(No Model.)

R. J. GILMORE.

SWIVEL JOINT FOR HOSE COUPLINGS.

No. 244,446. Patented July 19, 1881.

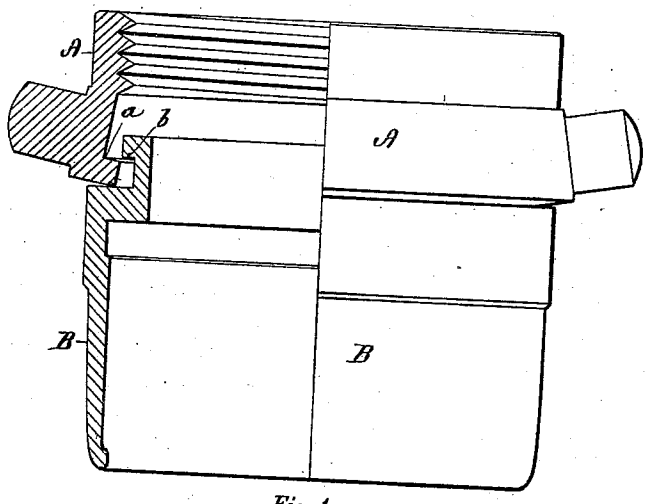


Fig. 1.

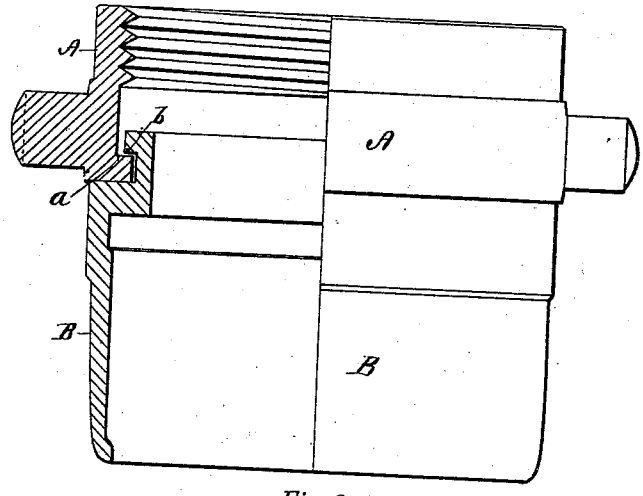


Fig. 2.

Witnesses:

Kendel Bourguignon,

Wilbur Mason.

Inventor:

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UNITED STATES PATENT OFFICE.

ROBERT J. GILMORE, OF PROVIDENCE, RHODE ISLAND.

SWIVEL-JOINT FOR HOSE-COUPLINGS.

SPECIFICATION forming part of Letters Patent No. 244,446, dated July 19, 1881.

Application filed March 19, 1880. (No model.)

To all whom it may concern:

Be it known that I, ROBERT J. GILMORE, of Providence, in the State of Rhode Island, have invented a new and useful Improvement in Swivel-Joints for Hose-Couplings, of which the following is a specification.

My invention relates to an improvement in the swivel-joints of hose-couplings; and it consists in constricting the annular retaining-shoulder of the cast-metal outer ring of the swivel upon and back of the corresponding annular shoulder of the hose-band, thus interlocking the two shoulders to form the swivel, and at the same time improving the quality of the metal by condensation.

Figure 1 is a partial view and longitudinal section, showing the two parts of the coupling as first formed. Fig. 2 is a similar view, showing the two parts of the coupling interlocked to form a swivel-joint.

In the accompanying drawings, A represents the swivel-ring, and B the band to be attached to the end of the hose. The band B is provided with an annular shoulder, *b*, made in proper position, as shown in Figs. 1 and 2, and the swivel-ring A is first cast with an annular shoulder, *a*, in an inclined position, as shown in Fig. 1, so that the shoulder *a* may be passed entirely over the shoulder *b*, and then the swivel-ring A is to be placed in a press of suitable construction, operating from all sides to constrict the ring and by compressing the metal force the shoulder *a* into interlocking position with the shoulder *b*, as shown in Fig. 2, thus forming the desired swivel-joint.

Swivel-joints for hose-couplings have heretofore been made by forming the two shoulders so that one would pass over the other, and then expanding the inner one by means of a tapering mandrel; but this method has proved defective in practice, for the reason that the metal ordinarily used for such couplings fails to expand to the required degree without liability of cracking or breaking, whereas by constriction the quality and strength of the metal will be improved, and the swivel-joint be as readily and as cheaply formed.

The constricted swivel-rings may be readily distinguished from all others by the slight crinkle upon the inner surface of the annular shoulder resulting from compression.

I claim as my invention—

1. In the manufacture of swivel-joints of hose-couplings, the method of improving the strength and quality of the metal forming the outer portion thereof, which consists in first forming the swivel-ring with an inclined annular shoulder and then constricting it into interlocking position with the shoulder of the hose-band, substantially as described.

2. The combination, in a hose-coupling, with a tail-piece having an internal hose-chamber and an external annular groove, of a swivel having an internal inwardly-projecting lip adapted to be forced into said groove in the tail-piece.

ROBT. J. GILMORE.

Witnesses:

WENDEL BOURGUIGNON,

WILBER MASON.