

(No Model.)

R. M. DILLARD.
SNAP HOOK.

No. 415,030.

Patented Nov. 12, 1889.

Fig. 1.

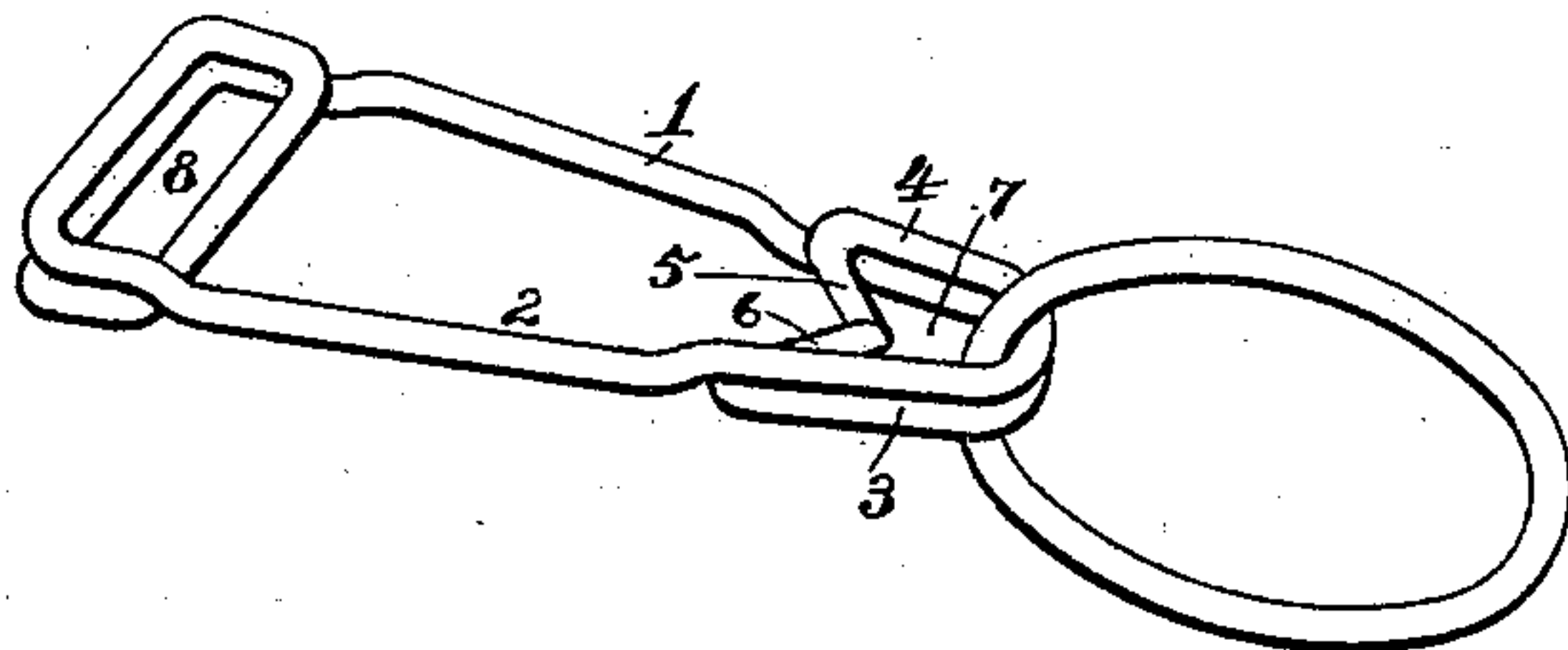


Fig. 2.

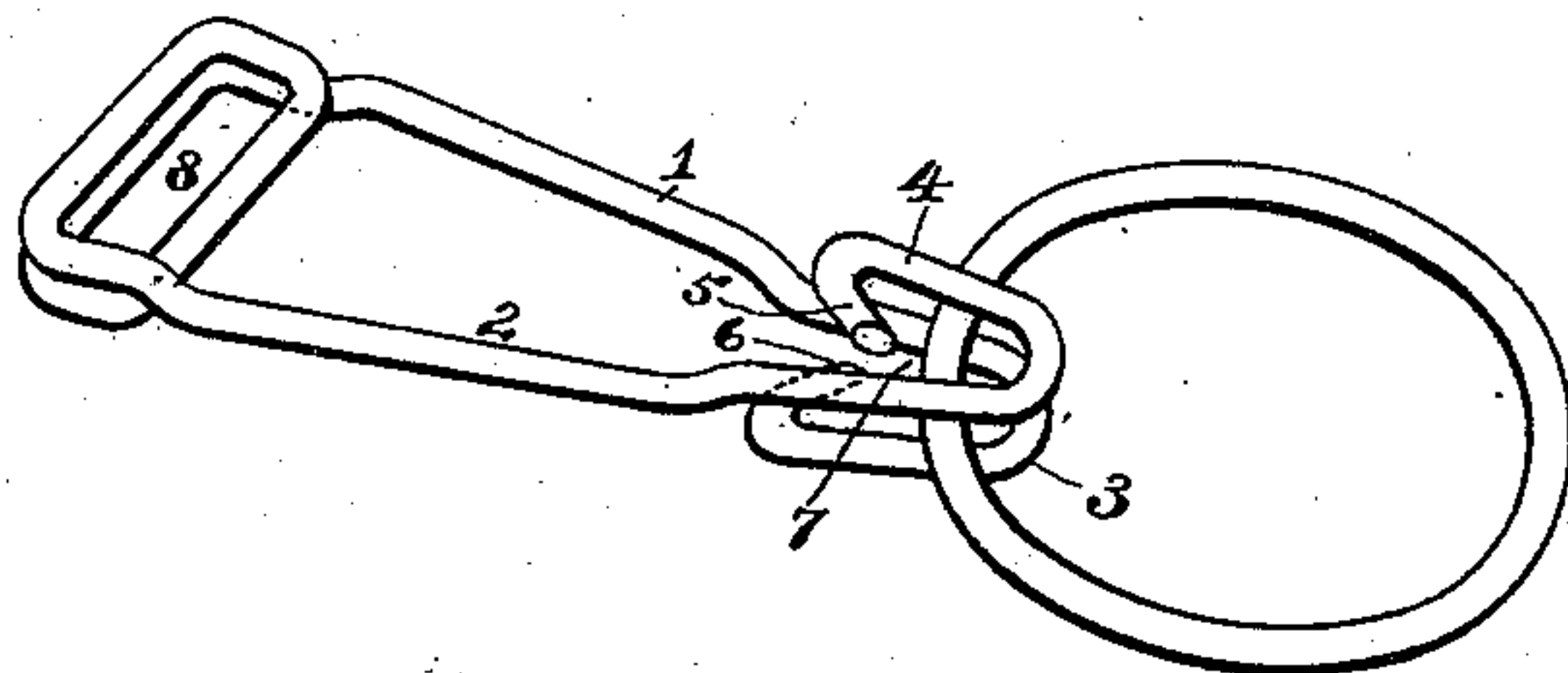
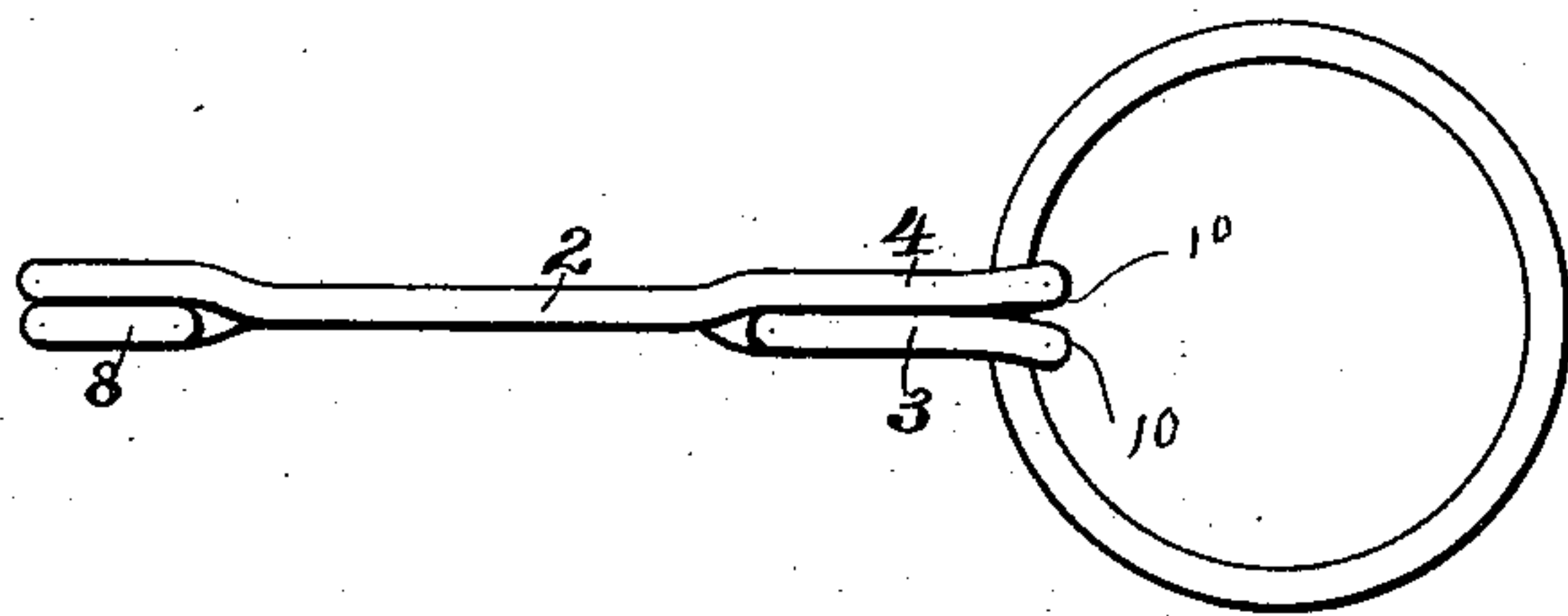


Fig. 3.



WITNESSES:

Percy C. Bowen.
Arthur L. Bryant.

INVENTOR

Robert M. Dillard
By *Edson Ross.*
Attorneys.

UNITED STATES PATENT OFFICE.

ROBERT M. DILLARD, OF GOODLAND, KANSAS, ASSIGNOR OF ONE-HALF TO
CALVIN P. RUSSELL, OF SAME PLACE.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 415,030, dated November 12, 1889.

Application filed August 14, 1889. Serial No. 320,707. (No model.)

To all whom it may concern:

Be it known that I, ROBERT M. DILLARD, a citizen of the United States, and a resident of Goodland, in the county of Sherman and State of Kansas, have invented certain new and useful Improvements in Snap-Hooks; 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 improvements in snap-hooks; and it has for its object to provide a simple, durable, and inexpensive device, which can be very easily and quickly manipulated to permit of the attachment or removal of a ring or eye and which effectually overcomes the accidental disengagement of the ring or eye from the device.

My invention consists in the peculiar construction and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the claims.

To enable others to understand my invention, I will now proceed to a detailed description thereof, in connection with the accompanying drawings, in which—

Figure 1 is a perspective view showing a ring connected to the snap-hook. Fig. 2 is a like view illustrating the manner of inserting the ring in the eye of the hook. Fig. 3 is an edge view of the device.

Like numerals of reference denote corresponding parts in all the figures of the drawings, referring to which—

1 2 designate the jaws of my improved snap-hook, and 3 4 the overlapping hooks of said jaws, which have the inwardly-extending prongs 5 6 to complete the ring-receiving eye 7.

The entire device is preferably made of a single piece of wire, which is first bent or twisted upon itself to form a loop 8, by means of which loop the snap-hook can be attached to a strap of a harness or to any other desired object. The free ends of the wire extend from said strap-loop 8 and are arranged parallel with each other to form the jaws 1 2 of the hook. The hooks 3 and 4 of the jaws are curved concentric with each other, and they extend from one jaw to the other—that

is to say, the hook 3 of the jaw 1 curves around the space that separates the jaws and over to the other jaw 2, and the hook 4 of the jaw 2 is similarly arranged. These hooks thus overlap one another and form that portion of the eye 7 against which the strain or pull of the ring is exerted, and, as the parts are doubled and lapped, it is evident that the device has sufficient strength to resist the strain of the ring or eye, which may be connected thereto.

The ends of the recurved hooks 3 4 extend upon or lap the outer ends of the jaws for a short distance, and said ends of the hooks are then bent inwardly to form the prongs 5 6, which meet at the medial line drawn longitudinally through the snap-hook. These prongs complete the ring-receiving eye 7, and they are bent at an acute angle to the line of the arms, so that the ring can be expeditiously inserted into the eye.

The operation of my invention is as follows: To insert a ring in the eye 7, it is placed edgewise between the lapped portions of the hooks 3 4 and forced between the same until it clears the inwardly-extending prongs, after which the ring is turned at right angles to the plane of the snap-hook and then drawn or moved toward the eye 7, which movement of the ring causes it to impinge against and separate the angularly-disposed prongs, which immediately return to their normal positions by reason of the inherent elasticity or spring in the wire of which the snap-hook is made. It is obvious that the ring cannot become accidentally disengaged because the eye 7 is closed by the prongs 5 6, and that the ring can be easily and quickly connected to the snap-hook. To disengage the ring, the jaws are forced toward each other by a simple pressure of the hand thereon, so as to separate the prongs, and the ring slipped back between said prongs, thus entering the space between the jaws. The ring is now turned nearly parallel with the plane of the jaws and then drawn forward, so as to impinge against the hooks at the points where the prongs join the same. This pull of the ring separates the hooks laterally, so that the ring can be slipped edgewise between said hooks and their prongs, and thus disengaged from the snap-hook. The

jaws and hooks are thus capable of limited play in two directions, the planes of which movements are at right angles, in order to permit the proper manipulation of the snap-hook to attach or disengage a ring, and, as the device is made of stout spring-wire, the jaws and hooks immediately resume their normal positions after the proper adjustment of the ring, so that the eye 7 is closed at all times.

By making the snap-hook out of a single piece of wire, as herein shown and described as the preferred embodiment of my invention, I am enabled to produce a device which can be manufactured and sold at a reduced cost, and at the same time is very simple and durable in construction and efficient and reliable in service.

Slight 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 would therefore have it understood that I do not strictly confine myself to the exact details and form of parts herein shown and described as an embodiment of my invention.

In order to facilitate the introduction of the ring or eye between the lapped ends of the hooks on the jaws of the device, I bend or incline the outer extremities of said hooks laterally of each other and in opposite directions, as indicated at 10 in Figs. 1 and 2. It is obvious that when the ring or eye to be connected to the snap-hook is placed edgewise between the laterally-inclined lapped ends of the hooks it can be more easily forced between said hooks than when the lapped hooks lie flush, as the hooks will separate more readily and thereby enable the ring to be introduced with greater ease and facility.

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

1. A snap-hook formed of a single piece of wire, consisting of the two jaws arranged in substantially the same plane and each having a hook at its free end, which hooks overlap each other, the extremities of said overlapping hooks being bent to form the inwardly-projecting prongs 5 6, which meet at the medial line of the snap-hook to form with the overlapping hooks a closed eye 7, said inwardly-extending prongs being inclined reversely with relation to each other and from the medial line of the snap-hook to the points where they unite with the hooks of the jaws, substantially as and for the purpose described.

2. A snap-hook formed of a single piece of wire, comprising the two jaws having the overlapping hooks, the extremities of said hooks 3 4 being bent inwardly to form the prongs 5 6, said prongs meeting each other, as described, and being inclined from the medial line of the snap-hook to the extremities of the jaws and reversely with relation to each other, the lapped portions of the hooks 3 4 at one end and the longitudinal center of the snap-hook being bent or inclined reversely at 10, for the purpose described, substantially as set forth.

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

ROBERT M. DILLARD.

Witnesses:

W. J. SMITH,
J. E. RULE.