No. 628,619. Patented July 11, 1899.

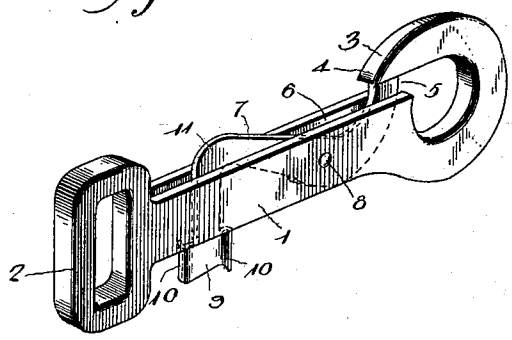
J. K. ALWOOD.

HARNESS SNAP.

(Application filed Aug. 17, 1897.)

(No Model.)

Fig. 1.



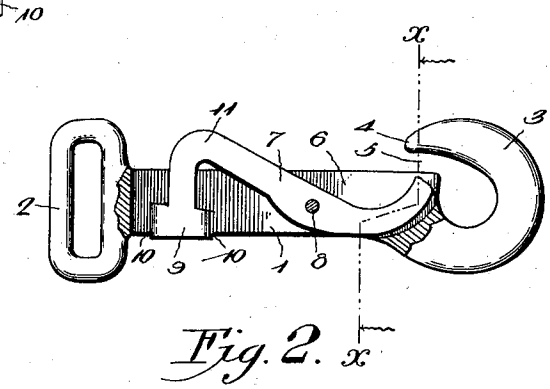
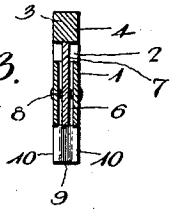


Fig. 2.

Fig. 3.



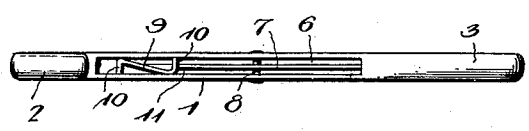


Fig. 4.

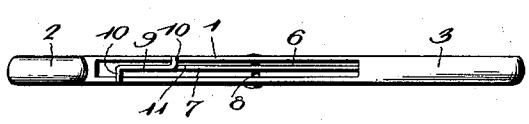


Fig. 5.

Witnesses

J. Grant Culverwell,

[illegible]

Josiah K. Alwood, Inventor,

By his Attorneys,

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSIAH K. ALWOOD, OF MORENCI, MICHIGAN.

HARNESS-SNAP.

SPECIFICATION forming part of Letters Patent No. 628,619, dated July 11, 1899.

Application filed August 17, 1897. Serial No. 648,505. (No model.)

To all whom it may concern:

Be it known that I, JOSIAH K. ALWOOD, a citizen of the United States of America, residing at Morenci, in the county of Lenawee and State of Michigan, have invented a new and useful device of the class commonly called "snaps" or "harness-snaps" for the temporary connection of different parts of animal harness, as lines or straps, reins, or chains, with bridles, halters, holdbacks, breeching, neck-yokes, bull-rings, and such like things, in such manner as to render the connection or disconnection quick and easy and always safe and reliable, of which the following statements, in connection with the accompanying drawings, constitute my specification, similar figures always referring to the same parts of my device.

This invention relates to snap-hooks of that class embodying a pivoted latch; and the object thereof is to so form and mount the latch upon the hook as to provide a simple and durable locking means for the latch, whereby the latter may be held against accidental opening, and thus dispense with the separate springs, as in the ordinary form of snap-hooks. These and other objects and advantages of my improvements will be hereinafter more fully described, shown in the drawings, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my improved snap-hook. Fig. 2 is a top plan view, parts being broken away to show the latch in open position. Fig. 3 is a transverse sectional view taken on the line $x\,x$ of Fig. 2 with the latch in closed position. Fig. 4 is a rear elevation showing the latch open. Fig. 5 is a rear elevation showing the latch closed.

Corresponding parts in the several figures are denoted by like characters of reference.

In the accompanying drawings, the hook is shown as having a straight shank 1, with the usual attaching-eye 2 at one end and the hook 3 at the other end thereof. The shank 1 is preferably straight, as shown, and the bill 4 of the hook overlaps the end of the shank and forms a contracted mouth 5, leading to the eye of the hook. A slot 6 is formed in the shank, extending the full length thereof, and is open at each side, as shown.

The latch 7 is pivoted intermediate its ends, as at 8, within the slot 6, having its forward end disposed transversely and at one side thereof and adapted to engage the bill of the hook. The other end is formed transversely of the shank of the latch, being disposed opposite the forward end thereof and provided with a head 9, having its ends formed into lugs or flanges 10, extending in opposite directions. The head 9 is disposed at one side of the slot 6 when the latch is in closed position, and the lugs 10 overlap and engage the edges of the shank at each side of the slot, thus preventing the accidental opening of the latch, as will be understood. The rear bowed portion 11 of the latch always protrudes from the slot at the opposite side from the head 9, and thus provides a convenient thumb-piece, whereby the latch may be opened and closed by simply pressing thereon toward the shank of the hook.

The latch should have sufficient spring to permit of the head 9 being twisted by pressing with the thumb and forefinger upon the lugs 10 to aline the latter with the slot 6, so that the head may be pushed therein to open the latch. To close the latch, it is simply necessary to press upon the bowed portion 11; but the tension of the lugs 10 against the upper and lower faces of the slot effectually prevents the latch from being accidentally closed.

My invention therefore presents an exceedingly simple and useful snap-hook composed of few parts which are compactly assembled together, whereby the latch is conveniently held against accidental displacement in either open or closed position and which is capable of use in any of the ordinary manners of application. The device is also capable of various changes in its form, proportion, and minor details without departing from the spirit and scope or sacrificing any of the advantages thereof, and therefore I do not wish to be understood as limiting myself to the precise construction and arrangement as herein described.

Having thus described the invention, what I claim, and desire to secure by Letters Patent, is—

1. A snap-hook comprising a hook provided in its shank with a longitudinal slot, and a latch arranged within the slot, extending lon-

gitudinally of the shank and pivoted between its ends, one end of the latch being arranged to engage the inner face of the bill of the hook, and the other end being provided with a locking device engaging the shank and holding the latch in its closed position, substantially as described.

2. A snap-hook having an open slot in the shank thereof, and a latch having its forward end adapted to engage the bill of the hook, and its rear end bent transversely and provided with a head having oppositely-extending flanges or lugs engaging the walls of the slot and locking the latch, substantially as shown and described.

3. A snap-hook having an open slot in the shank thereof, and a latch pivoted intermediate its ends within said slot, the forward end of the latch being formed at an angle thereto and adapted to engage the bill of the hook, and the other end thereof formed at an angle and disposed upon the other side of the latch, the latter end being provided with a head having its ends bent or deflected in opposite directions and engaging the walls of the slot and locking the latch, and the rear angled portion of the latch normally extending beyond the edge of the shank whereby the latch may be closed or opened, substantially as shown and described.

4. A snap-hook having a slot therein, and a latch pivoted intermediate its ends within said slot, the forward end of said latch being adapted to engage with the bill of the hook and the rear end thereof provided with a transverse arm, the respective ends of the latter normally extending at each side of the slot whereby the latch may be opened and closed, substantially as shown and described.

5. A snap-hook comprising a hook, and a latch extending longitudinally of the shank of the hook and pivoted to the same at a point between its ends, one end of the latch engaging the bill of the hook and closing the latter, the other end of the latch forming a handle and being resilient and engaging the shank of the hook, whereby the latch is locked in its closed position, substantially as described.

JOSIAH K. ALWOOD.

Witnesses:
JOHN C. WARNER,
MARRY V. WARNER.