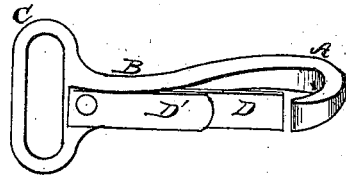


W. HEATH.  
SNAP-HOOKS.

No. 193,950.

Patented Aug. 7, 1877.



Witnesses  
H. Carlton & Arthur  
C. L. Ewert.

Inventor:  
W<sup>m</sup> Heath.  
T. H. Alexander & Elliott  
Attorneys.

# UNITED STATES PATENT OFFICE.

WILLIAM HEATH, OF BATH, MAINE.

## IMPROVEMENT IN SNAP-HOOKS.

Specification forming part of Letters Patent No. 193,950, dated August 7, 1877; application filed May 5, 1877.

*To all whom it may concern:*

Be it known that I, WILLIAM HEATH, of Bath, in the county of Sagadahoc and State of Maine, 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 thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a snap-hook, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which the figure is a perspective view of my improved snap-hook.

A represents the hook with shank B, at the end of which is formed a loop, C. In the front of the shank B, at its junction with the loop C, is formed a groove, in which are placed two springs, D D', which are firmly riveted to the shank.

The end of the spring D very nearly meets the point of the hook A, just so close that it will go clear and work by the same both in and out.

In the snap-hooks now generally in use the

spring runs by the point of the hook and underneath, so that it cannot be worked but one way, and then it has to be pressed down with the thumb or finger in order to get it unhooked. By my invention of having the end of the straight flat spring D coming nearly to the end of the hook, this difficulty is obviated and the spring will work both ways.

The outer spring D' is shorter, and is simply applied to give additional strength to the mainspring D.

This snap-hook is mainly intended for driving-reins, but may also be used on other parts of the harness. It can be attached and detached very easily, and is perfectly reliable.

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

In a snap-hook, the combination of the hook A, the straight flat spring D, the free end of which is adapted to work by the point of the hook both in and out, and the strengthening-spring D', substantially as and for the purposes herein set forth.

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

WILLIAM HEATH.

Witnesses:

J. W. SNOW,  
FRED. H. PATTEN.