

No. 775,678.

PATENTED NOV. 22, 1904.

J. W. LAWHEAD.
HARNESS SNAP.

APPLICATION FILED FEB. 10, 1904.

NO MODEL.

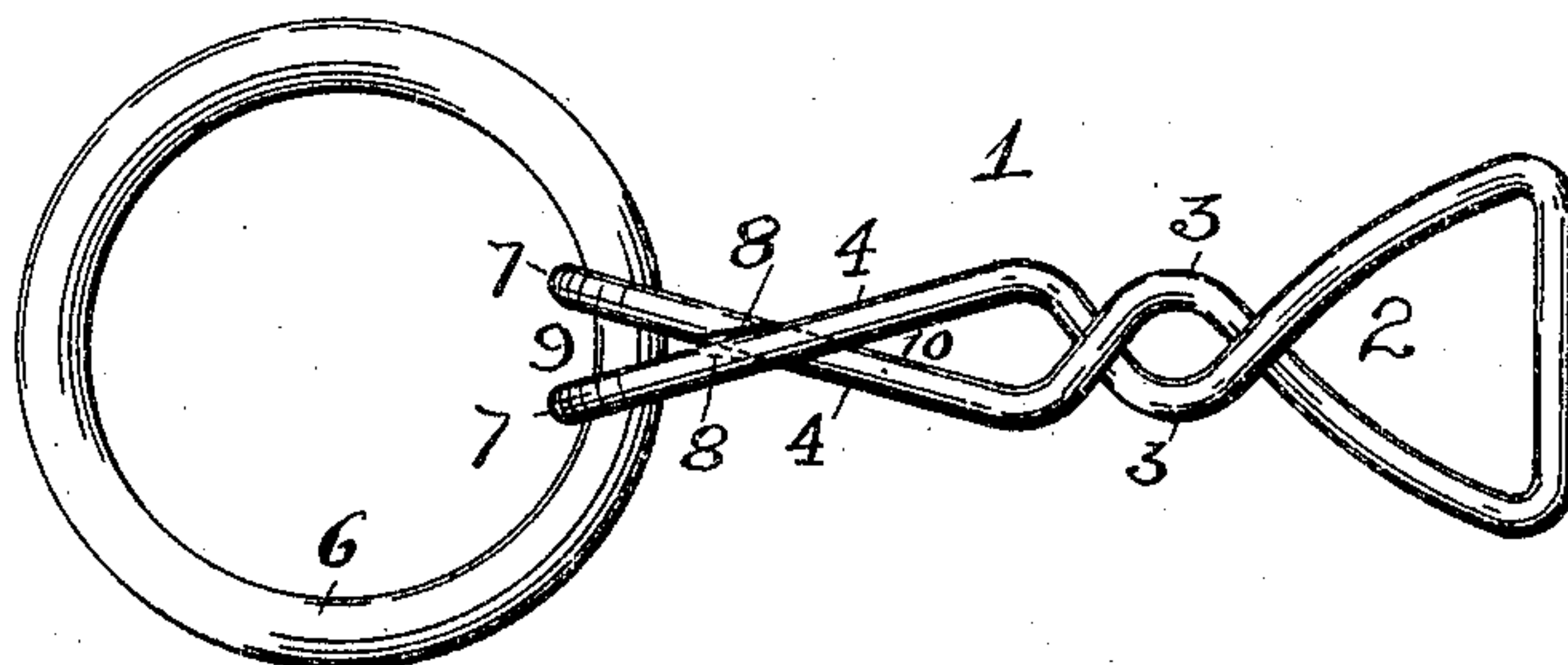


Fig. 1.

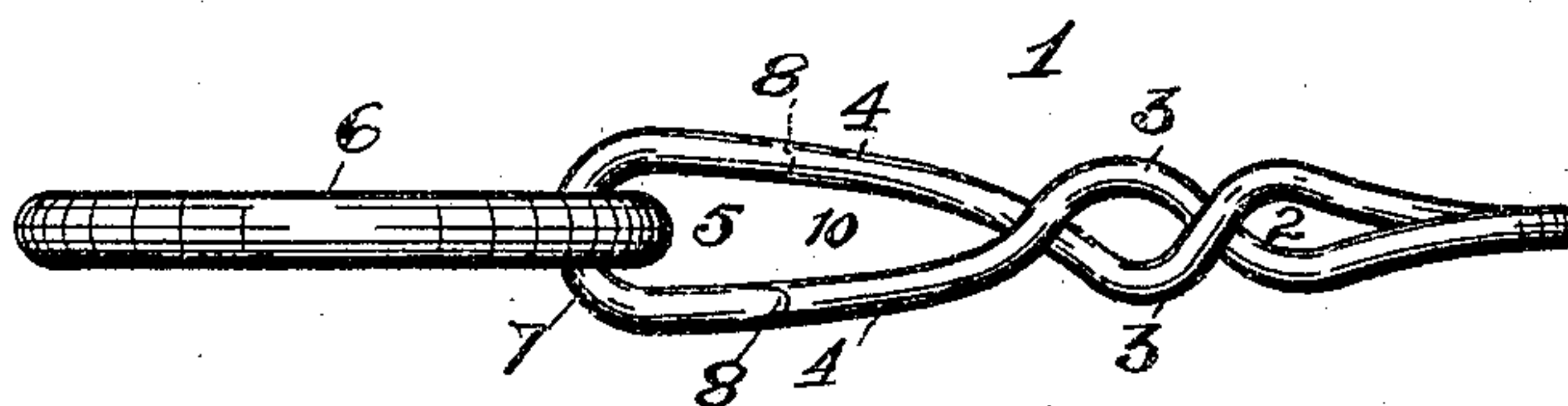


Fig. 2.

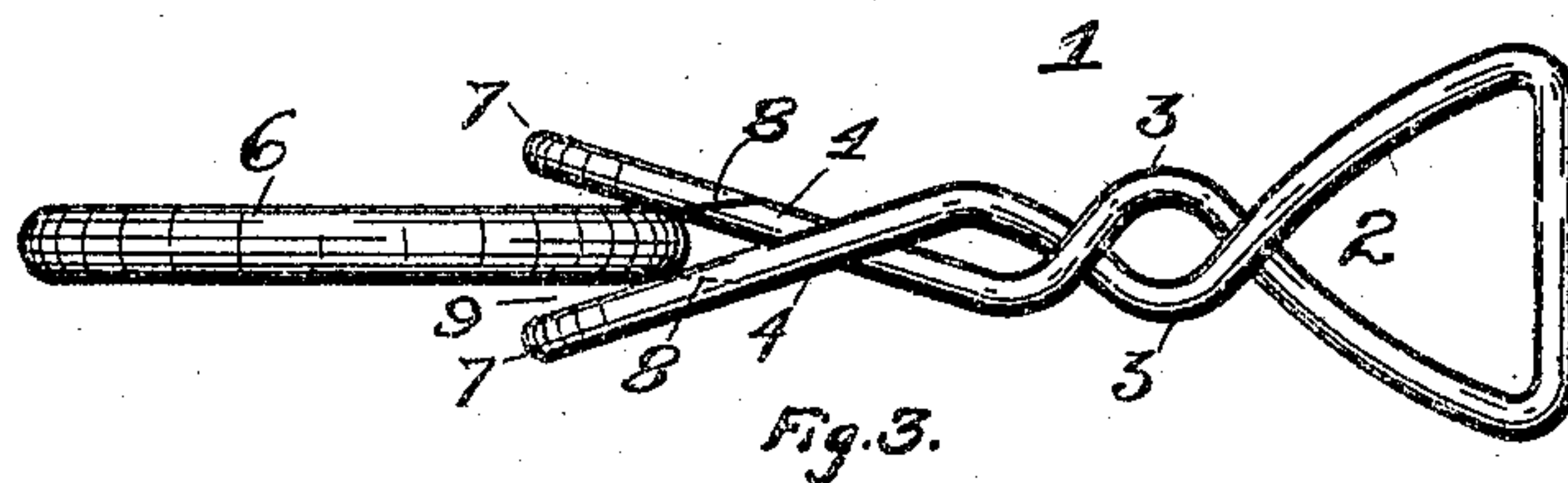


Fig. 3.

WITNESSES
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UNITED STATES PATENT OFFICE.

JAMES W. LAWHEAD, OF DAYTON, OHIO.

HARNESS-SNAP.

SPECIFICATION forming part of Letters Patent No. 775,678, dated November 22, 1904.

Application filed February 10, 1904. Serial No. 192,977. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. LAWHEAD, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Harness-Snaps; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in harness-snaps, and possesses the new and advantageous features hereinafter described and claimed.

The invention is an improvement in the harness-snap set forth in United States Letters Patent No. 742,690, granted to F. L. Loree, October 27, 1903, and of which patent I am the sole and exclusive owner.

The object of the invention is to add to the practicability and utility of the harness-snap, which is the subject-matter of the above patent.

To this end the invention consists in providing a loose twist in the body of the snap and from which twist the sides of the snap extend diagonally, cross each other, and terminate in a V-shaped end. In such a construction in inserting the ring in the snap the loose twist above referred to enables the crossed sides of said snap to spread outward by the contraction and expansion of the twist sufficiently to permit the ring to pass the extreme or beveled ends of the snap, after which the contraction and expansion of the coils of the twist draw the sides in contact with the beveled ends and cause the sides to turn the ring to a position at right angles to its entering position. The size of the twist, or, in other words, the space between the coils of said twist, is substantially equal to the diameter of the metal from which the ring is formed. In other words, the coils of the twist must contract and expand sufficiently to permit the ring to pass between the beveled ends and the sides of the snap. In removing the ring, as well as inserting it, the coils of the twist nec-

essarily expand and contract sufficiently to permit the crossed sides of the snap to be sprung in opposite directions, all as will hereinafter be more fully described.

Preceding a detail description of the invention, reference is made to the accompanying drawings, of which—

Figure 1 is a plan view of my improved harness-snap with ring attached. Fig. 2 is a view looking at Fig. 1 at right angles. Fig. 3 is a plan view showing the portion connecting the ring and snap.

In a detail description of the invention similar reference characters indicate corresponding parts.

The snap 1 is constructed of one integral piece of metal of suitable diameter. One end of the snap is provided with a loop 2, which engages the usual harness-strap. The body of the snap is provided with a loose twist 3, which completes the loop 2. From this loose twist 3 the sides 4 4 extend diagonally, cross or intersect each other at a point between the twist and the rounded or hooked ends of the snap and lie away from each other to provide a loop 5, which engages the ring 6. The sides 4 4 extend diagonally, as before stated, toward each other from the point where the twist terminates and by crossing or intersecting each other provide at the extreme end of the snap a V-shaped entrance, said entrance being also inclosed by the rounded tapering sides of the snap after they cross each other. The ends of the snap are uniformly curved or rounded in hook form, as at 7, in opposite directions and are tapered at their extreme ends 8, so that the said tapered ends when the snap is closed abut against the sides 4, the spring of the metal serving to maintain such contact. The points of contact of the extreme ends of the hooks with the sides 4 4 are substantially in line with the cross or point of intersection of said sides. Therefore suitable inclination is thus given said sides to cause the ring to be ejected from the loop 5 under the contraction of the twist or coil 3. The crossing of the sides 4 4, as hereinbefore stated, provides the entering-space 9, into which the ring 6, as in Fig. 3, is inserted, and is thus utilized to open the snap by forcing said ring inwardly. In

this act of uniting the ring and the snap the ring is pressed inwardly and the fork or V-shaped ends of the snap are caused to spread apart and the tapered ends 8 to move away
5 from their contact with the sides 4 4. The twisted portion of the snap contracts and expands at the same time in inserting or removing the ring. The ring is permitted to enter the loop 5, and when it passes inwardly to a
10 point beyond the tapered ends 8 the contraction and expansion of the twist causes the sides 4 4 to come in contact with the beveled ends 8, and the ring is thereby caused to assume its natural position within the loop 5.
15 The slanting sides 4 4, adjacent to the twist, stop the insertion of the ring soon after the said ring has passed the beveled ends 8 8 and turn said ring at right angles to its entering position.

20 Having described my invention, I claim—

1. The snap comprising two members connected at one end and terminating at their opposite ends in hooks curved in opposite di-

rections, and the end of the hook of each member abutting the opposite member, and said 25 members being loosely twisted together intermediate their ends and beyond the twist lying in planes which intersect substantially at the line joining said abutting ends.

2. A snap comprising two members connected at one end and terminating at their opposite ends in hooks curved in opposite directions and having a V-shaped entrance between said hooks, the end of the hook of each member abutting the opposite member and 35 said members being loosely twisted together intermediate their ends and beyond the twist lying in planes which intersect between the twist and the hooked end of the snap.

In testimony whereof I affix my signature 40 in presence of two witnesses.

JAMES W. LAWHEAD.

Witnesses:

R. J. McCARTY,
C. M. THEOBALD.