

No. 792,074.

PATENTED JUNE 13, 1905.

G. RATHBURN.

HOSE COUPLING FOR HYDRANTS.

APPLICATION FILED DEC. 22, 1902. RENEWED APR. 3, 1905.

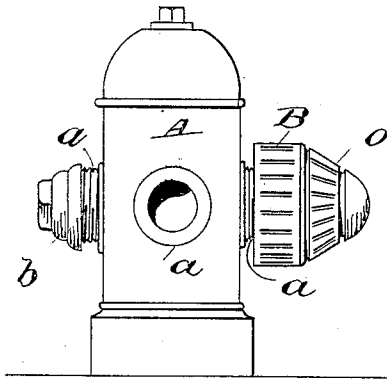


FIG. 1.

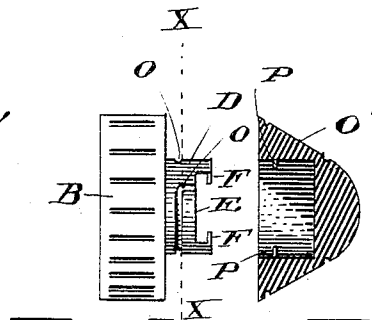


FIG. 2.

FIG. 3.

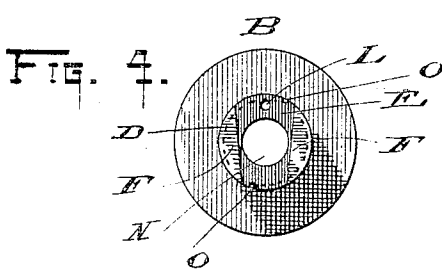


FIG. 4.

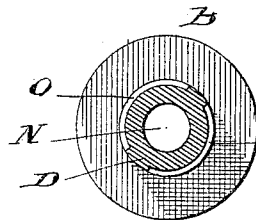


FIG. 5.

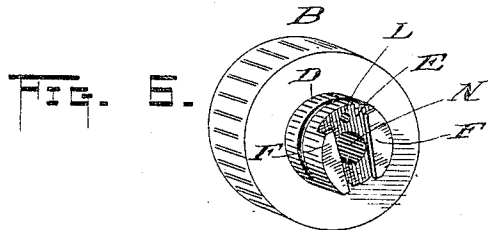


FIG. 6.

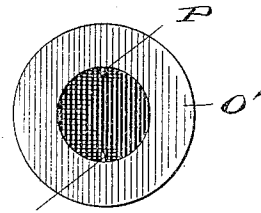


FIG. 7.

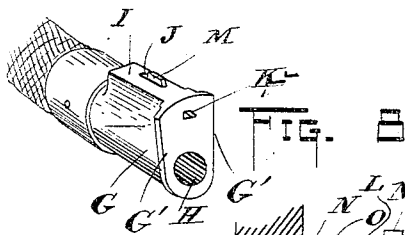


FIG. 8.

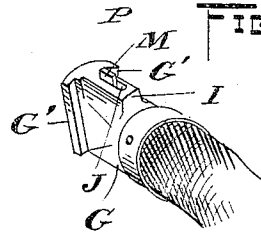


FIG. 9.

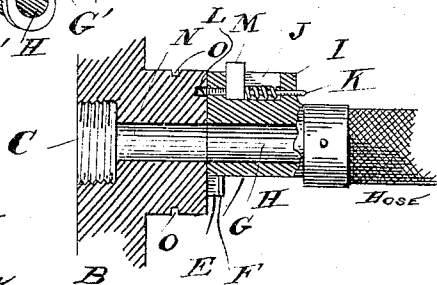


FIG. 10.

WITNESSES

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GEORGE RATHBURN, OF PEORIA, ILLINOIS.

HOSE-COUPLING FOR HYDRANTS.

SPECIFICATION forming part of Letters Patent No. 792,074, dated June 13, 1905.

Application filed December 22, 1902. Renewed April 3, 1905. Serial No. 253,602.

To all whom it may concern:

Be it known that I, GEORGE RATHBURN, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Hose-Couplings for Hydrants; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention pertains to an improvement in fire-hydrants of that class employed upon city streets.

My invention relates mainly to an attachment for the hydrant or plug by which a line of hose may be attached instantly to such hydrant and ready for immediate use in times of fire.

One of the objects of the invention is to provide a cap for each of the openings in the hydrant which can be removed by a single turn instead of having to screw the cap from the hydrant as in usual practice.

Another object is to provide a fitting for the hydrant to which a hose can be instantly attached after the removal of the cap above described.

In the accompanying drawings, Figure 1 is an elevation of the hydrant or plug, showing one of my attachments applied thereto. Fig. 2 is a side view of the attachment. Fig. 3 is a sectional view of the cap used in said attachment. Fig. 4 is a front view of the attachment. Fig. 5 is also a front view of the same, in part section, as taken on line X X, Fig. 2. Fig. 6 is a perspective view of the attachment. Fig. 7 is a view of the back of the cap, showing a depression and lugs therein. Fig. 8 is a perspective view of a hose-fitting adapted for engaging the attachment. Fig. 9 is also a perspective view of the hose-fitting as viewed from the rear. Fig. 10 is a longitudinal section of the hose-fitting in connection with the attachment.

In the figures, A is the ordinary fire hydrant or "plug," having the usual threaded projections *a a*. These have heretofore been provided with the cap shown at *b*. It is my purpose to dispense with this cap, because too

much time is consumed in removing it when the plug is to be used on short notice. The caps *b* are all removed, therefore, and in lieu thereof is provided the attachment illustrated in several of the figures and indicated by B. Said attachment comprises a body portion which may be knurled or formed so as to take a wrench, whereby it may be screwed over the projection *a* by means of the threaded aperture C, Fig. 10. On the front face of the body is a cylindrical projection D, in the end of which is cut a slot E, larger at the top than at the bottom, much the same as the form of a keystone. This slot is overhung at each side with a lip F. In this manner a dove-tailed inclosure is formed for receiving and retaining a hose coupling or fitting. (Shown in Figs. 8, 9, and 10.) This coupling merely consists of a cylindrical body G, having a bore H therethrough for communicating with the hose, to which said body is attached. At the top of said body is a housing I, having a slot J, within which is a spring-plunger adapted to engage a socket L in the projection D within the slot E, as shown in Fig. 10. The said spring-plunger is operated by means of a finger-piece M when disengaging the coupling from the part D; but the end of the plunger is beveled, as shown, so that in making a coupling in case of fire the beveled end will strike the part D and be forced back, so that the fitting can be pushed into place, and on reaching the socket L the spring will force the plunger into it and the device is locked in place. The parts B D are bored at N to correspond with H to form a continuous passage from the hydrant to the hose, as will be understood.

The coupling described is provided on each edge with a flange G', which enter behind the lips F and serve to hold the member in place in a very secure manner, it being understood that the body G is wedge-shaped to fit into the slot E. The face of the said body is made perfectly flat, as is also the face of the part D within the slot, so that when the parts are placed together, as in Fig. 10, a perfectly water-tight joint is assured. A packing of some form may of course be used, if desired, to aid in making said joint tight; but this will

not be necessary if the parts are properly formed. In Figs. 2, 4, 5, 6, and 10 are shown two grooves O, which are cut in the periphery of the projection D concentric with the circumference of the bore N, and one end of each groove turns toward the said slot E, as shown in Fig. 2. A cap O' is provided, Figs. 3 and 7, to slip over the projection and lugs P at diametrically opposite sides of the bore of said cap, enter the grooves O, and a turn to the left secures the cap in place.

It will now be seen that the cap O' can be detached almost instantly and does away with the old-fashioned screw-cap mentioned hereinbefore. Furthermore, when attaching the hose but a moment is necessary for the operation, and the time lost in attaching the hose by the old method is saved by this arrangement.

I may vary the construction of the parts materially without departing from the spirit and intent of the invention.

Having described my invention, I claim—

In a hose-coupling, the combination with the hydrant A having the threaded projection a, of the fitting B adapted to screw thereonto, the stem D of round cross-section formed with the said fitting, there being a bore N through the fitting and stem for communicating with said hydrant, said stem D having a tapered groove E extending across its face at right angles to the said bore N, the lips F over-

hanging the groove E as shown and for the purposes set forth, the grooves O in the rounded periphery of the said portion D concentric with said rounded surface, the said grooves being equidistant from the face of the said portion D throughout their entire lengths, one end of each terminating in a closed end diametrically opposite the end of the other, the opposite ends of said grooves being turned at right angles to their lengths toward the face of D and terminating at that face as shown, the coupling G for engaging the groove E, flanges G' at each side thereof for entering said groove E and engaging the lips F, there being a bore H in said coupling to communicate with the bore N when attached to D, the enlargement I having the recess J therein, the spring-bolt K in the recess for engaging the coupling D for locking the two coupling portions together, there being a socket L in the portion D for receiving said bolt K, a spring surrounding the bolt for normally keeping said bolt thrown outward into the said socket L, and the finger-piece M attached to K for operating the said bolt all as set forth and described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE RATHBURN.

Witnesses:

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