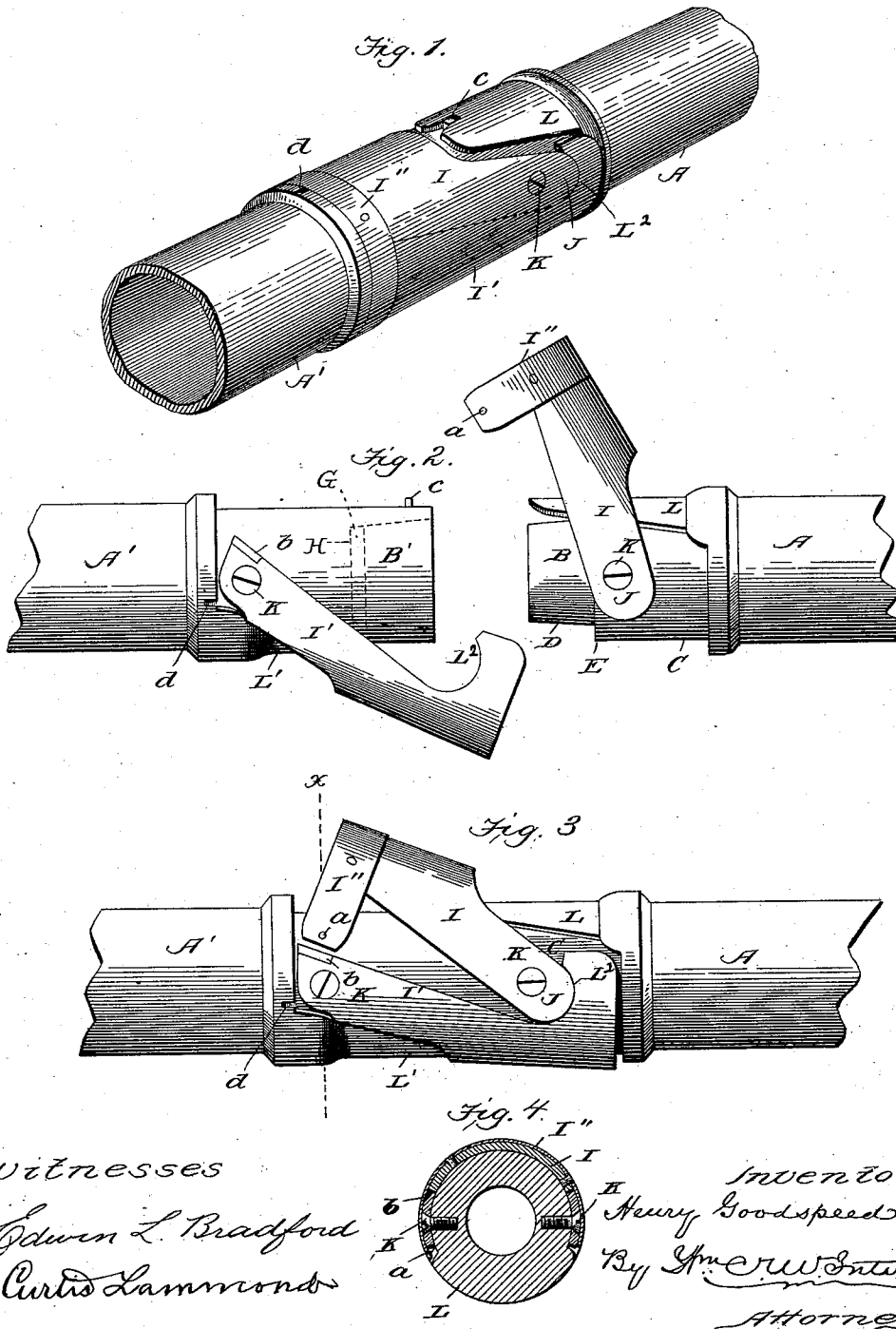


(No Model.)

H. GOODSPEED.
HOSE COUPLING.

No. 536,141.

Patented Mar. 19, 1895.



UNITED STATES PATENT OFFICE.

HENRY GOODSPEED, OF SAN MARCOS, TEXAS, ASSIGNOR OF ONE-HALF TO
ED. R. KONE AND J. M. HONS, OF SAME PLACE.

HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 536,141, dated March 19, 1895.

Application filed May 4, 1894. Serial No. 510,062. (No model.)

To all whom it may concern:

Be it known that I, HENRY GOODSPEED, a citizen of the United States, residing at San Marcos, in the county of Hays and State of Texas, have invented certain new and useful Improvements in Hose-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in hose couplings.

It has for its objects to provide a coupling which shall be simple and economic in construction and which shall be capable of rapid and ready action without the use of any tool for manipulating the same.

With these ends in view my invention consists in the peculiar construction and arrangement of the several parts as will be hereinafter and in detail explained.

In order that those skilled in the art to which my invention appertains may know how to make and use the same I will proceed to describe the construction, arrangement and operation of the same referring by letters to the accompanying drawings, in which—

Figure 1 is a perspective view of the meeting ends of hose coupled together with my improved device. Fig. 2 is a side view, partly in section, of the two parts separated. Fig. 3 is a similar view showing the interlocking coupling devices in position just previous to being forced into final relation shown at Fig. 1; and Fig. 4 is a cross section taken at the line *x, x*, of Fig. 3 the parts in their final relation.

Similar letters of reference denote like parts in the several views.

A, A' represent the ends of two pieces of hose to be coupled together. Within the ends of the flexible tube or hose is secured short metallic sections B, B'. (See Fig. 2.) These sections are secured within the ends of the hose in any of the well known ways, such for instance as with a binding wire. The exposed end of the section B is reduced at C to form a proper seat for the locking device presently described, and it is also reduced at D so that such reduced portion can enter the open end of the opposite section B', the shoul-

der E abutting against and making a tight joint with the end of the section B', and the extreme end of B abutting against and making a close joint with a packing ring G located against an interior shoulder H. (See Fig. 2.)

To the section B is pivoted a semi-tubular cam-lever I the free end of which terminates in or is equipped with a semi-circular spring I², the ends of which are armed with an inwardly projecting beveled nose *a*, which rides up the bevel *b* on the twin hook or lever I' on the section B', and interlocks with the lower edge, as clearly shown at Fig. 4. The heel J in rear of the pivot K is slightly cam-facced as shown to enter and operate with a correspondingly shaped seat L² in the twin hook I'. Both the hooks or levers I, I' are cut away above and in front of their respective pivots in order that they may swing outwardly, as shown in Figs. 2 and 3, and metal sections L, L', corresponding with the cut away portions, are secured to or cast with the couplings B and B'. The portion L on coupling B has its forward end bifurcated, as shown, to be guided upon and straddle a radial teat *c*, which guides the ends of the couplings into proper embrace, and prevents any axial movement, and thus brings the coupling hooks or devices into proper relation for action and the two sections L, L' also constitute coverings and braces co-acting with the twin tubular levers I, I' to completely surround the joint between the couplings.

The semi-tubular and twin cam lever I' on the coupling B' is pivoted in the same manner as the one already described and its free end is hook-shaped and formed with the cam face L² before referred to.

When the two hooks or levers I, I' are in position to tightly couple the ends of the hose it will be seen by reference to Fig. 1 that jointly they constitute substantially a continuous cylindrical band or collar around the reduced portions of B, B' and thoroughly brace and strengthen the same.

To couple the ends of two sections of hose the cam levers or hooks I, I' are swung into the position shown at Fig. 2, the end D of the coupling B is introduced within the free end of the coupling B', and the radial teat *c* en-

tering the bifurcated end of L brings the two couplings together in the proper relation to permit the swinging of I and I' into the position shown at Fig. 3. The free end of I is
 5 then forced downward or toward the coupling B' and its heel or cam face J coacting with the cam seat L² of hook I' forces the ends of the couplings B, B' toward each other to make a close joint in an obvious manner,
 10 and the hooks or levers then assume the position and relation shown at Fig. 1, so that any longitudinal strain upon the couplings will be resisted by the interlocking heel J and seat L².

15 If for any reason the parts should stick, bind or become difficult to manage, the spring clasp may be released and the lever I lifted simply by inserting a pointed nail or other piece of metal through the channels d, and
 20 under the parts to be released.

I do not wish to be limited to the exact details of construction as these may be varied in many particulars without departing from the spirit of my invention.

25 What I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the couplings B, B'

adapted to be secured to hose sections, the semi-tubular cam levers I, I' pivoted to the couplings B, B' respectively, the lever I 30 formed with the heel J, and the lever I' with the toe L² adapted to interlock and draw the couplings toward each other, substantially as and for the purpose set forth.

2. The combination and arrangement of 35 the couplings B, B', the semi-tubular hook levers I, I', pivoted to the couplings and cut away in front of their pivots, as described, and metal sections L, L' secured to the couplings B, B'. 40

3. In combination with the couplings B and B' the semi-tubular lever or hook I provided at its free end with the ring spring I'', having the latch or nose a, and the semi-tubular lever or hook I' provided at its heel end with 45 the bevel b, all arranged as described to embrace and surround the couplings as hereinbefore set forth.

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

HENRY GOODSPEED.

Witnesses:

ED. R. KONE,
 WM. MALONE.