(No Model.)

G. W. GIFFARD.

SNAP HOOK.

No. 311,427. Patented Jan. 27, 1885.

Fig. 1.

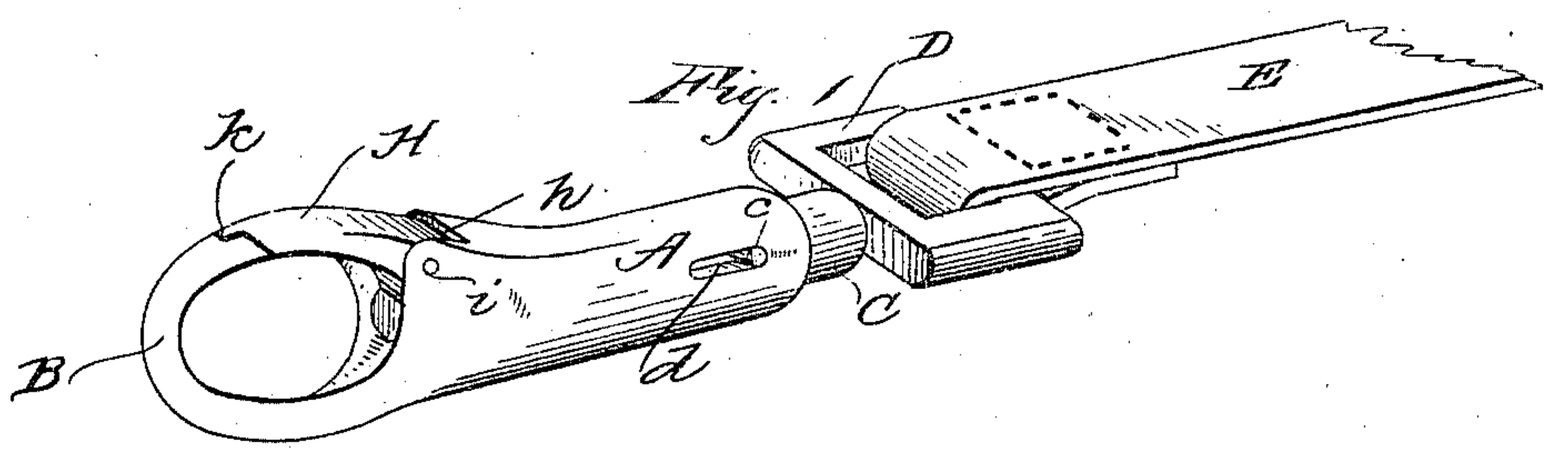


Fig. 2.

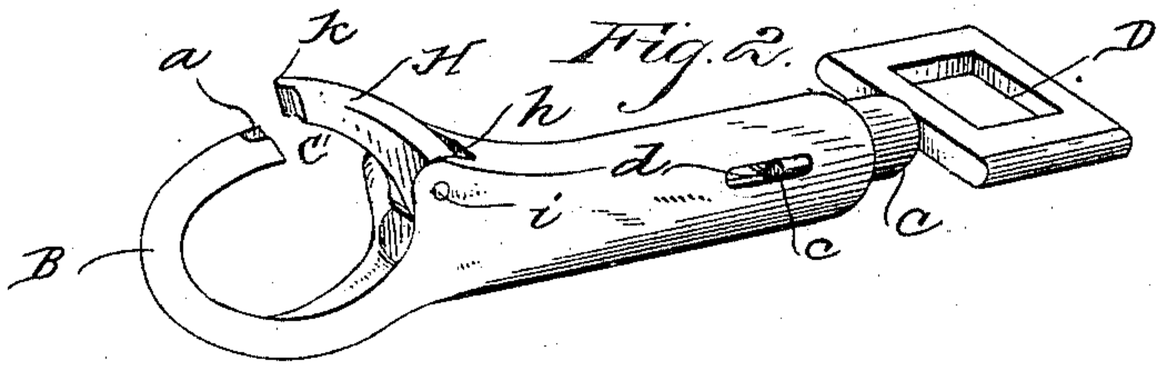


Fig. 3.

Fig. 4.

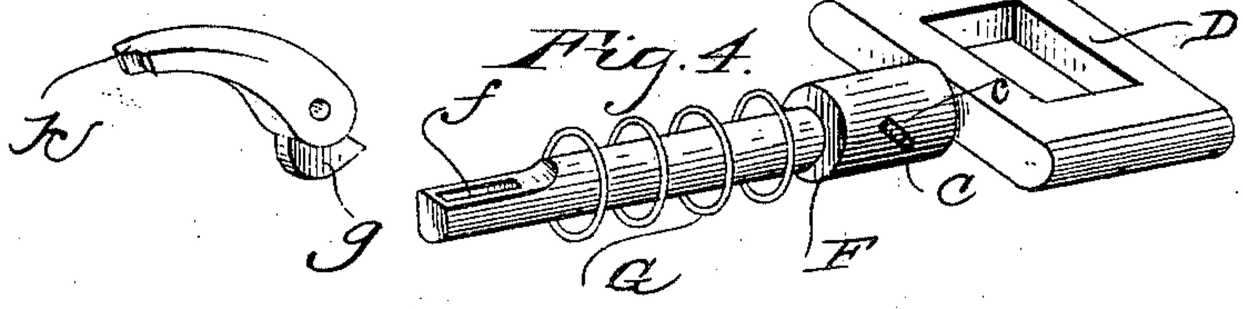
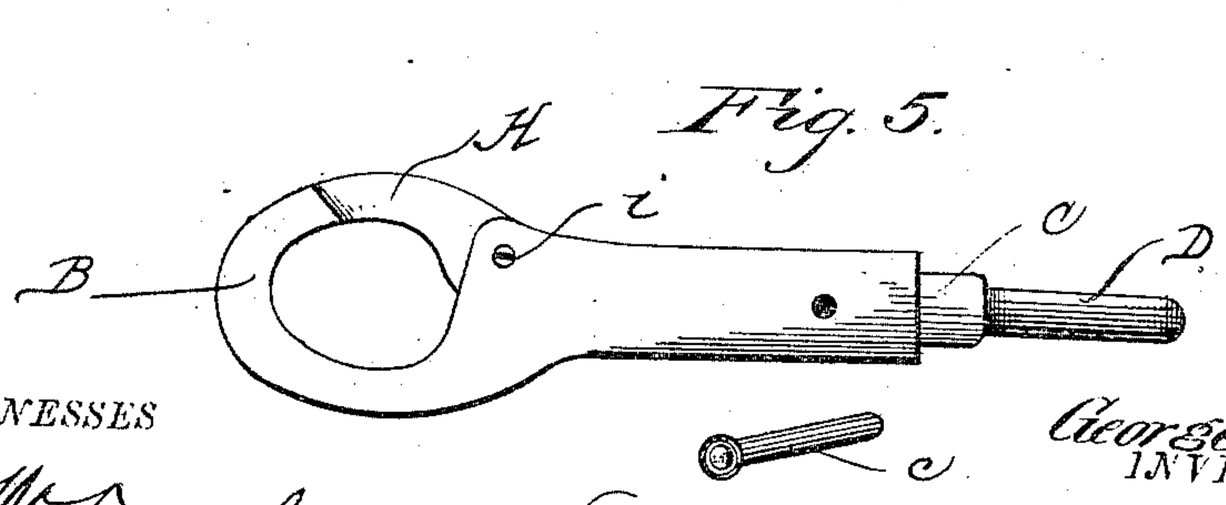


Fig. 5.



WITNESSES

C. W. Dashiell

Edw. G. Siggers.

George W. Giffard
INVENTOR

By C. A. Snow & Co
his
Attorneys

UNITED STATES PATENT OFFICE.

GEORGE WASHINGTON GIFFARD, OF GREAT BEND, KANSAS, ASSIGNOR OF ONE-HALF TO OLIVER BASCOM WILSON, OF SAME PLACE.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 311,427, dated January 27, 1885.

Application filed October 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. GIFFARD, a citizen of the United States, residing at Great Bend, in the county of Barton and State of Kansas, have invented a new and useful Improvement in Snap-Hooks, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to snap-hooks; and it has for its object to provide an article of this character which will be simple in construction, efficient and ready in operation, and superior in every respect to those in common use.

A further object of the invention is to provide a snap-hook in which there will be no liability of it catching on anything so as to accidentally open while in use, and in which the increased strain will not cause it to open, as is ordinarily the case, the draft serving to keep the hook closed.

With these ends in view the said invention consists in certain details of construction and combination of parts, as hereinafter set forth, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of my improved snap-hook in its closed position. Fig. 2 is a similar view showing the open position of the hook. Fig. 3 is a longitudinal section of Fig. 1. Fig. 4 is a view of the stem, spring, and finger-lever detached. Fig. 5 is a view illustrating a modified form used on large hooks.

Like letters are used to indicate corresponding parts in the several figures.

Referring to the drawings, A designates the body of the article, having at its forward end an integral semi-elliptical-shaped hook, B, the extreme end of which is notched in the center, as at *a*, an opening or space, C′, (see Fig. 2,) existing between the end of the hook and the body for the insertion of the part with which the hook connects. The body A is preferably cylindrical in form, and is made hollow or bored longitudinally, as at *b*, to receive a sliding stem or shank, C, which works through the open ends of the body, one end of the stem projecting beyond the latter, and having a loop, D, with which the strap E is connected in the manner well known.

Projecting from the stem or shank, on opposite sides and at the rear end thereof, are pins or studs *c*, which fit within and work through elongated slots *d*, in the sides of the body, to guide the movements of the stem, the latter being reduced in width from a point forward of the pins or studs *c* to its opposite end, so as to provide a shoulder, F.

G designates a spring coiled around and encircling the stem or shank, and having one end bearing against the shoulder F, and its other end against the wall *e*, near the front opening of the body. The forward end of the stem or shank is slotted at *f*, to receive the reduced inner end, *g*, of a finger-lever, H, which is pivoted by the pin or bolt *i*, in a cut-away portion, *h*, at the front end of the body. The outer end of this lever is formed with a nib or projection, *k*, which is adapted to fit in the notch *a* of the hook B.

The operation of my invention will be readily understood from the foregoing description, taken in connection with the annexed drawings. The snap-hook is attached to the strap by means of the loop D, which may be either solid with the stem or simply a pivoted bail or yoke, as found desirable. In its closed position the finger-lever occupies the opening or space C′ between the end of the hook B and the body, so as to effectually prevent the disengagement of the hook from the ring or other part to which it is applied. It will be observed that the tension or draft on the strap E serves to draw the stem or shank backward, and by reason of the peculiar connection with the finger-lever force the latter inward, so as to bind it more firmly in the closed position. Thus, no matter how great the tension is on the hook, there will be no possibility of accidental unhooking, for the increased draft will cause it to close and bind more securely. Again, the finger-lever having the projecting nib fitting within a notch of the hook provides a tight fit between the parts, so as to prevent the hook catching against any part of the harness and accidentally opening while in use.

When it is desired to separate the snap-hook from the part to which it is connected, the operator pushes against the rear end of the stem or shank to cause the forward movement of the same against the pressure of the spring,

the pins or stud *c* working in the slots *d*, and thus guiding the stem or shank. As the latter is impelled forward it forces the inner end of the finger-lever forward, thereby causing its outer end to spring outward, as seen in Fig. 2. The snap-hook can then be applied in position or detached, as desired, and the moment pressure is relieved from the stem or shank the spring exerts its power and returns the parts to their normal positions, the finger-lever closing inward against the hook, as seen. It will be apparent that the force of the spring is sufficient at all times to keep the hook closed, and should the draft or tension on the strap to which the snap-hook is connected be increased the hook will not become disengaged, as before stated.

In making large snap-hooks, I propose to dispense with the elongated slots *d* and studs *c*, and employ a pin extending through the body and stem, so as to lock the latter from moving forward until the pin is removed, when the hook can be opened by pressing the stem forward in the manner hereinbefore described.

Having described my invention, I claim—

In a snap-hook, the combination, with the hollow body A, having a hook, B, formed therewith, of a finger-lever, H, closing the entrance to the hook, a sliding stem or shank, C, working within the body and having a slot, *f*, at its front end to receive a projection, *g*, of the said lever H, a spring, G, coiled around the stem or shank and bearing against the same, and a loop, D, provided on the lower end of the stem or shank beyond the body, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEORGE WASHINGTON GIFFARD.

Witnesses:

EMIL HENRY KLÜBER,

CLAUDIUS B. GILLIS.