

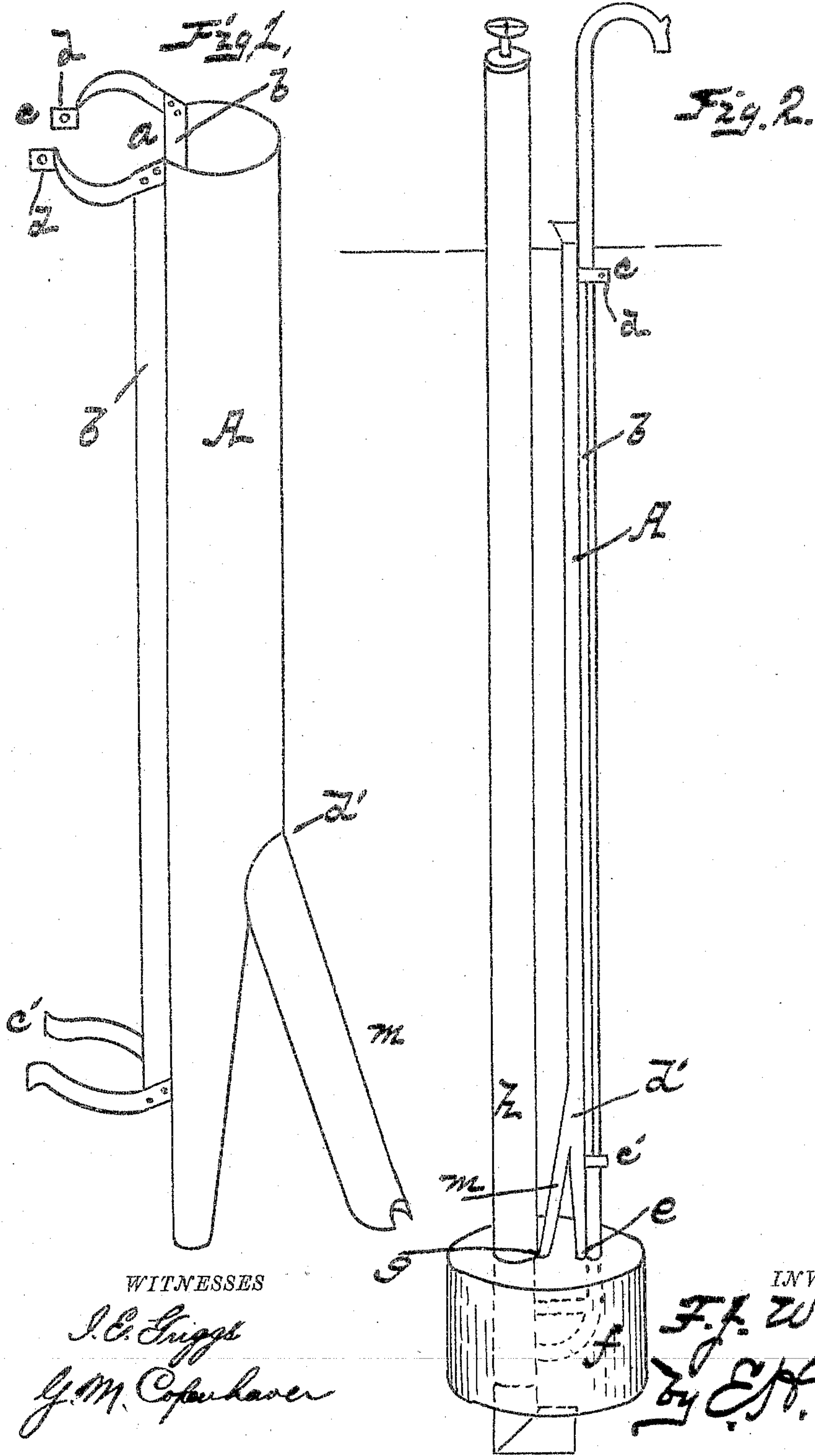
No. 780,250.

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F. J. WOOD.

ANTIFREEZING DEVICE FOR WATER PIPES.

APPLICATION FILED APR. 26, 1904.



WITNESSES

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# UNITED STATES PATENT OFFICE.

FRANCIS J. WOOD, OF GREENVILLE, MICHIGAN.

## ANTIFREEZING DEVICE FOR WATER-PIPES.

SPECIFICATION forming part of Letters Patent No. 780,250, dated January 17, 1905.

Application filed April 26, 1904. Serial No. 204,976.

*To all whom it may concern:*

Be it known that I, FRANCIS J. WOOD, a citizen of the United States, residing at Greenville, in the county of Montcalm and State of Michigan, have invented new and useful Improvements in Antifreezing Devices for Water-Pipes, of which the following is a specification.

My invention relates to antifreezing devices for water-pipes, wherein I provide means for thawing the frozen water-pipes; and it consists in the novel construction, combination, and arrangement of parts of which it is composed, all as will be hereinafter fully explained, and particularly pointed out in the appended claims.

The annexed drawings, to which reference is made, fully illustrate my invention, in which—

Figure 1 represents a perspective view of my conductor detached from the water-pipe. Fig. 2 is a perspective view of the same, showing the conductor in position and connected with the water-pipes.

Referring by letter to the accompanying drawings, A designates a conductor which is designed to permit hot or chemicalized water to be poured from the surface of the ground to the interior of a shield or drum arranged at the meeting point of the service-pipe and the vertical pipe or hydrant. This hot-water conductor is preferably constructed with an open side *a*, extending from the top thereof to the bottom, and on either side of this opening are angular flanges *b b*, to which are secured upper and lower clamping-arms *c c'*, the former having ears *d d*, which are perforated to receive a bolt or rivet by which the conductor is firmly clamped to the vertical pipe or a hydrant, while the lower clamp *c'* forming spring-arms which grasp the water-pipe, thus securely holding the conductor thereto. This conductor is provided at its lower end with an inclined branch *m*, which communicates at the point *d'* with the interior of the main conductor.

The lower end of the hot-water conductor enters an opening *e* in the shield *f* and adjacent to the vertical water-pipe and the branch

or tubular portion *m* thereof enters an opening *g* in the drum or shield adjacent to the casing *h*, having the shut-off valve.

Thus it will be seen from the above description, when taken in connection with the annexed drawings, that when the water-pipes become frozen the operator pours hot or chemicalized water into the top of the conductor, which water passes therethrough and into the drum, as well as into the jacket surrounding the service-pipe, thereby heating the vertical frozen pipe, the fittings within the drum, and the service-pipe, thus thawing the ice therein. The conductor being open on one side and placed close to the vertical pipe permits direct hot-water contact with said vertical pipe. The conductor may be open or closed, as circumstances require in adjusting the same to the different makes or shapes of water-pipes, and instead of hot water chemicalized water may be used in connection with my device.

Water-pipes being manufactured in various forms or shapes, as well as the fittings therefor, I do not wish to be confined to the exact construction of my antifreezing device, as various changes may be made therein without departing from the spirit of my invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with the pipe, of the conductor, comprising the enlarged body; the lower conducting-chutes, the lateral angular flanges and the clamps, substantially as described.

2. The combination with the water-pipe, of the conductor, composed of the enlarged body and the narrow lower chutes, the angular side flanges and clamps and the drum, substantially as described.

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

FRANCIS J. WOOD.

Witnesses:

GEO. W. MOULTON,  
FRED G. FRIEND.