

(No Model.)

E. BRADLEY.
SNAP HOOK.

No. 462,907.

Patented Nov. 10, 1891.

Fig. 1.

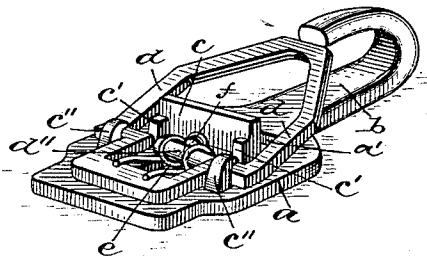


Fig. 2.

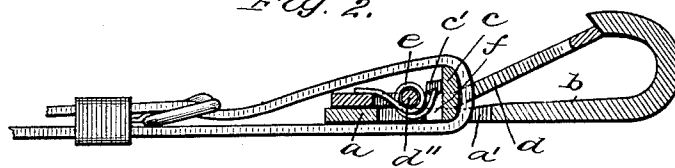


Fig. 3.

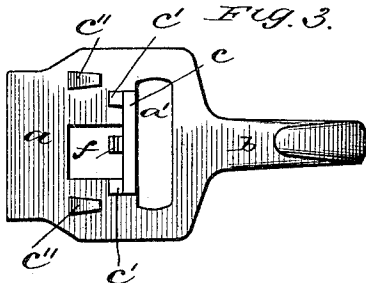


Fig. 4.

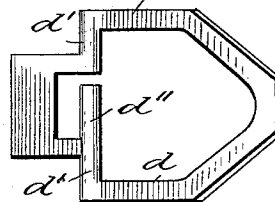
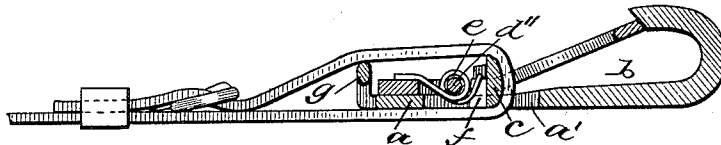


Fig. 5.



Witnesses

Wm. R. Davis.
E. J. Bussem.

Inventor

E. Bradley

By his Attorneys

Alexander Davis

UNITED STATES PATENT OFFICE.

EVERAL BRADLEY, OF OVID CENTRE, NEW YORK.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 462,907, dated November 10, 1891.

Application filed July 7, 1891. Serial No. 398,642. (No model.)

To all whom it may concern:

Be it known that I, EVERAL BRADLEY, a citizen of the United States, residing at Ovid Centre, in the county of Seneca and State of New York, 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, in which—

Figure 1 represents a perspective view of one form of my improved snap-hook; Fig. 2, a longitudinal sectional view of the same connected to a strap; Fig. 3, a detail view of the hook-frame; Fig. 4, a similar view of the spring-actuated open tongue, and Fig. 5 a vertical sectional view of the snap-hook provided with an upturned retaining-loop at its upper end.

This invention will be fully understood and appreciated from a perusal of the following specification, when taken in connection with the accompanying drawings, in which *a* designates the main frame or plate, which is preferably of cast metal, and which has formed integrally with its lower end a narrow tongue *b*, which is hook-shaped, being turned forwardly and upwardly at its lower end. The main plate is provided with a transverse slot *a'* across its lower end, and projecting forward from the upper edge of this slot is a guard-flange *c*, which is preferably rounded off on its underside. Formed integrally with the ends of this flange and the main plate are shoulders or abutments *c'* *c'*, which project upwardly therefrom a short distance. Projecting from the face of the plate a short distance above each of the abutments *c'* *c'* is an integral lug *c''*, these lugs being made sufficiently malleable to enable them to be bent or turned over, as will presently appear. The tongue of the snap is a bent open frame having side bars *d*, which are arranged approximately parallel with each other a short distance and are then converged and bent outwardly toward their lower ends, where they are connected together and beveled, so as to abut against the inwardly-beveled end of the hook *b*. This open frame embraces the guard-flange *c*, and its side bars are turned abruptly inwardly at points a little above this

flange, forming journals *d'* *d'*, which are rounded, so as to fit and have a slight rocking movement between the abutments *c'* and the malleable lugs *c''*, the latter of which are bent over the journals to hold the tongue-frame in place on the main plate. The side bars *d* of the tongue-frame are then continued upwardly approximately parallel with each other and are connected at their upper ends by a short cross-bar.

Projecting inwardly from one of the side bars of the tongue-frame, in alignment with the journals *d*, is a pin *d''*, around which is coiled a wire spring *e*, which has its lower looped portion engaged over a hook *f*, formed on the upper side of the guard-flange, and its upper free ends resting in notches in the face of the upper cross-bar of the tongue-frame, the tendency of this spring serving to normally keep the snap-hook closed by keeping the lower end of the tongue pressed against the beveled end of the hook *b*. The main plate *a* is preferably recessed or provided with an opening immediately back of the spring, in order that the latter may work freely. The end of the strap is passed through the slot in the main plate and through the open tongue-frame, and is then carried up and attached to the main part of the strap in the usual manner, the loop thus formed in the strap embracing the upper parts of the tongue and main plate, as shown in Fig. 2.

Besides being cheap and extremely simple and durable, this snap-hook has a number of important advantages. The arrangement of the tongue—that is, having the strap pass through it between its pivotal point and the hook—not only makes it easy to manipulate, but also completely hides and protects the actuating-spring, while at the same time the strap presses the upper part of the tongue against the main frame, and thereby assists in keeping the tongue closed.

Another advantage in having the strap pass through between the hook and the pivotal point of the tongue is that the length of metal the strap-loop is thereby caused to embrace has a tendency to hold the snap-hook in line with the strap, which renders it easier to operate and handle.

The forwardly-projecting part *g*, formed integrally with the upper end of the main plate, (shown in Fig. 5,) may be employed, if desired, to prevent the strap-loop bearing upon the spring and upper part of the tongue-frame. Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a snap-hook, the combination of a main plate provided with a hook at one end and having a transverse slot formed in it between the hook and its other end, an open frame pivoted on the said main plate adjacent to the slot therein, one end of this open frame normally abutting against the end of the hook and its other end lying against the face of the main plate beyond the slot therein, and an actuating-spring for said frame connected thereto beyond the slot in the main frame, whereby when the connecting-strap is attached to the snap-hook it may be passed through the transverse slot and open frame, so as to embrace the actuating-spring and up-

per part of the main plate and frame, substantially as described.

2. The combination of a main plate provided with a hook at one end and a transverse slot near its other end, a guard-flange projecting from the face of the main plate adjacent the slot therein, two pairs of lugs on the face of the plate near the flange, and a tongue consisting of an open frame embracing the guard-flange and bent outwardly and converged at one end, so as to abut against the hook, and having its other end lying against the main frame, said frame being provided with transverse journals held between the said lugs, and an actuating-spring, substantially as described.

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

EVERAL BRADLEY.

Witnesses:

CHARLES D. DOWERS,
LE ROY C. BRADLEY.