No. 643,924. Patented Feb. 20, 1900.

J. E. VANNOTE.

SNAP HOOK.

(Application filed June 30, 1899.)

(No Model.)

Fig. 1

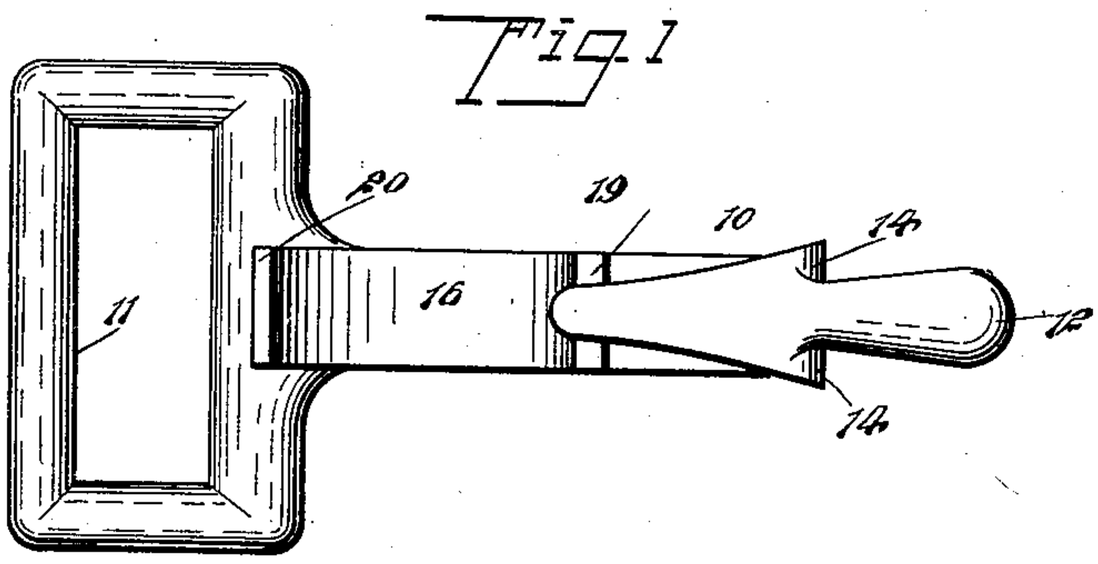


Fig. 2

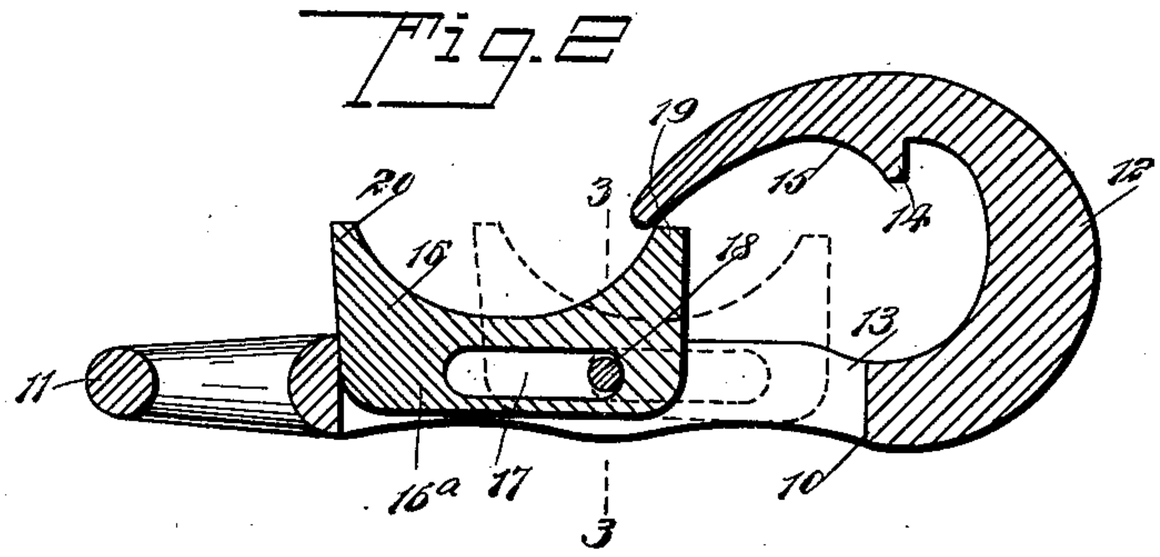
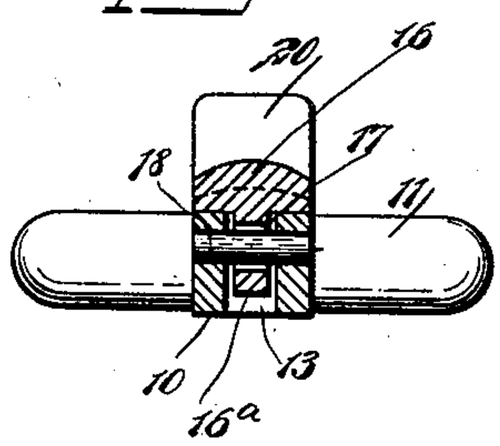


Fig. 3



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UNITED STATES PATENT OFFICE.

JACOB EDWARD VANNOTE, OF LAKOTA, NORTH DAKOTA, ASSIGNOR OF ONE-HALF TO JOHN A. KINSEY, OF SAME PLACE.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 643,924, dated February 20, 1900.

Application filed June 30, 1899. Serial No. 722,426. (No model.)

To all whom it may concern:

Be it known that I, JACOB EDWARD VANNOTE, of Lakota, in the county of Nelson and State of North Dakota, have invented a new and Improved Snap, of which the following is a full, clear, and exact description.

One object of my invention is to provide a simple and economic form of snap-hook which may be used wherever such a device is applicable, but which is especially designed to be employed in connection with harness to attach the driving-reins or a hitching-strap, for example, to the rings or ring of a bridle-bit.

Another object of the invention is to so construct a snap-hook that no springs are necessary and also so that the snap will automatically lock and will not become accidentally unlocked while in use.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improved snap. Fig. 2 is a longitudinal vertical section through the central portion of the snap, and Fig. 3 is a transverse section taken practically on the line 3 3 of Fig. 2.

The body of the improved device consists of a shank 10, having a loop or eye 11 at one end and a hook 12 at its opposite end, and the said hook is rearwardly curved over the said shank. The shank is provided with a longitudinal slot 13, that extends from a point near the loop or eye 11 to a point within the hook 12, as is best shown in Fig. 2, and that portion of the hook that is carried over the shank is provided with a transverse rib 14 on its under side, constituting a stop. As shown in Fig. 1, this rib extends beyond opposite sides of the rearwardly-curved portion of the hook, and the side edges of the ends of the ribs or flanges 14 are usually beveled, so as to render the free end of the hook symmetrical, as also shown in Fig. 1. The flange or rib 14 is located nearer the body portion of the hook than its free end, as illustrated in Fig. 2, and the under face of the free end of the hook is provided with a concavity 15, said concaved surface being carried to the bottom of said flange or rib 14, as is also shown in Fig. 2.

A slide 16 is used in connection with the body. This slide is of sufficient width to extend practically to the side edges of the shank 10, and said slide is provided with a rib 16^a on its bottom of such dimensions that it will move freely in the slot 13 of the shank 10. The rib 16^a of the slide is provided with a longitudinal slot 17, and the slide is held within the slot of the shank 10 of the body by passing a pin 18 through said shank and through the slot 17 in the slide, as is shown in Figs. 2 and 3. The upper face of the slide is decidedly concaved, as is shown in Figs. 1 and 2, forming thereby two end sections 19 and 20, whose tops are considerably above the horizontal plane of the central portion of said concaved surface of the slide. The end 19 of the slide, which is the forward end, is of such length that when the slide is drawn rearward as far as possible the said forward end 19 of the slide will engage with the under surface of the hook 12 adjacent to its free end, as shown in Fig. 2, thus preventing the escape of any ring that may have been entered at the hook portion of the snap. The slide is readily moved forward and backward through the medium of the rear end 20, and said slide may be operated as conveniently in very cold weather as in warm weather and as readily with gloves as without them.

When a ring is to be entered at the hook portion of the snap, the slide is carried forward as far as possible, as shown in dotted lines in Fig. 2. A ring may now be passed between the concaved surface of the slide and the concaved surface 15 of the front end of the hook 12 back to the forward body portion of the hook, and as soon as the slide is released the tendency of the slide will be to move rearward and close the opening at the mouth of the hook.

While the snap is in use, in the event the ring should have a tendency to move rearward it will strike the stop or rib 14 and be deflected downward or in direction of the shank 10 and will thus be brought in engage-

ment with the forward end of the slide, and the ring when so engaging will force the slide farther rearward, if possible, and will more securely lock the mouth of the hook.

The device is exceedingly simple. It is durable and economic, and the absence of springs renders the device reliable at all times. Through the medium of the slide 16 the snap is readily made to engage with the ring and may be as conveniently disengaged therefrom. It is possible to remove the hook from the snap only when the slide is carried forward, the ring having previously been carried to an engagement with the concaved surface 15 at the mouth of the hook.

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

1. A snap, consisting of a longitudinally-slotted shank formed with a hook having a concave under surface at its free end and a transverse rib at the inner end of said surface, and a slide fitted to slide loosely in the slot of the shank, said slide having a concavity in its upper face opposed to the concave surface of the hook and a raised end section formed on each side of its concavity, the inner end section forming a finger-hold, and the outer end section abutting against the free end of the hook when the slide is at the outer limit of its movement, as set forth.

2. A snap, consisting of a longitudinally-slotted shank formed with a hook having a concave under surface at its free end and a transverse rib at the inner end of said surface, a transverse pin in the slotted portion of said shank, a slide having movement on the upper face of said shank and having a concavity on its upper face opposed to the concaved surface of the hook and a raised end section at each side of its concavity, said slide being formed on its bottom with a rib fitting in the slot of the shank and formed with a longitudinal slot in which the transverse pin is received, the said slot being of such a length that the inner end section of the slide will stop between the free end of the hook and the transverse rib when the slide is at the inner limit of its movement whereby to form a zigzag or undulating passage for the insertion of a ring, and whereby the said end section of the slide will abut against the free end of the hook when the slide is at the outer limit of its movement, as set forth.

JACOB EDWARD VANNOTE.

Witnesses:
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