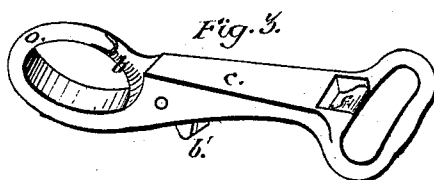
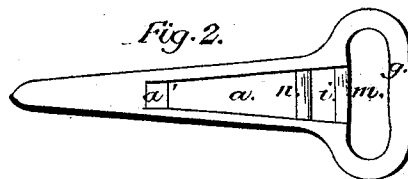
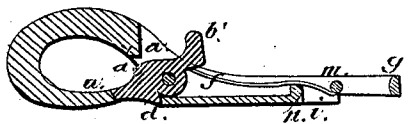


F. Valentine.

Snare Hook.

N^o 90,896.

Patented Jan. 1, 1869.



WITNESSES;

Walter H. Buelter
Geo. J. Bonner,

INVENTOR;

F. Valentine
by Fortbush & Hyatt,
attys.

United States Patent Office.

FREDERICK VALENTINE, OF BUFFALO, NEW YORK, ASSIGNOR TO
"PRATT & LETCHWORTH," OF SAME PLACE.

Letters Patent No. 90,896, dated June 1, 1869.

IMPROVEMENT IN SNAP-HOOK.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, FREDERICK VALENTINE, of the city of Buffalo, in the county of Erie, and State of New York, have invented certain new and useful Improvements in Snap-Hooks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure I is a longitudinal section.

Figure II is a perspective view.

Figure III is a back view, with the spring and trigger-lock removed.

Like letters of reference indicate like parts in each of the figures.

My improved snap-hook consists of the following essential features or elements, viz:

First, a mortise and recess, cast in the shank of the hook without coring;

Second, a trigger or lever, hinged in said mortise, with one end uniting and locking with the end of the hook, while the other projects through the shank on the back side, so as to form a trigger or finger-piece for operating it; and

Third, a flat spring, arranged and secured in place by three bearing-points, of which the trigger forms one, without the use of a rivet or other permanent fastening.

The invention does not consist of either of these elements, separately considered, but in the construction and arrangement of the several parts as a whole, forming an improved article of snap-hook.

In the drawings above referred to—

a represents the channel or recess formed in the back side of the shank, and *a'* the mortise or opening through the shank, in which the trigger or locking-lever is hinged.

This lever consists of a locking-end, *b*, projecting through the shank, and engaging with the end of the hook *o*, and the trigger or finger-piece *b'*, for operating it in detaching the hook.

It is also formed with a shoulder, *d*, which stops against the end of the front-plate portion *c* of the shank, and with a notch, *e*, to receive the end of the flat spring *f*, as shown in Fig. I.

The shank of the hook next to the loop *g*, is cast

with an opening, *i*, through it, so as to leave a cross-bar, *m*, and a feed-bearing, *n*, at the end of the plate *c*.

The spring *f* is made of such width as to fit in the groove *a*.

The end which engages with the cross-bar *m* is slightly curved, so as to partially hook around the latter, while the opposite end fits in the notch *e* in the trigger.

It will thus be readily perceived that the three bearings *e m n* will securely retain the spring in place, without any other means of fastening.

The operation of my improved hook is obvious.

I am aware that snap-hooks, provided with a trigger-lock and spiral-spring, or a spring differently arranged from mine, are old.

But in all these, so far as I am acquainted with them, the arrangement and construction of the parts are such as to make the article either more expensive than mine, or more liable to get out of order, or less convenient to handle, or more clumsy or ungraceful in appearance.

The shank of my hook can be cast without coring. The spring can be applied without any expensive mode of fastening; and, when once arranged, with the trigger in place, it becomes perfectly secure against displacement.

The hook is compact, can be cheaply manufactured, is neat in appearance, and can be conveniently operated.

These advantages result from the peculiar manner of forming the shank, in connection with the flat spring and notch *e* in the trigger, which, taken together as a whole, form my invention.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

The construction and arrangement of the recess and mortise *a a'*, bearings *m, n*, and *e*, flat spring *f*, and lock-trigger *b b'*, as herein described, and for the purpose set forth.

F. VALENTINE.

Witnesses:

JOSIAH LETCHWORTH,
JAY HYATT.