

(No Model.)

W. STRONG.

HOSE COUPLING FOR STREET WASHERS.

No. 326,604.

Patented Sept. 22, 1885.

Fig. 1.

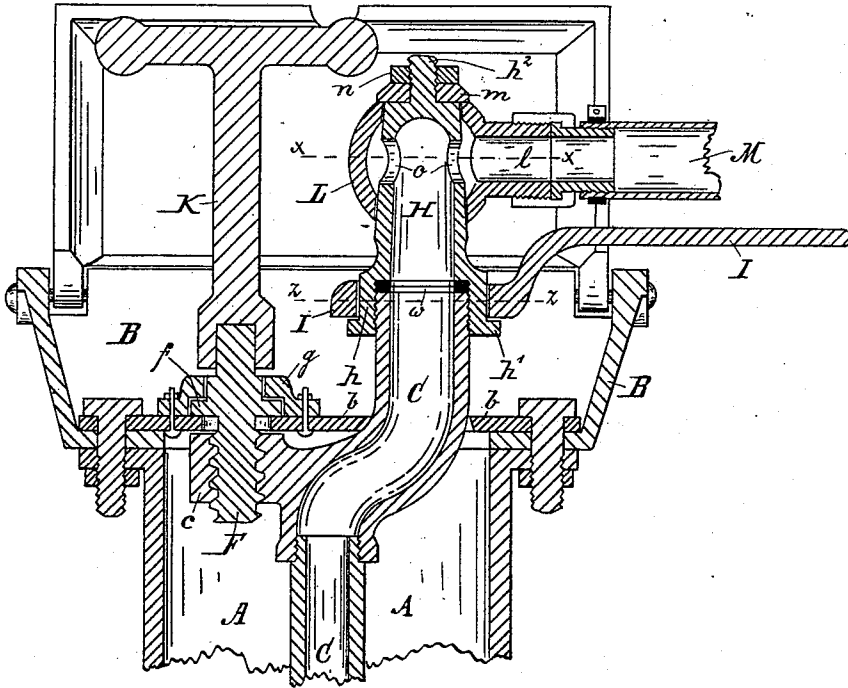


Fig. 2.

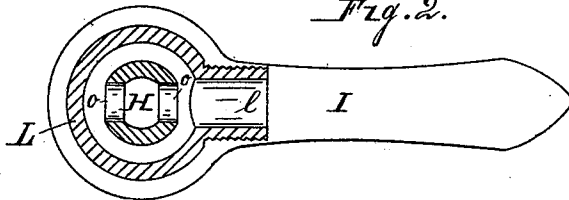
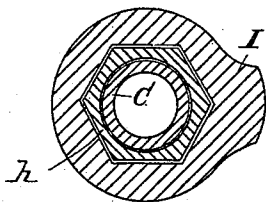


Fig. 3.



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WILLIAM STRONG, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF
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HOSE-COUPLING FOR STREET-WASHERS.

SPECIFICATION forming part of Letters Patent No. 326,604, dated September 22, 1885.

Application filed June 22, 1875. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM STRONG, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Hose-Couplings for Street-Washers, of which the following is a specification.

My invention relates to a coupling to be used to connect one end of a hose to a water-works pipe contained and terminating in a cast-iron casing and box located on a level with the surface of the ground, and commonly called a "street-washer" or "street-sprinkler."

Heretofore the end of the hose had to be screwed directly onto the end of the vertical water-works pipe contained in the street-washer box. It always was a troublesome and difficult task to make a water-tight connection between hose and pipe, on account of the box being small and down in the ground, and it requiring the aid of a wrench to screw the hose tight onto the water-pipe. Thus children and ladies, not possessing the necessary strength and mechanics' tools, seldom succeeded in making the coupling water-tight, and often more water leaked out and was wasted at the point of coupling than came out at the nozzle of the hose. Further, the hose being screwed to the water-pipe in a vertical position, and then being carried around horizontally in order to reach and sprinkle the surroundings, the hose became twisted and kinked at its angle-point and soon wore out, causing constant repairs and expense. I avoid all these objections by the independent coupling connecting the hose and water-pipe, illustrated in the accompanying drawings, in which--

Figure 1 is a vertical cross-section through a common street-washer box and my hose-coupling attached to the end of the water-pipe; Fig. 2, a horizontal section through my coupling on line X X on Fig. 1; Fig. 3, a horizontal section through the same on line Z Z on Fig. 1.

Similar letters refer to similar parts throughout the several views.

A is the vertical cast-iron casing, in which the water-pipe C rises from the horizontal water-main below the ground; B, a cast-iron box secured to the top end of the casing A and lo-

cated on a level with the surface of the ground. The water-pipe C terminates in the box B, and is provided with a screw-threaded shoulder, *c*, butting against the under side of the bottom *b* of the box B. In this shoulder *c* operates the screw-threaded end of the lifting-bolt F, which extends up through the bottom *b* of the box B and terminates in a square head fitting into the square hollow end of the key K. The lifting-bolt F is held in the same horizontal position with the bottom of the box B by the flange *f*, cast on the bolt F above the bottom of the box B, and the flanged rim *g*, bolted to the bottom *b* and overlapping the flange *f*. The turning of the key K raises the water-pipe C from or presses the same onto a valve-seat at the point of connection between the vertical pipe C and the horizontal water-works main down in the ground, thus turning on or shutting off the water.

The device described so far is old, and constitutes what is called a "street-washer" or "street-sprinkler."

The attachment or hose-coupling I claim as my invention is constructed and put on in the following manner: A circular upward-tapering hollow stem, H, is provided at its base with an enlarged socket, *h*, circular, and screw-threaded on the inside to screw over and receive the end of the water-pipe C, and square or hexagonal on the outside to fit the jaws of a wrench, I. The wrench I is prevented from slipping down off from the nut-socket *h* by the circular flange *h'*, cast on and projecting outward from the socket. The stem H has a solid top, with a smoothly-turned-off top surface, out of the center of which rises a screw-threaded bolt, *h²*, of smaller diameter than the top of the stem H. Slipped over the stem H and closely fitting onto the same is the hollow ball L, from the interior of which projects out horizontally the hollow pipe *l*, screw-threaded on the outside to receive the end of the hose M. The ball L is kept in position with the stem H by a washer, *m*, fitting around the screw-bolt *h²* and resting on the upper rim of the ball L and on the top surface of the stem H, the washer *m* being pressed down onto both by the nut *n*. The water rising in the pipe C and stem H passes through the openings *o o* in the walls of the stem H into the hollow core

of the ball L, and from there through the outlet-pipe *l* into the hose M. The connection between the hose M and the pipe C and stem H being made thus in a horizontal direction, and the ball L turning around the stem H without causing the flow of water to cease, as the hollow core of the ball L permits the water to circulate around the stem H and to escape through the pipe *l*, even in case one of the holes *o o* is not opposite the pipe *l*, the operator is enabled to carry the hose around the street-washer in any direction without kinking or twisting the hose at the coupling. The wrench I is slipped over the stem H onto the nut *h* before the ball L is secured in position. After the ball is put in its proper place the wrench is prevented from coming off of the nut *h* and from being lost or misplaced by the flange *h'* on the socket *h* and the ball L and pipe *l*, thus forming always ready means to screw the stem H tight onto the pipe C. Elastic washers *w w* are inserted into the socket *h* to secure a water-tight joint. The handle of wrench I is bent up so that it extends over the top of the box B, thus giving ample room to operate the same.

I disclaim the use, in a pipe or hose coupling with a swivel or ball-and-socket joint, of a hollow stem, H, provided with the openings and outlets *o o*.

Having thus fully described the construction and operation of my improved hose-coupling, what I claim, and desire to secure by Letters Patent, is—

1. A hose-coupling for street-washers, hav-

ing a conical hollow stem, H, closed at the top, and provided with openings *o o* in its side walls, an enlarged socket, *h*, square or nut shaped on the outside and round and screw-threaded on the inside, a screw-bolt, *h²*, projecting upward from the stem H, as described, a hollow ball, L, fitting snugly at top and bottom onto the stem H, and being provided with an outlet-pipe, *l*, and a washer, *m*, and nut *n*, forming means to keep the ball L in its proper position on the stem H, all constructed as described, and for the purpose specified.

2. The combination, with a hose-coupling for street-washers, having a conical hollow stem, H, closed at the top, and provided with openings *o o* in its side walls, an enlarged socket, *h*, square or nut shaped on the outside and round and screw-threaded on the inside, a screw-bolt, *h²*, projecting upward from the stem H, as described, a hollow ball, L, fitting snugly at top and bottom onto the stem H, and being provided with an outlet-pipe, *l*, and a washer, *m*, and nut *n*, forming means to keep the ball L in its proper position on the stem H, of a flange, *h'*, extending out from the socket *h*, and a wrench, I, kept in place on the socket *h* by said flange *h'*, and the ball L, all constructed as described, and for the purpose specified.

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

WILLIAM STRONG.

Witnesses:

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