## I. F. letcher, Snap Hook. No. 106,043, Patented Aug. 2. 1870.

Fig. 2.

Witnesses: Lailer-Phil of Dodge

Inventor J. A. Fletcher by May I Manne his allys.

## Anited States Patent Office.

## JOSEPH A. FLETCHER, OF EYOTA, MINNESOTA.

Letters Patent No. 106,043, dated August 2, 1870.

## IMPROVEMENT IN SNAP-HOOKS.

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, Joseph A. Fletcher, of Eyota, in the county of Olmsted and State of Minnesota, have invented certain Improvements in Snap-Hooks, of which the following is a specification, reference being had to the accompanying drawing.

My invention relates to snap-hooks; and

It consists in forming the same of a single piece of wire, bent in a peculiar form, so as to form a means of holding it secure, and prevent it from slipping between the thumb and fingers, when being compressed to attach or release it, as hereinafter described.

In the drawing—

Figures 1 and 2 are plan views of my hook in different positions, and

Figure 3 is a view showing the manner of operating it.

In constructing my snap-hook A, I take a piece of wire of any suitable size, and bend it in the form shown in all the figures.

When so bent, it will be seen that the middle portion of the wire is made to form a loop, a, for permanent attachment to any strap or other article, and that its ends are curved, so as to lap concentrically and form an eye, b, the plane of which is at right angles with the plane of the loop, the twist in the sides being made at c; that between the point of this twist and the loop the opposite sides or legs of the wire forming the hook are curved in directions opposite to each other, forming the curves d, as shown in all the figures.

The twist at c, as clearly shown, is only sufficient to place the curves on the end of the wire forming

the eye b at right angles with the loop a, as clearly shown in fig. 1.

To operate a snap-hook thus constructed, as will be seen in fig. 3, it is only necessary to grasp it so as to place the curves d between the thumb and forefinger, and press them together, which at once separates the curves forming the eye of the hook laterally, when a ring, B, or other object to which it may be connected, is released; or in case the wire is very stiff, and the hook cannot be readily operated in this way, it may, at the same time, be turned so that the object within the eye may be brought to bear against the opposite sides of its inner end, and thus assist in pressing them apart.

For most purposes my hook is designed to be easily operated by pressing the curved portions d together with the hand, as shown.

I am aware that hooks have heretofore been made operating on the same general principle as mine, and therefore I do not claim such, broadly, or irrespective of the special manner of constructing them; but,

Having fully described my improved hook,

What I claim is—

A snap-hook, constructed substantially as described, when provided with the shoulders d or outward bend in the side bars thereof, as shown, for the purpose of holding it more securely between the thumb and finger when compressing the bars, as set forth.

JOSEPH A. FLETCHER.

Witnesses:

JAS. S. NILES, WESLY ROBISON.