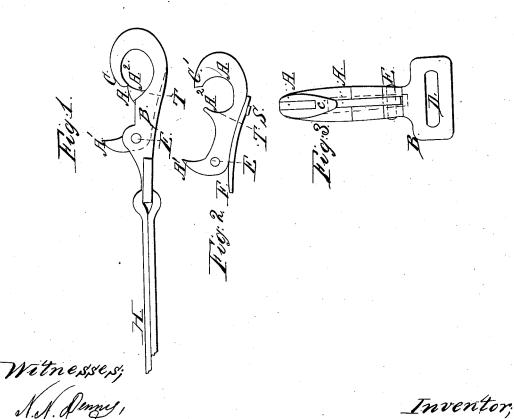
M. Armstrong, Snap Hook, Nº53, 255, Patented Mar. 20, 1866



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## UNITED STATES PATENT OFFICE.

WILLIAM ARMSTRONG, OF NEWARK, OHIO.

## IMPROVED SNAP-HOOK.

Specification forming part of Letters Patent No. 53,255, dated March 20, 1866.

To all whom it may concern:

Be it known that I, WILLIAM ARMSTRONG, of Newark, county of Licking, State of Ohio, have invented a new and Improved Mode of Constructing Snap-Hooks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of

reference marked thereon.

The nature of my invention consists, first, in that of placing in the body of the snap B the thin plate A, which in a common malleable snap-hook I am permitted to use for the single purpose of retaining the ring in such manner that it cannot be unsnapped while in use, and whereby I relieve the spring of the snap from that strain of the ring against it so common in the ordinary snaps now in use, and for a combined wrought-iron and malleable cast snap I extend this plate A so as to form a hook, which is made to work within the hook of the body of the snap in such manner that if the cast hook of the snap be broken the hook on the plate A will safely hold the ring, and thus render the snap positively safe under all circumstances; second, in that the peculiar combination of the spring F with the plate A and body of the snap B, for the purpose of retaining the ring in the hook of the snap, with or without the hook on the end of the plate A.

In the drawings, Figure 1 represents a side view of the snap complete. Fig. 2 is a detached view of the plate A, with the safety-hook C' on one end, and shows the manner of securing the spring F of the snap thereto. Fig. 3 is a top view of the snap complete.

As before stated, this plate A, I intend using with or without the safety-hook C' on its front end. (Represented by Fig. 2.) If it is designed to make the snap wholly of malleableiron, cast, the plate A and corresponding slot A (see Fig. 3) through the body of the snap terminate at that point in the snap indicated by the dotted lines T. In this case the front end of the plate A is made to rest against the under side of the point of the hook C by exactly the same arrangement of spring as shown in Fig. 2, and held in the snap by the same arrangement of pivot E, as shown in Fig. 1; but when this plate A is to form a safetyhook, C', to operate within the malleable as hook C of the snap, I proceed substantially follows, viz: The body of the snap B, Figs. 1 and 3, I cast malleable, of a pattern substantially as shown in the drawings, with a slot,

A, (see Fig. 3,) through its center, commencing at or near the loop-hole D and extending around and through the hook C of the snap. I make the width of this slot equivalent to the thickness of the center plate, A, intended to be used therein.

I form the plate A by stamping the same by means of suitable dies from thin plates of a good quality of wrought-iron, and secure it in the slot A, Fig. 3, of the snap, by means of the rivet or pivot E, which passes through the entire body of the snap. The plate A, with or without the hook C', has the square rivet S formed solid therewith, whether the same be stamped or cast, and by which the spring F is secured to the plate, as shown in Fig. 2. The back end of the spring F is made to rest against the under side of the malleable frame near the loop-hole D, by which the plate A is kept up in its position in the slot through the snap. The back end of this plate A terminates by forming the thumb-piece A', and the plate is operated by grasping the strap H firmly in the hand and placing the thumb against the back surface of the thumb-piece, and by a slight upward pressure the front end of the plate is pushed down through the slot far enugoh to release the ring upon which the hook is snapped.

I desire it to be understood that I do not limit my claim to the precise mode here shown of connecting this center plate, A, to the body of malleable-iron or other snaps, as the combination of the plate A with the body of the snap B may be made in various ways, and the plate stamped out in a variety of shapes.

I do not limit my claim to the manner here shown of securing the plate-hook A to or within the body of the snap, nor to the manner shown of operating the same, as this may be done in a great variety of ways well known to the manufacturers of snap-hooks.

I claim-

Combining with the ordinary snap-hooks a safety-hook, substantially as shown by Fig. 2, so arranged as to relieve the main hook of the snap of a part or all of the strain of the ring thereupon, and so that if the main hook, C, Fig. 1, of the snap be fractured or broken by a hard pull upon the ring upon which it is snapped, the safety-hook will retain the ring and thus prevent accident, substantially as shown and described.

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