulphur of an alkali through the pipe to be acted upon.

To enable others skilled in the art of making lead pipe to make use of my invention, I will proceed to describe my process.

When the pipe is getting discharged from the die, I inject the boiling solution of caustic soda and sulphur into the pipe by means of a small pump or a syringe. The solution has to remain in the pipe for some ten or fifteen minutes, converting the lead into insoluble sul-

phide; or I immerse the whole coil of lead pipe into an iron caldron containing such a solution and protecting the outside of the pipe, as well as the inside, against the action of water thereon.

What I claim as my invention, and desire to secure by Letters Patent, is—

The production of sanitary pipe by the application at 212° Fahrenheit of a strong solution of a sulphide of an alkali to the inside of lead pipe or lead cisterns or leaden vessels for the purpose of forming a sulphide of lead, so that water will afterward not act on the pipe or vessel and cannot get contaminated by running through or by remaining standing in such pipe or vessel.

LEOPOLD BRANDEIS.

Witnesses:

CHAS. E. FROST,
M. FOSTER.