(No Model.)

A. W. WEIERBACH.

SNAP HOOK.

No. 582,564. Patented May 11, 1897.

Fig. 1.

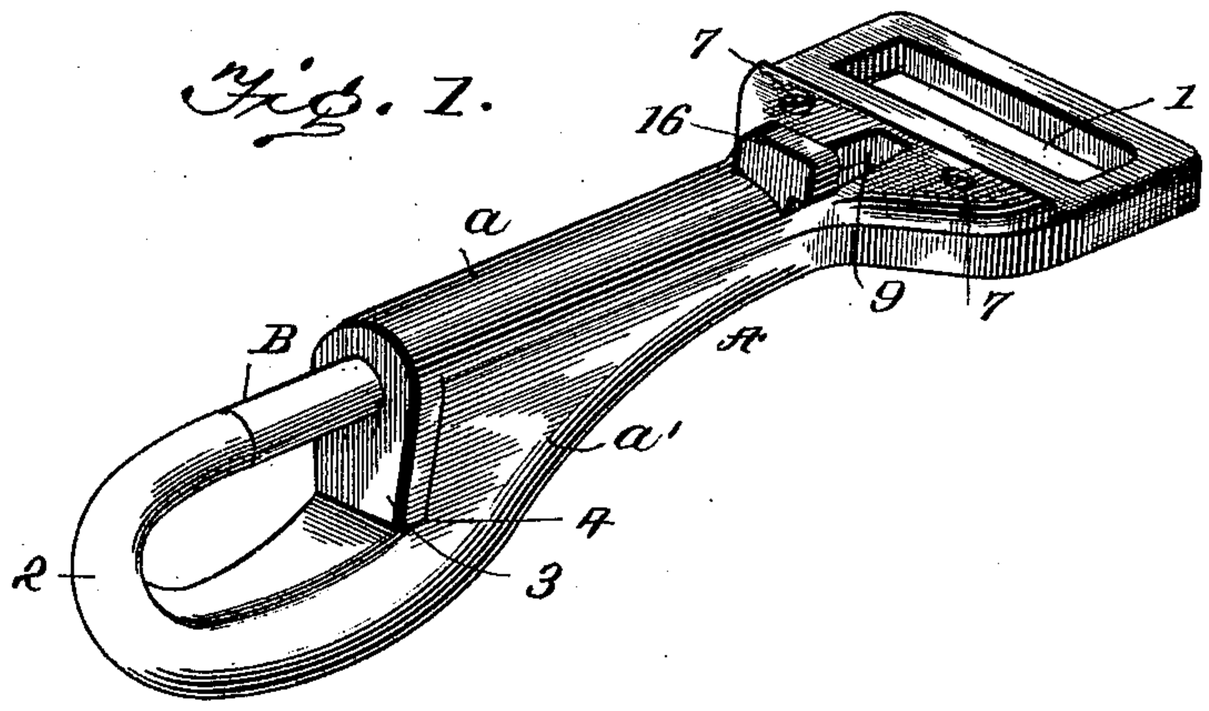
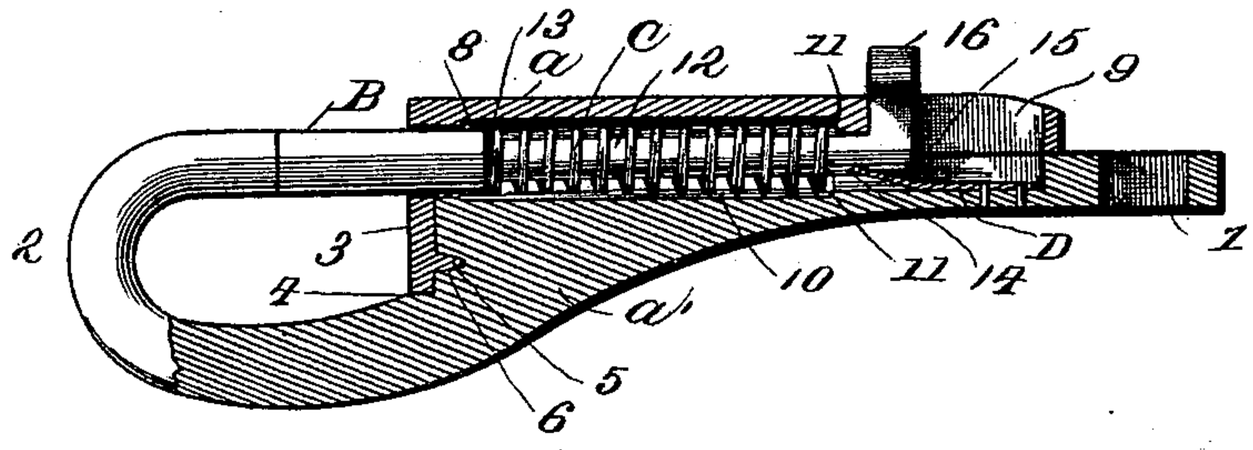


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

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SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 582,564, dated May 11, 1897.

Application filed January 23, 1897. Serial No. 620,433. (No model.)

To all whom it may concern:

Be it known that I, ALBERT W. WEIERBACH, a citizen of the United States, residing at Heilmandale, in the county of Lebanon and State of Pennsylvania, have invented certain new and useful Improvements in Snap-Hooks, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in sliding-bolt snap-hooks; and it has for its object the production of means for automatically locking the sliding bolt when thrown into operative position, thereby preventing accidental movement of the bolt.

The invention will first be described in connection with the accompanying drawings, and then pointed out in the claims.

Figure 1 of the drawings is a perspective view of my improved snap-hook. Fig. 2 is a vertical central section of the same, illustrating the means for automatically locking the sliding bolt, the hook, sliding bolt, and operating-spring being shown in elevation.

Referring to the drawings, A represents a snap-hook formed of an upper member *a* and a lower member *a'*. The lower member is provided at its rear end with the usual strap-receiving opening 1, its forward end being reduced and shaped to form a hook 2. The upper member has a downwardly-extending lip 3 at its forward end, adapted to seat snugly against a shoulder 4, formed in member *a'* just in rear of hook 2. The member *a* is secured to the member *a'* at the forward end by an inwardly-projecting spur 5 on lip 3 taking into a recess 6 in the shoulder 4 and at the rear end by screws 7, passing through member *a* and taking into member *a'*; all as shown in the drawings. The members are each provided with a longitudinal recess, which, when the members are assembled, forms a round sliding-bolt channel 8, a narrow longitudinal slot 9, formed in member *a*, communicating with channel 8 at one end. The forward end of the channel is of a size to just permit longitudinal movement of the sliding bolt, and is then enlarged, as at 10, forming shoulders 11 at the rear end, the enlarged portion of the channel permitting the necessary vertical movement of the sliding bolt, as hereinafter described.

B represents the sliding bolt, its forward end being of a size to just pass through the forward end of the channel 8, the remainder of the bolt being reduced, as at 12, leaving a shoulder 13 near the forward end, against which and against the shoulders 11, near the rear end of channel 8, the respective ends of an operating-spring C are adapted to bear, serving to project the sliding bolt forward to close the snap-hook, as in ordinary construction. A notch 14 is formed in the lower side of the sliding bolt near its rear end, the rear end of the bolt being enlarged, as at 15, for a purpose hereinafter described.

D represents a leaf-spring secured in the bottom of channel 8, at the rear end thereof, the forward or free end of this spring being adapted to enter the notch 14 in the bolt when the bolt is in the extreme forward position, as shown in Fig. 2.

A thumb-piece 16, preferably formed integral with the sliding bolt, projects through the longitudinal slot 9 in member *a* and serves to operate the bolt.

The operation of my improved snap-hook is as follows: When the spring C operates to force the sliding bolt forward to close the snap-hook, the forward end of spring D enters notch 14 in the sliding bolt and prevents accidental movement of the said bolt, as will be apparent. When desired to withdraw bolt B to open the snap-hook, by simply pressing on the thumb-piece 16 the enlarged end 15 of bolt B will be caused to contact with the spring D, forcing the forward end thereof out of notch 14, permitting the bolt to be withdrawn against the stress of spring C, the enlarged portion of channel 8 affording sufficient space to permit the vertical movement of the bolt necessary in forcing spring D out of notch 14.

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

1. A snap-hook having a longitudinal channel therein, a bolt adapted to slide in said channel, said bolt being formed with a notch near one end, means for operating the bolt in

one direction, and a leaf-spring secured in said channel, the forward end of said spring being adapted to engage the notch in the bolt when the bolt is in the extreme forward position, as and for the purposes stated.

2. A snap-hook having a longitudinal channel therein, a bolt adapted to slide in said channel, said bolt being formed with a notch near one end, the inner end of the bolt being somewhat enlarged, means for automatically moving the bolt to close the snap-hook, and a leaf-spring secured in said channel, the forward end of said spring being adapted to engage the notch in the bolt when the snap-hook is closed, the enlarged rear end of the bolt serving to disengage the end of the spring from the notch, substantially as described and for the purposes stated.

3. A snap-hook comprising two members, the upper member having a downwardly-extending lip adapted to seat in a shoulder formed in the lower member, a spur on said lip entering a recess in said shoulder, said members having a longitudinal channel formed between them, a bolt adapted to slide in said channel, a coil-spring seated in said channel and adapted to automatically move said bolt in the forward direction, a thumb-piece on the bolt projecting through a slot formed in the upper member and communicating with said channel, said thumb-piece being adapted to move the bolt in the opposite direction, and means contained in said channel for automatically locking the sliding bolt when in the extreme forward position, substantially as described.

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

ALBERT W. WEIERBACH.

Witnesses:

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A. RISE BOWMAN.