Bull & Shelley,

Hose Coupling.

No. 83,455. Patented Oct. 27, 1868.

Fig. 5.

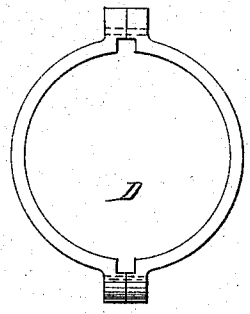


Fig. 1.

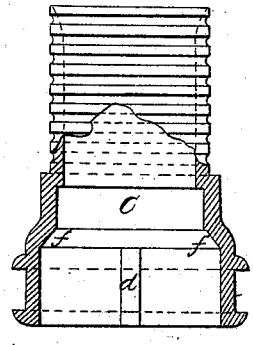


Fig. 4.

Fig. 3.

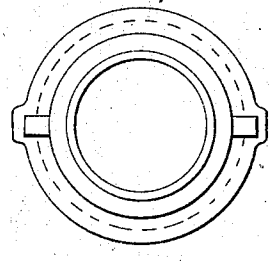
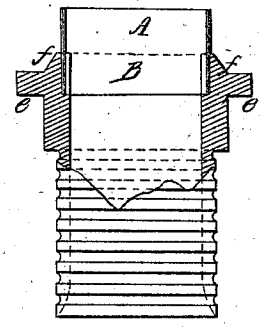


Fig. 2.



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HENRY C. BULL AND SAMUEL T. SHELLEY, OF LOUISVILLE, KENTUCKY.

Letters Patent No. 83,455, *dated October* 27, 1868.

IMPROVEMENT IN HOSE-COUPLINGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, HENRY C. BULL and SAMUEL T. SHELLEY, of Louisville, in the county of Jefferson, and State of Kentucky, have invented a new and useful Improvement in Hose-Couplings; and we do hereby declare that the following is a full and exact description thereof, which will enable any one skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a partial sectional view of the female part of hose-coupling, made according to our invention, extreme end being in full view.

Figure 2 is a partial sectional view of the male part of coupling, showing the mode of making the joint.

Figure 3 is an end view of fig. 1 of the hose-coupling.

Figures 4 and 5 are side and end views of swivel-band for securing figs. 1 and 2 together.

Similar letters of reference indicate corresponding parts.

This invention relates to an improvement in hose-couplings, and it consists in the means employed for forming and tightening the joints, as will be hereinafter described.

A is a gum or other elastic ring, which is placed within the male portion of the coupling, and is held in its position by means of a metallic band or ring, as shown at B, fig. 2. The ring A extends beyond the end of the portion B of the coupling for a distance sufficient to permit it to be pressed firmly against the conical shoulder formed upon the female portion, E, of the coupling, as shown at *f* in fig. 1.

B is the band or ring above referred to, which is used to secure the elastic tube *a* within the male portion, F, of the coupling.

C is the chamber, formed within the female portion, E, of the coupling to receive that portion of the elastic tube which extends beyond shoulder *f*.

D is a metallic and eccentric-ring, which is made to embrace the female portion of the coupling, and it is provided with slots in its interior surface, as shown at *a*, fig. 5, to permit it to pass over the projection *e*, formed upon the male portion, F, of the coupling, as shown in fig. 2.

E is the female portion of the coupling, the interior diameter of which is of the proper size to receive the male portion for, say, one-third of its length, at which point its diameter is reduced by having formed within the remaining portion a conical ledge or shoulder, *f*, against which the elastic ring or tube presses firmly when the two parts are united.

It will be observed that slots, *d*, are formed at opposite parts upon this portion of the coupling, which are for the purpose of receiving the projections upon female portion, and permitting of their longitudinal movement therein as they are pressed upon by the eccentric portions of ring D.

The operation of this device is as follows:

The two parts of the coupling being properly fitted together, and the ring D placed in its position, the elastic ring or tube is passed into the recess formed in F to receive it, when ring B is pressed within said tube sufficiently tight to secure it in its position when the two parts are put together, which carries the flexible ring within the shoulder *f*, formed in the female portion, when, if the eccentric-ring D is turned so as to bring the eccentric portions thereof in contact with the projections on the male portion, that portion will be pressed toward the shoulder, and thus a tight joint formed.

It will be seen that we are enabled to form a perfectly reliable coupling, and one which can be readily connected and disconnected, and which possesses the further advantage of always insuring a tight joint.

Having thus described our invention,

What we claim, and desire to secure by Letters Patent, is—

A hose-coupling, consisting of the following elements: The female portion E, with its concave shoulder *f*, the male portion F, having the elastic ring or tube secured therein, and the eccentric-ring D, all constructed and combined substantially as herein described.

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