(No Model.)

W. KREIDER.

HOSE COUPLING.

No. 496,363. Patented Apr. 25, 1893.

Fig 1.

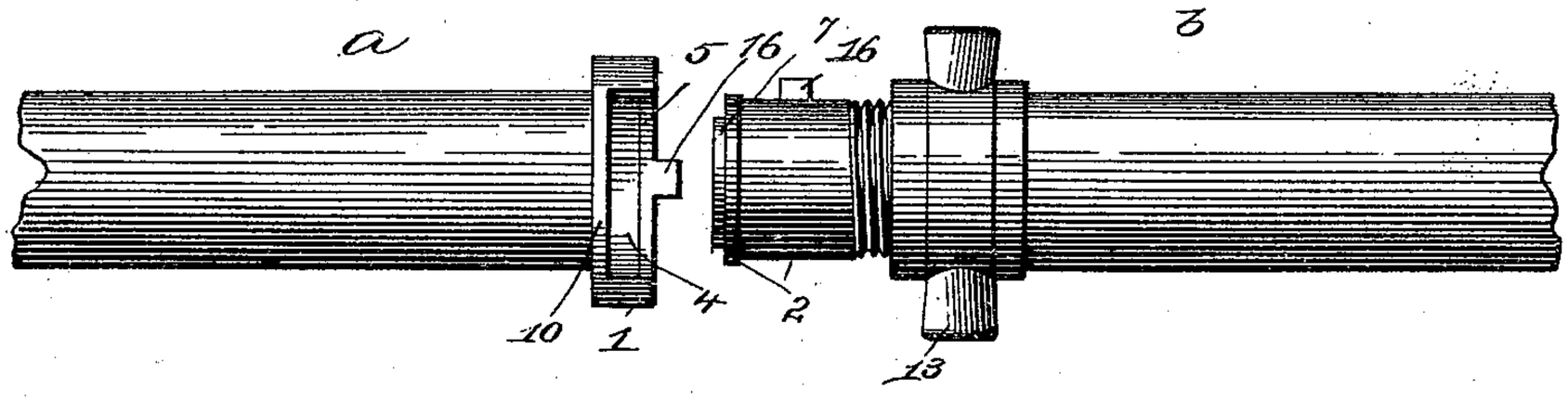


Fig. 2.

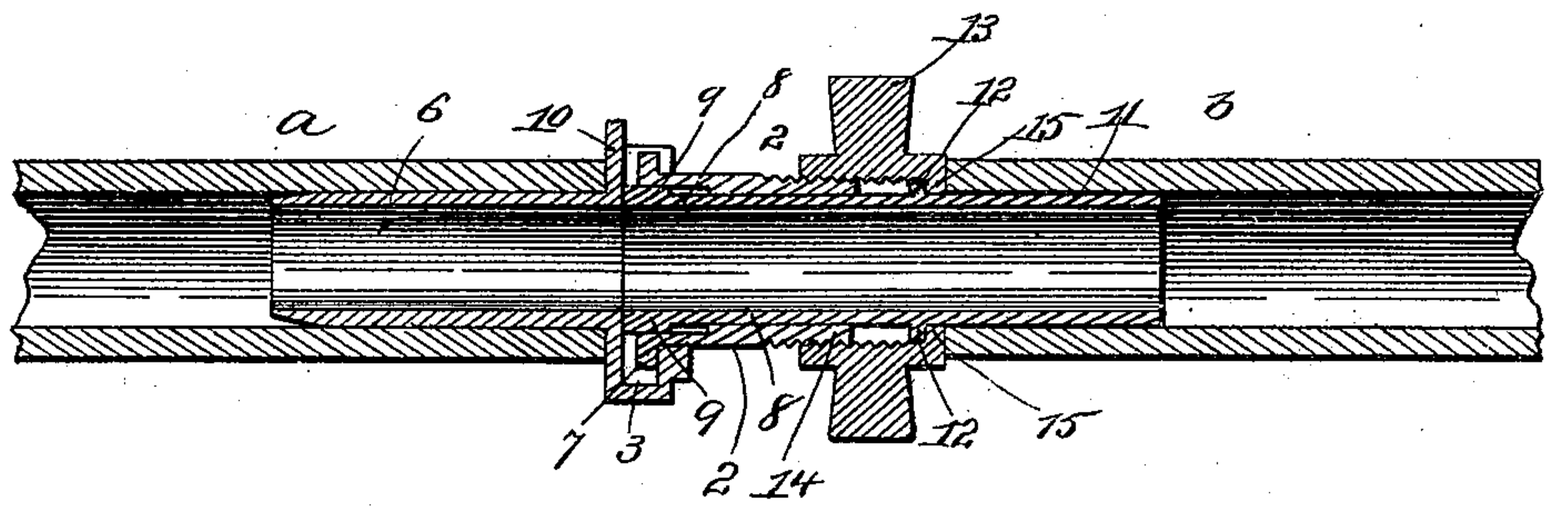


Fig. 3.

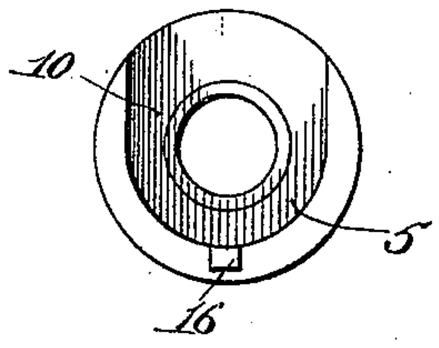
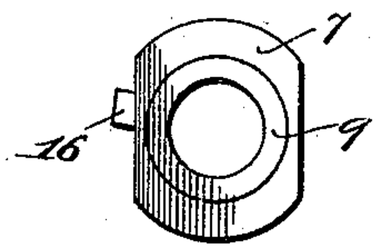


Fig. 4.



Witnesses:
Harry S. Rohrer.
Geo. E. Bruce.

Inventor:
Wm. Kreider
By. Knight Bros
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM KREIDER, OF NEW ORLEANS, LOUISIANA, ASSIGNOR OF ONE-THIRD TO CHARLES CARROLL, OF SAME PLACE.

HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 496,363, dated April 25, 1893.

Application filed September 30, 1892. Serial No. 447,420. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM KREIDER, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Hose-Couplings, of which the following is a specification.

My invention relates to those couplings, which employ upon one of the hose-sections to be connected, a laterally-opening undercut or grooved socket, and upon the other hose section a transverse head or flange, having a short diameter which adapts it to enter the lateral opening of the socket, and a longer diameter, which when the sections are turned relatively causes the head or flange to engage in the groove and hold the sections together, and an internal sleeve carried by one section and having means for forcing it against the other for the purpose of preventing the unlocking of the sections.

My invention relates to certain novel features in the construction of such a hose-coupling, which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings:—Figure 1 represents the two sections in position for coupling. Fig. 2 is a longitudinal section in a plane at right angles to the picture-plane of Fig. 1, the nut having been turned to secure the parts in interlocked position. Figs. 3 and 4 are face views of the socket piece and the head which enters it.

a and *b* represent the two hose-sections one of which carries the socket piece 1, and the other the interlocking head 2, with its securing attachments. The socket piece 1 has a lateral opening 3 and an internal groove 4 in addition to the longitudinal bore 5, and this socket piece is attached in use by means of the nipple 6 which receives the end of the hose section. The interlocking head piece 2 is provided with radial flange or transverse head 7 flattened on two opposite sides to reduce its diameter and permit the head to enter the lateral opening 3 of socket 1, but having its other diameter of sufficient length to cause said flange to enter and engage in the groove 4 when the head is turned relatively to the socket piece and thus lock the parts against longitudinal displacement. In order to prevent the pieces from turning back and becoming unlocked and also for the purpose of effecting a water-tight joint, one of them, preferably the head-piece is provided with an internal sleeve 8, bored to correspond to the bore of nipple 5, and having an enlarged end formed by a flange 9, which is forced against the rear wall 10 of socket 1. The sleeve 8 projects beyond the rear end of head-piece 2, and terminates in a nipple 11 which receives the other hose-section and is the means of attachment thereto of the head-piece. Upon the sleeve 8, in rear of the head, is an annular flange 12. The front end of head-piece 2 is preferably recessed to admit the flange 9 and permit the withdrawal of sleeve 8 and facilitate insertion of the head in the socket. By means of the flanges 9 and 12 the head-piece and sleeve are inseparably connected.

13 represents a nut threaded interiorly to receive the threaded end 14 of head piece 2, and this nut is provided with internal flange 15 which engages behind the flange 12 on sleeve 8. When the nut is screwed upon head piece 2, the sleeve is projected or the head piece is drawn back over the sleeve. If the head be first inserted and turned in the socket, the turning of the nut brings the end 9 of the sleeve and the rear wall 10 of the socket into such intimate contact, as to prevent the sections turning back to unlocking position and also to make a water-tight joint. In practice the relative turning between the sections to interlock them as well as the screwing up of the nut and the reverse movements, are all done by holding the socket section in one hand and turning the nut in the other, and in order to first permit the sections to turn to interlocking position, each of the coupling pieces is provided with a lug 16, which come in contact after the parts have turned a quarter revolution, after which they are held against further turning while the nut does its work.

It will be seen that a coupling constructed as above described has several advantages over the construction of similar devices heretofore suggested. There is but a single joint to be made water-tight and that between the

faces of the head 9 and wall 10. In my construction the nut cannot be removed and the screw threads are always protected from damage by blows from being dropped on the paving or other hard objects, and when the coupling is effected, there is no friction resulting from sliding of one part upon another. In my device there is no necessity for holding the parts accurately while coupling as they bring themselves to proper seating by turning.

Having thus described my invention, what I claim is—

1. In a hose-coupling, the combination of the socket-piece having a nipple to receive one hose section and a laterally opening socket; a head-piece provided with a head adapted to enter and turn in the socket to interlock therewith, an internal sleeve longitudinally movable within the head-piece, and having front and rear flanges for retaining it therein and a nipple for receiving the other hose section; and the nut threaded over the rear end of the head piece and having the internal flange engaging behind the rear flange on the sleeve and thereby adapted to project the head beyond the head-piece, all substantialy as and for the purposes set forth.

2. In a hose coupling, the combination of the socket-piece having the nipple for the reception of one hose section, the sleeve having a bore corresponding to that of the socket-piece and terminating in a nipple for receiving the other hose-section and the means for forcing the sleeve against the socket-piece and making a water-tight connection which consists in the head surrounding the sleeve and adapted to enter the socket and the nut threaded to the end of the head-piece and having connection with the sleeve in rear of the head-piece, all substantially as and for the purpose set forth.

3. In a hose-coupling, the combination of the socket-piece connected with one hose-section and the co-operating part consisting of the sleeve for receiving the other hose-section and provided with the two flanges on its exterior surface, the head-piece confined between the two flanges and the nut screw threaded to the head-piece and engaging one of the flanges on the sleeve, all substantially as set forth.

WILLIAM KREIDER.

Witnesses:
OWEN BRENNAN,
THEO. G. SPITZFADEN.