R. E. DIETZ.

Device for Thawing Frozen Water-Pipes.

No. 165,550. Patented July 13, 1875.

FIG. 1.

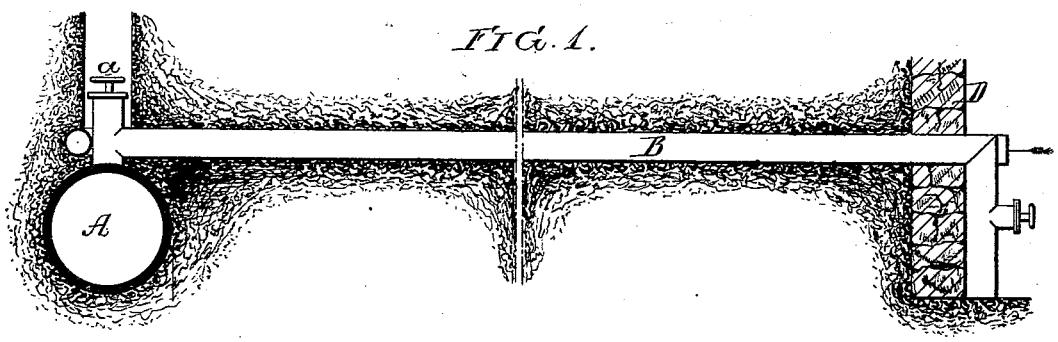
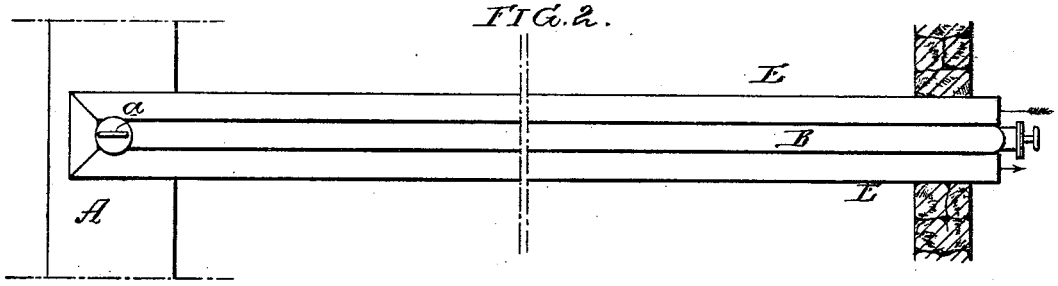


FIG. 2.



Witnesses,
Harry Smith
Hubert Howland

Robert E. Dietz
by his attorneys
Howson & Son

UNITED STATES PATENT OFFICE.

ROBERT E. DIETZ, OF NEW YORK, N. Y.

IMPROVEMENT IN DEVICES FOR THAWING FROZEN WATER-PIPES.

Specification forming part of Letters Patent No. **165,550**, dated July 13, 1875; application filed April 2, 1875.

To all whom it may concern:

Be it known that I, ROBERT E. DIETZ, of the city, county, and State of New York, have invented a Device for Thawing Frozen Water-Pipes, of which the following is a specification:

The object of my invention is to readily thaw the ice which in severe weather frequently interrupts the flow of water through the pipes extending from the mains in the street to the cellars of dwelling-houses and other buildings; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 represents a vertical section of a water-main, part of the street, the wall of the cellar, the branch pipe, and device through the medium of which hot water or heated air or gases may be applied from within the building to the thawing of ice in the branch pipe. Fig. 2 is a plan view of Fig. 1.

A represents the main, which, as usual, is embedded at a depth of several feet below the surface of the street, and from the ordinary stop-valve *a* on this main extends the branch pipe B through the wall D and into the cellar of a dwelling-house or other building. During very severe frosts the water in these branch pipes is frequently frozen while the flow in the main is unobstructed. As a means of thawing the ice in the branch pipe B, I place on each side of the said pipe, and in contact with the same, two tubes, E E, communicating with each other at or near the main, and extending through the wall D into the building.

Whenever the water in the branch pipe B is frozen, hot water or heated air or gases may be forced from within the building into one tube, E, and permitted to escape from the other tube, and this circulation of hot water or heated air through the said tube E will soon impart such heat to the adjoining branch pipe B as to thaw the ice therein.

I am aware that a surrounding chamber for receiving hot air or steam has been heretofore combined with a water-pipe, and that such water-pipes have been inclosed by a steam-pipe coiled round them; but such arrangements cannot be applied to service-pipes which have been already laid in the ground, nor can they be used in rocky localities, where the water-pipes are generally laid in the crevices between the rocks, and consequently follow an irregular course. The tubes E, however, can be laid close to the sides of the water-pipe B throughout its entire length, and can be readily adapted to any irregularities in the course of the said pipe.

I claim as my invention—

The combination of the branch pipe B and a tube, E, adjoining said pipe and extending parallel, or nearly parallel, thereto from a point at or near the main to and through the wall D of a building, as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT E. DIETZ.

Witnesses:

W. H. DE HART,

FREDERICK DIETZ.