

H. TYLER & W. H. SEVERSON.

HOSE-COUPLING.

No. 182,723.

Patented Sept. 26, 1876.

Fig. 1.

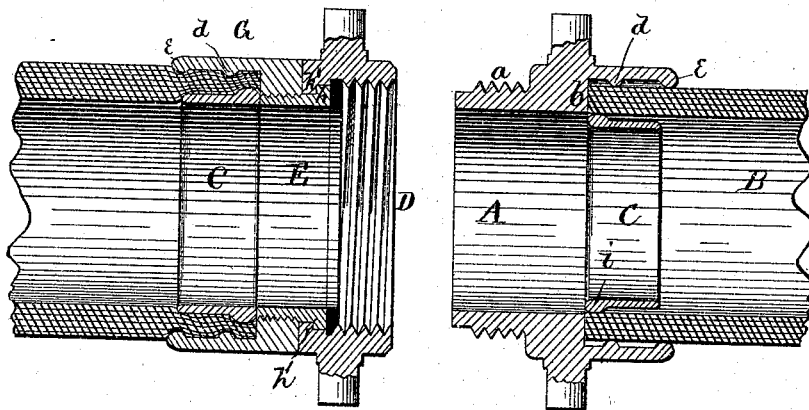
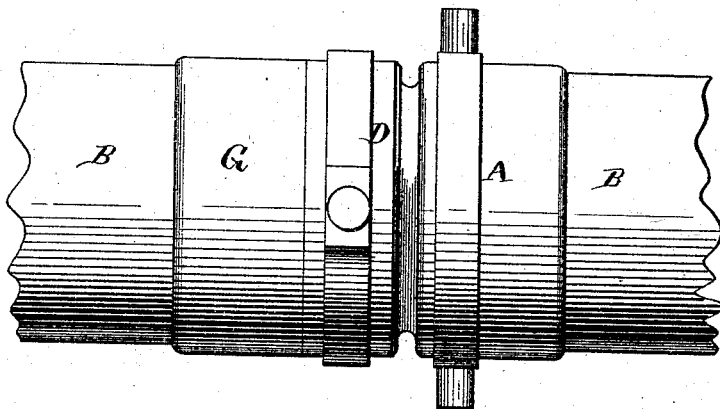


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE

HIRAM TYLER AND WILLIAM H. SEVERSON, OF GENESEO, ASSIGNORS TO
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IMPROVEMENT IN HOSE-COUPLINGS.

Specification forming part of Letters Patent No. 182,723, dated September 26, 1876; application filed
July 27, 1876.

To all whom it may concern:

Be it known that we, HIRAM TYLER and WM. H. SEVERSON, of Geneseo, in the county of Livingston, and in the State of New York, have invented certain new and useful Improvements in Hose-Couplings; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in the construction and arrangement of a hose-coupling, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a longitudinal section of our hose-coupling detached. Fig. 2 is a side view of the same coupled.

A represents the male part of the coupling, provided with exterior screw-threads *a* at the outer end. At the inner end it is reamed out, forming a shoulder, *b*, against which the end of the hose B is to abut. It is also provided with an interior circumferential bead or flange, *d*, and around the extreme inner end, on the inside, is formed another bead, *e*. C represents the interior copper band, which is to be expanded to fasten the hose in the coupling. This copper band has one end turned over to make it thicker, forming a bead, *i*, as shown in Fig. 1. When this band is expanded by a suitable expanding-tool the thicker portion or bead *i* of the copper band compresses the end of the hose between the shoulder *b* and the bead *d* so tightly that no water can escape. The hose is, of course, also compressed between the beads *d* and *e*.

The female part of the coupling consists of the swivel D, short collar-tube E, and exterior collar G. The swivel D and tube E are formed with corresponding interlocking shoulders *h* and *h'*, and the tube E is screwed into the collar G, and afterward brazed or soldered thereto,

holding the swivel in place, and yet allowing the same to turn freely. The inside of the collar G is formed with beads in the same manner as described for the interior of the male coupling, and the hose is fastened by expanding the copper band, as before described.

When the copper band is expanded to hold the hose in place the inside becomes perfectly smooth, and no shoulders or obstructions are encountered by the water during its passage.

In the hose-couplings as generally used there is a shoulder formed by the interior tube or collar, and the water, while under pressure, will work its way behind such shoulder, which is the cause of the hose usually bursting at that point.

The copper band C may be provided with one or more exterior beads, *i*, and at any point thereon desired.

By the construction of this coupling the female part thereof may be coupled to the ordinary couplings on engines, hydrants, &c.

In expanding the copper bands we propose to do it in such a manner that the interior thereof will be the least trifle larger than the main part of the hose.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination of the outer collar G, provided with interior circumferential beads *d* *e*, the hose B, inner expansible band C, provided with one or more exterior beads, *i*, the short collar-tube E, having shoulder *h*, and brazed or soldered to the collar G, and the swivel D, having shoulder *h'*, all constructed substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 18th day of July, 1876.

HIRAM TYLER.
WILLIAM H. SEVERSON.

Witnesses:

H. C. SILSBY,
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