

(No Model.)

J. YOUNG.

DEVICE FOR FASTENING HOSE ON THE SPINDLES OF COUPLINGS.

No. 453,791.

Patented June 9, 1891.

Fig. I

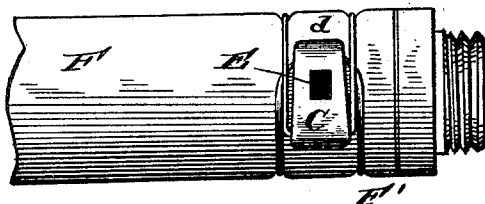
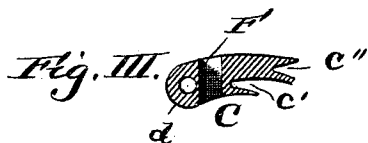
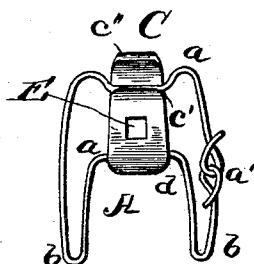


Fig. II.



Witnesses:

J. B. McGivv.
H. B. Burkhard

Inventor:

John Young.
By this Attorney,
Edson Bros.

UNITED STATES PATENT OFFICE.

JOHN YOUNG, OF TIFFIN, OHIO.

DEVICE FOR FASTENING HOSE ON THE SPINDLES OF COUPLINGS.

SPECIFICATION forming part of Letters Patent No. 453,791, dated June 9, 1891.

Application filed March 25, 1891. Serial No. 386,373. (No model.)

To all whom it may concern:

Be it known that I, JOHN YOUNG, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have
5 invented certain new and useful Improvements in Devices for Fastening Hose on the Spindles of Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will
10 enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in devices for fastening hose on the spindles of couplings used to connect two parts or sections of hose; and the object is to provide a
15 simple and effective device which can be quickly adjusted in position and which securely fastens the hose in place; and a further object is to provide suitable means whereby the fastening device may be used on hose
20 of different sizes and at the same time perform its functions in an effective manner.

With these ends in view my invention consists of a double bail formed of one piece of
25 stout wire and having the ends of said wire joined together by loops which interlock with each other. A fastening-plate is eccentrically pivoted on one end of said bail and is provided with a cam-surface on its lower side,
30 which is adapted to bear against the hose when placed in position and fasten it securely in place on the spindle of a hose-coupling. This fastening-plate is provided with a groove or seat in its free end and another corresponding
35 groove or seat at a short distance from the first seat, and the free end of the bail is fitted in either of these grooves or seats, according to the size of the hose, after which the fastening-plate is sprung or forced over upon
40 the hose by means of a pin fitted in a socket formed in the plate for such pin at a point between the pivot and the seats.

My invention further consists of certain details of construction and combination of parts,
45 as will more fully appear hereinafter.

To enable others to more readily understand my invention, I have illustrated the same in the accompanying drawings, in which—

Figure I is a view of my improved fastening device secured in position on a section of
50 hose and spindle. Fig. II is a view showing

the device detached from the hose and in position to be sprung or clamped in place. Fig. III is a detail view of the fastening-plate.

Referring to the drawings, in which like
55 letters of reference denote corresponding parts in all the figures, A designates the bail, which is formed of one piece of wire and consists of two concentric loops *a a*, which are connected at their ends at *a'*, for a purpose
60 hereinafter specified. The ends of the wire which form the bail are looped at *b b*, and these loops interlock with each other and the extreme ends of the wire are bent over
65 the main portion of the wire, forming one of the loops of the bail, the free sides of said wire extending in opposite directions and lying on the inner side of said loops and the bail, so that
70 when the bail is clamped in place the ends of these loops *b b* will be pressed tightly against the hose, and thus be prevented from pulling loose and rendering the device inoperative. This arrangement and manner of joining the
75 ends of the bail presents many advantages over those in general use, as it will not pull apart as those in which the ends are soldered together, nor will it injure the hose on which it is clamped, but it holds the ends securely
80 together, and the tighter the bails are clamped the less danger there is of the ends ever becoming separated. On one end *a'* of the loops *a a* is an eccentrically-pivoted fastening-plate C, which is slightly tapered toward its free
85 end. This plate is provided with a transverse groove or seat *c''* in its end, which is flared upwardly and downwardly for this purpose, and this groove or seat is adapted to receive
90 the other ends of the loops *a a* after the bail has been placed on the hose. The pivoted end of this plate C is provided with a cam-surface *d* on its lower inner side, and this end of the plate is rounded and smoothed, so that
95 when it has been sprung over to bind on the hose it will not cut or otherwise injure the hose, and it will operate easily and can be quickly adjusted without delay.

In rear of the grooved seat, near the end of the fastening-plate, is another groove or seat
100 *c'* on the under surface of said fastening-plate, and this seat *c'* is used when the device is fitted on a larger hose, and the seat *c''* in the end of the plate is used when the hose is

larger; but the two seats are substantially alike and are adapted to receive the end *a'* of the loop *a*. Between the seat *c'* and the pivot of the plate is a socket *E*, which may
 5 extend entirely through the plate from the upper side thereof, and this socket is adapted to receive a lever or pin, by means of which the fastening-plate is sprung or turned over and the bail tightened and securely clamped.
 10 By this arrangement the hose *F*, which has been first slipped on the spindle *F'*, can be clamped securely and quietly in place. The bail is slipped on the hose over the spindle in the position it is desired to clamp it, and the
 15 end of the loop *a* is placed in the groove or seat *c'* or *c''*, according to the size of the hose. The lever is then inserted in the socket *E* and the fastening-plate is sprung or forced over upon the other side of the bail, as shown in Fig.
 20 I. The lower face of the fastening-plate between the pivot and the second groove *c'* is concaved slightly and forms a compound curve with the cam-surface of said plate, and thus when the plate has been clamped in position it
 25 will fit snugly against the hose, and the bail draws both ends tightly and prevents the device from being displaced. When the bail has been drawn tightly and the fastening-plate properly clamped, the two ends of said bail
 30 are crossed one within the other, and they exert an actual tension on the plate at opposite ends thereof, and as the intermediate space between the pivot and groove *c'* of the plate is concaved the ends of the bail exert a tension
 35 toward each other, and also draw the plate closer against the hose, and thus effectively clamp the bail in place.

When it is desired to remove the bail, the lever is inserted in the socket and the plate
 40 turned backward, when the connected bail and plate can be easily removed.

I am aware that changes in the form and proportion of parts and details of construction can be made without departing from the

spirit or sacrificing the advantages of my invention, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device for fastening hose on the spindles of couplings, the combination of a bail, and the fastening-plate pivoted at one end to the bail and provided with a series of
 55 grooves or seats on its lower surface, near the free end thereof, adapted to receive the unconfined end of said bail, whereby the fastening-plate serves as a lever to draw the ends of the bail together and fasten the same, substantially as described.

2. In a device for fastening hose on the spindles of couplings, the combination of a bail formed of a single wire bent to form the loops or rings, and a fastening-plate pivotally
 65 secured to one end of said bail and provided with a series of grooves or seats, in one of which the unconfined end of the bail is adapted to be fitted, as and for the purpose set forth.

3. In a device for fastening hose to the spindles of couplings, a bail formed of one piece of wire bent into two parallel rings or loops, the fastening-plate pivotally secured
 75 at one end to one end of said bail, said plate having a cam-surface beneath the pivot, a series of seats or grooves on the lower face thereof, and the concaved portion between said seats and the pivot, and a socket in the fastening-plate adapted to receive a pin or
 80 lever, substantially as and for the purpose set forth.

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

JOHN YOUNG.

Witnesses:

M. L. YOUNG,
 H. J. WELLER.