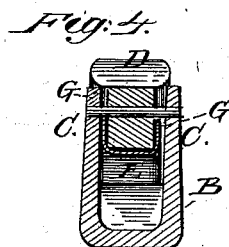
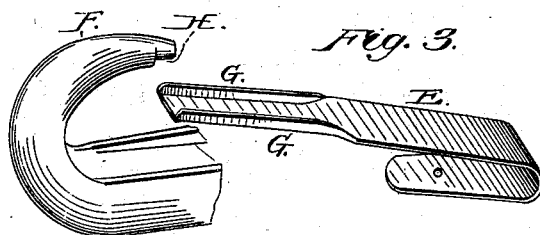
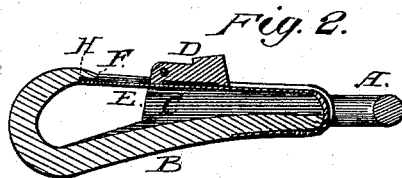
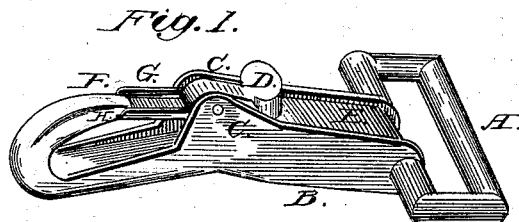


M. ROSS.  
Snap-Hook.

No. 217,487.

Patented July 15, 1879.



Witnesses:  
*Fred G. Dietrich*  
*J. R. Little*

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*Martianus Ross,*  
By: *Chas. Snow & Co.*  
Attorneys.

# UNITED STATES PATENT OFFICE.

MARTIANUS ROSS, OF ABILENE, KANSAS.

## IMPROVEMENT IN SNAP-HOOKS.

Specification forming part of Letters Patent No. **217,487**, dated July 15, 1879; application filed June 5, 1879.

*To all whom it may concern:*

Be it known that I, MARTIANUS ROSS, of Abilene, in the county of Dickinson and State of Kansas, have invented certain new and useful Improvements in Snap-Hooks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view. Fig. 2 is a longitudinal sectional view. Fig. 3 shows, in perspective, on an enlarged scale, the end of the hook; and Fig. 4 is a cross-section.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to snap-hooks for harness; and it consists in certain improvements in the construction of the same, which will be hereinafter more fully set forth, and particularly pointed out in the claims.

My improved snap-hook is provided at the rear end with a loop or slot, A, for attachment of the rein. Its body B is provided upon the sides with upwardly-projecting flanges C C, between which is pivoted a lug or thumb-piece, D, bearing against the snap-spring E, which is secured under the hook, bent up through loop A, and extending forward, under lug D, to the end F of the hook. The sides of the snap-spring are provided with flanges G G, which are fitted to the sides of lug or thumb-piece D and to the end F of the hook, which is provided with a recess, H, to accommodate

the end of the spring, thus making a smooth or flush wearing-surface.

From the foregoing description, and by reference to the drawings hereto annexed, the operation and advantages of my invention will be readily understood.

The recess H in the end F of the hook prevents wear upon the ring or strap inserted into the hook, and also prevents accidental disengagement of the spring. The flanges upon the sides of the spring prevent disengagement of the same from the hook laterally, and the pivoted lug or thumb-piece enables the device to be easily operated.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a snap-hook, a snap-spring provided with flanges to prevent lateral motion of the same, as set forth.

2. The combination, in a snap-hook, of a hook having a recessed end with a spring having upward-projecting flanges, as set forth.

3. A hook, B, provided with flanges C C and a loop, A, in combination with a spring secured to the under side of said hook and passed upward through loop A and forward under a pivoted thumb-piece or lug, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

MARTIANUS ROSS.

Witnesses:

E. D. PORTER,  
J. McMASTER.