

N^o 44, 794.

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Witnesses:
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UNITED STATES PATENT OFFICE.

A. M. GEORGE, OF NASHUA, NEW HAMPSHIRE.

IMPROVEMENT IN HOSE-COUPPLINGS.

Specification forming part of Letters Patent No. 44,794, dated October 25, 1864.

To all whom it may concern:

Be it known that I, A. M. GEORGE, of Nashua, in the county of Hillsborough and State of New Hampshire, have invented a new and useful Improvement in Hose Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those 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 plan view of a hose-coupling made after my improvement, one of the coupling-straps being thrown down to show the cam C, and the other strap being in position and having the wrench D applied to it. Fig. 2 is a vertical section through Fig. 1, taken on the red line.

Similar letters of reference indicate corresponding parts.

Hose-couplings that are used with fire-engines or with other apparatus for putting out fires ought to be so made as to be capable of being fixed in position and also unfixed instantaneously, and yet be secure from accidental unlocking. They ought also to be so constructed as not to become unserviceable by reason of ice in winter or by collections of sediment at out the joint. Furthermore, their joints should be strong and simple in construction and in the mode of operating them, so that unskillful persons can use them with readiness.

It is, or has been, customary to make couplings of this character with screw-thread joints, which are liable to injury by jamming their threads and by the presence of sediment and by rust, so that frequently the coupling cannot be got ready for use without great loss of time and labor, and sometimes not without the skill of those used to managing them.

My hose-coupling A is made of two parts, A' and A², each of which is secured to hose by means of the corrugations at their ends in the usual way.

The couplings are made to fit one within the other by sliding joints, and they are made strong at those points because it is necessary to secure them against becoming bent by violent blows or heavy weights, which might destroy or injure their fit. The drawings show the upper box, A', of the coupling as fitting within the box A² by a sliding joint, which ought to be made in a workmanlike manner, so as to prevent the passage of water when the coupling is locked.

The exterior of the box A' of the coupling is turned off, so as to leave a shoulder, 2, to receive the end 3 of the box A², the interior of which is also turned or reamed out so as to receive the end 4 of box A' against its shoulder 1. The sides of box A² are left the strongest and thickest of the two, to enable them to receive at opposite sides of its circumference the metallic locking-straps B, which lie within grooves on the exterior of the box, (shown in dotted outline in the figures,) the inner face, d, of the straps fitting snugly against the sides of the box, and the recessed part e fitting against the exterior face of the box A', so as to bring the end b of the strap over the groove a, which is cut on the upper face of the solid part of the box A' for the purpose of receiving the cam C. The end b of the strap is made of larger size, so that it can contain a socket or cavity to receive a cam, C, whose contour is shown in Fig. 1. The cam fits snugly in the chamber, and an arbor, c, extends from its outer end through a hole in the back of the end b of the strap. The wrench D fits upon the arbor c of the cam, and by its means the cam is turned, so that its longest diameter shall project down into the groove a of the upper box, A', when it is desired to lock the coupling together. The cam may be made with an increasing radius after passing its plain face V on either side, so that it will lock the coupling, whichever way the arbor is turned, or it may increase only in one direction. The cam is secured in its socket by a screw, g, whose end fits in a groove, 7, cut around the stem of the cam, and thus guides it in its revolution.

The inner and outer faces of the boxes of the coupling are flush with each other.

My coupling is adapted for the joints of all kinds of hose, whatsoever use they are put to.

When it is desired to uncouple the hose, the wrench is applied to the arbor c of the cam, which is thereby turned, so as to bring the face V over the groove a, when the strap can be withdrawn, as seen in the figures.

I claim as new and desire to secure by Letters Patent—

The hose-coupling, constructed and operating substantially as within described.

A. M. GEORGE.

Witnesses:

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