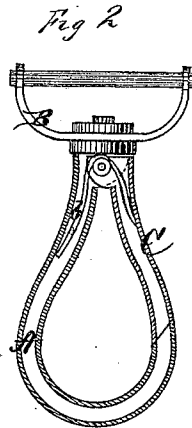
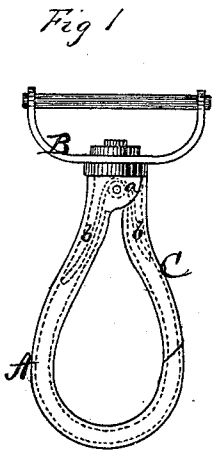


G. HAVELL.

Improvement in Snap-Hooks.

No. 131,271.

Patented Sep. 10, 1872.



Witnesses:

Francis L. Durand.
C. L. Ewert

Inventor.

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Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE HAVELL, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN SNAP-HOOKS.

Specification forming part of Letters Patent No. 131,271, dated September 10, 1872.

To all whom it may concern:

Be it known that I, GEORGE HAVELL, of Newark, in the county of Essex and in the State of New Jersey, have invented certain new and useful Improvements in Swivel-Hook; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a swivel-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—

Figure 1 is a side view, and Fig. 2 a longitudinal section, of my swivel-hook.

A represents the hook provided with the usual stem or spindle passing through the bar or bridge B, to turn on the same. At the base of the hook A are ears *a*, between which the tongue C is pivoted. The tongue C and hook A are each made hollow, of sheet-metal of

suitable thickness rolled in the proper shape, or otherwise formed in tubular shape.

This mode of construction makes the hook very strong, while at the same time it is lighter and stronger than the common swivel-hook. Around the pivot which holds the tongue C between the ears *a a* is wound a wire-spring, *b*, the ends of which extend up, respectively, into the hollow hook and hollow tongue, as shown in Fig. 2. The spring is thus entirely covered and shielded from all injury.

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

The combination of the hollow or tubular hook A, hollow or tubular tongue C pivoted between ears *a a* on the hook, and the spring *b*, having its ends extending up into the hook and tongue, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of April, 1872.

GEORGE HAVELL.

Witnesses:

A. H. MARR,
JOHN N. KERR.