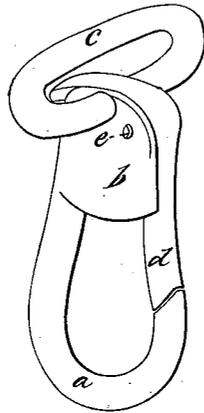


*J. Ives,  
Rein Snap.*

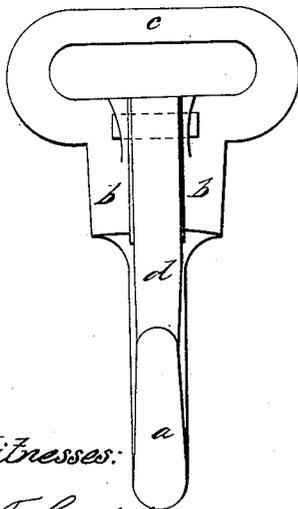
*N<sup>o</sup> 42,775.*

*Patented May 17, 1864.*

*Fig. 1.*



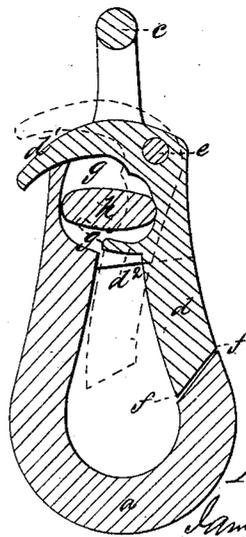
*Fig. 2.*



*Witnesses:*

*R. J. Campbell  
C. Schaefer*

*Fig. 3.*



*Inventor.*

*James Ives  
by his Attor:  
Wm. Jamieson & Co.*

# UNITED STATES PATENT OFFICE.

JAMES IVES, OF MOUNT CARMEL, CONNECTICUT.

## IMPROVED REIN-SNAP.

Specification forming part of Letters Patent No. 42,775, dated May 17, 1864.

*To all whom it may concern:*

Be it known that I, JAMES IVES, of Mount Carmel, county of New Haven, State of Connecticut, have invented a new and Improved Rein-Snap; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the improved snap. Fig. 2 is a front view of the same, and Fig. 3 is a central longitudinal section showing the arrangement of the spring within the head of the snap.

Similar letters of reference indicate corresponding parts in the several figures.

By this invention and improvement in rein and harness snaps I am enabled to greatly reduce the opening of the hook and to leave barely space for entering and removing the ring, or any object to which it is desired to attach the snap, at the same time I retain all the facilities of operating the pivoted tongue which is used to close the hook, as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

I form on the shank of the hook *a* a flattened and enlarged head, *b*, which is suitably recessed to receive the pivoted lever-tongue *d d'*, and also a spring, *h*, as shown in Figs. 2 and 3. I also form on the upper end of the head *b* the usual loop, *c*, by which the snap is attached permanently to a strap. The tongue *d* is beveled on its end at *f*, and adapted to fit against the correspondingly beveled end of the hook, so that this tongue will be prevented from slipping without the compass of the hook, as shown in Figs. 1 and 2, but will be allowed to open inward, as indicated in red lines in Fig. 3.

The transverse pivot *e* attaches the lever-tongue *d d'* in its place between the jaws of the flattened head *b*, and this tongue is so formed as to make both sides of the hook or snap of the same shape, and thus give a symmetrical appearance to it. The upper portion

of this tongue *d* is extended beyond the pivot *e* and projected from the recess *g* or head *b* a sufficient distance only to be worked by the fingers. This extension of the tongue *d* forms a lever, the pivot *e* being its fulcrum, and by means of the projecting lip *d'* of this lever a person can readily force the tongue inward to the position indicated in red, Fig. 3, and thus detach a ring from the hook *a* through the space which the tongue *d* closes. The tongue is forced back to its place, (represented in black lines, Figs. 1, 2, and 3,) or retracted by a spring, *h*, which is placed within the recess *g* in head *b*, as shown in Fig. 3, so as to act respectively against the tongue *d* and opposite portion of head *b*. The curved lip *d<sup>2</sup>*, which is formed on the tongue *d*, and which plays in the slot or recess *g*, is merely used to prevent any lateral or side motion of the lever-tongue.

From this description it will be seen that it is not required in my snap to make the tongue *d* as long as in other snaps, wherein it is necessary to press directly upon the tongue to move it. I am enabled to carry the point of the hook *a* nearly up to the head *b*, leaving only sufficient space at this point for entering and detaching a ring from the hook or snap.

I have set forth my invention as a "rein-snap," but it is evident that it will serve an equally useful purpose as a carbine-snap.

In practice the projecting lip *d'* need not project far from the head *b*, and it may be formed and applied to the head of the snap in such manner as not to be in the way.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The double-acting lever-tongue *d d'*, in combination with the spring *h*, substantially as and for the purposes described.

2. Forming the tongue of a snap with an extended finger portion or lip, *d'*, on it, substantially as and for the purposes described.

JAMES IVES.

Witnesses:

L. A. IVES,  
E. N. HORTON.