C. W. Saladee,

Snap Hook.

No. 49,654. Patented Aug. 29, 1865.

Fig. 1

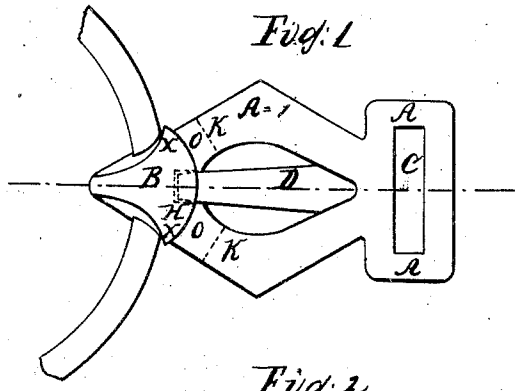


Fig. 3

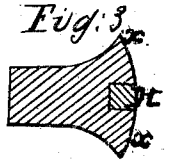
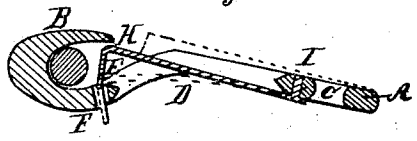


Fig. 2



Witnesses.

J. G. Clayton

V. E. Clayton

Inventor

Cyrus W. Saladee

by atty

J. C. Clayton

UNITED STATES PATENT OFFICE.

CYRUS W. SALADEE, OF NEWARK, OHIO.

IMPROVED SNAP-HOOK.

Specification forming part of Letters Patent No. **49,654**, dated August 29, 1865.

To all whom it may concern:

Be it known that I, CYRUS W. SALADEE, 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 of the same, 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 forming the body of the snap an open or skeleton frame-work, whereby I attain the advantages of lightness, strength, and ornamentation. Another advantage I gain by this peculiar form of the body of the snap is that it may as readily be stamped from a sheet of iron or other suitable metal and afterward bent into shape as cast of malleable iron, so that it can be manufactured either wrought, stamped, or cast—an advantage not possessed by any of the various different snaps now in use.

Second. In that of spreading the point of the hook into such shape as to form a guard to throw the ring away from the spring of the snap, and thereby prevent the ring from being unsnapped by any position it may assume in the snap while in use.

Third. In that of providing the bottom side of the point of the hook with an indentation for the reception of the point or front end of the spring of the snap, by which the spring is prevented from being pushed laterally away from its central position and bearing on the under side of the hook.

Fourth. In that of forming a hook on the end of the spring immediately under the point of the hook on the body of the snap, by which the ring is prevented from leaving the hook of the snap or of passing out under the spring.

Fifth. In that of piercing a hole or slot through the body the snap, through which to pass the hook on the end of the spring, and by which the end of the spring is sustained in its intended position.

Sixth. In that of providing each side bar of the body of the snap with an elevated shoulder, which, in combination with the flattened point of the hook, most effectually prevents the ring from being turned back upon the spring.

Figure 1 is a top view of the snap complete. Fig. 2 is a side view of same in section.

I form the body of the snap with two side bars, A′ A′, and by which the loop C and hook B are connected, leaving an open space between wide enough to operate the spring D with the end of the thumb. These side bars, A′ A′, may be bent so as to represent, from a face or top view, the outline of a heart, harp, shield, or buckle-frame, and may be finished in a great variety of different ways.

B, Fig. 1, represents the hook of the snap flattened out so as to form the projecting corners X X, the front or point of the hook representing the segment of a circle.

D is the spring, secured to the rear end of the snap, in the well-known mode of doing the same, by rivet I. The front of the spring D is turned down and made to form the hook E, which hook, from a side view (see Fig. 2,) represents the segment of a circle. The end of this hook E passes into a hole or slot, F, which is pierced through the body of the snap immediately under the point of the hook B, and in which the hook E is allowed to play up and down when the spring D is operated upon by the end of the thumb. The object of this hole or slot F (see Fig. 2) is to keep the end of the spring-hook E in position and to support it against any backward pressure of the ring. The under side of the point of the hook B has an indentation, H, (see Fig. 3,) to receive the end of the spring D, and by which the latter is prevented from being forced laterally out of its position.

When the ring is in place it is most completely locked in the hook B of the snap, and cannot escape until the spring D is acted upon, as designed. The projecting corners X X on the end of the hook B, and the hook E on the end of the spring D, will, under all circumstances, so guard the ring on which the snap is hooked away from the straight portion of the spring D as to render any action upon the spring by the ring literally impossible, and thereby make what has never yet been produced—a positive lock-snap.

For a cheaper class of snap upon this principle, I omit the spring-hook E and slot F. In this case, however, I place a solid perpendicular shoulder, *k*, (marked in red, Figs. 1 and 2,) on each of the side bars, A′ A′, of the snap. These shoulders K, I place on the side bars, A′ A′, back from the point of the hook B just

far enough to allow the passing into the hook of an ordinary-sized heavy ring.

By referring to Fig. 1 it will be seen that the opening *o o* between the front line of the hook B and the front line of the shoulders K K (shown by the red dotted lines) represents the segment of a circle, and that the ring cannot therefore be dropped into the hook B unless it be held in a horizontal position, so that any other position which the ring may assume after passing into the hook B will of itself, and without the aid of the spring D, prevent its escape from the hook.

The operation of the ring in the hook of this snap is substantially as follows: The spring D is depressed by the end of the thumb, when the ring is placed horizontally in the opening *o o*, and passes down into the hook B. If, now, the ring is turned up in a perpendicular position and drawn over against either side of the hook, and you then attempt to turn the ring back down upon the top of the side bars, A′ A′, the projecting corner X on the end of the hook B will carry the ring away from the end of the spring D and throw it around against the side and top of the shoulder K, and which latter, in its turn, prevents the ring from entering the opening *o o*, or of coming in contact with the spring D.

In place of spreading the point of the hook B so as to form the projecting corners X X, a cross-bar of suitable proportion and shape attached to the end of the hook will answer the same purpose.

The peculiar arrangement of the hook E on the end of the spring D and the slot F through the body of the snap admits of using the spring with equal advantage, whether secured to the top or bottom side of the snap.

As now represented by the drawings the spring is secured in such manner as to cause the hook E to operate in the slot F from the top or face side of the body of the snap; but I prefer turning the spring over and have the hook E made to enter the slot F from the bottom in place of the top, as now shown.

As now represented the point of the hook E is made to enter the slot F from the top, and points downward. By reversing it the point of the hook E enters the slot F from the bottom, and rests up against the bottom side of the hook B in the indentation H.

Now what I claim as new of my invention, and desire to secure by Letters Patent, is—

1. The open skeleton-frame A′ A′ A A A, when constructed and operating in the manner and for the purpose shown and described.

2. Spreading the point of the hook B so as to form the projecting corners X X, or their equivalents, in the manner and for the purpose substantially as shown and described.

3. The indentation H, or its equivalent, on the bottom side of the point of the hook B, in combination with the curved end of the spring S, in the manner and for the purpose substantially as shown and described.

4. The hook E on the end of the spring D, constructed and operating in the manner and for the purpose substantially as shown and described.

5. The slot or hole F through the body of the snap, in the manner and for the purpose substantially as shown and described.

6. The shoulders K and K, or their equivalents, when arranged in combination with the flattened point of the hook B and projecting corners X X, in the manner and for the purpose substantially as shown and described.

CYRUS W. SALADEE.

Witnesses:

E. A. SALADEE,

R. E. SIMMONS.