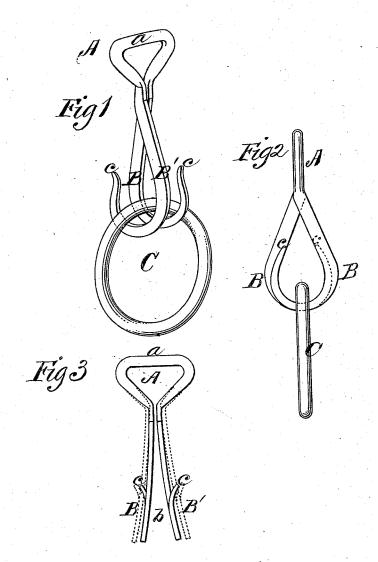
E. R. JONES. SNAP-HOOKS.

No. 184,211.

Patented Nov. 7, 1876.



WITNESSES Villette Anderson F. J. ellass Edward . R. Jones E. W. Anderson, ATTORNEY.

## UNITED STATES PATENT OFFICE.

EDWARD R. JONES, OF WAVERLY, ASSIGNOR TO ANNIE W. JONES, OF CHEMUNG, NEW YORK.

## IMPROVEMENT IN SNAP-HOOKS.

Specification forming part of Letters Patent No. 184,211, dated November 7, 1876; application filed March 4, 1876.

To all whom it may concern:

Be it known that I, E. R. Jones, of Waverly, in the county of Tioga and State of New York, have invented a new and valuable Improvement in Snap-Hooks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a perspective view of my improved snap-hook with a ring attached. Fig. 2 is a side view thereof; and Fig. 3 is an edge view of the same, showing the cleft in the eye.

This invention has relation to snap-hooks made of one piece of spring metal; and it consists in the construction of such a snap-hook with an open eye at its upper end, the shanks extending downward independent of each other, and gradually separating in their planes, to form a mouth between the hooks, the ends being curved in opposite directions toward the opposite shanks, and turned outwardly to prevent casual disengagement, as hereinafter fully shown and described.

In the annexed drawings, the letter A designates the eye, and B B' two reversed hooks attached thereto or forming a component part thereof. This eye is preferably of the general form of a triangle, its end bar  $\alpha$  being rounded and designed to have the end of a strap secured thereto. The hooks B B' are in a plane at right angles to that of the eye, and are formed in the following manner, to wit: The angular eye A is first formed at the middle of the length of a bar of spring-steel of suitable dimensions. The ends of the said bar are then bent outward from each other independently and without crossing, extended a sufficient distance, and then turned up to form hooks B B'. While in a heated state, the said hooks are spread apart, so as to leave an interval, b, gradually increasing from the open neck z of the eye between them, and they will be preferably flattened in order to increase their elasticity.

C designates a bit or other ring of the usual construction, which is inserted in between hooks B B', and, having been thrust up beyond the points c of the said hooks, is then given a half-turn, which will have the effect

of causing it to become engaged with the hook. While the ring is being passed between hooks B B' the latter will spring outwardly from each other to allow of its passage, this yielding being due not only to the springing of the flattened shanks of the hooks, but also to that of the eye, the side bars of which form a continuation of the hook-shanks, and, when the engagement of the ring is complete, will spring back into their normal condition.

The springing of the eye, above described, will prevent the hooks B B' from being broken loose therefrom when, from careless handling or the insertion of a ring of large size, the said hooks are unduly separated.

The eye A, being open at its junction with the hooks, will also permit a ring or strap to be introduced into it if from any cause it be deemed expedient.

The hooks B B', being somewhat spaced, as shown at b, Fig. 3, are not liable to be clogged with snow or sleet, and the ring may be at any time introduced between them without removing the gloves—an advantage to be readily\_appreciated.

The ends or points c c of the hooks are turned outward from the planes of the hooks, in order to throw them out of the line of disengagement as far as may be desirable, according to the size of the hook and the special use for which it is designed.

My improved hooks are admirably adapted as a means of attaching the single to the double trees, the traces to the single-trees, and for many other purposes, and they are made of any spring metal and of any size.

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

A snap-hook formed of a single piece of spring metal, having an open eye extended at its throat z, to form independent and uncrossed shanks, gradually diverging in their planes to form a mouth, and curved in opposite directions to form hooks opposite the said shanks, substantially as herein shown and described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

EDWARD R. JONES.

Witnesses:
Ed. Henry,
Squire Whitaker.