L. J. JOHNSON.

SNAP-HOOK.

No. 185,639. Patented Dec. 26, 1876.

Fig: 1.

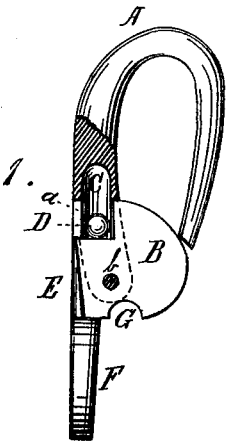


Fig: 2.

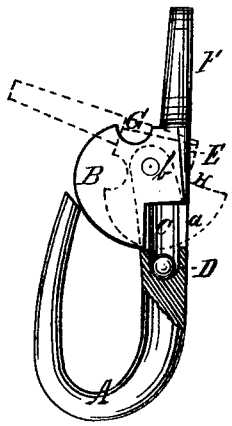


Fig: 3.

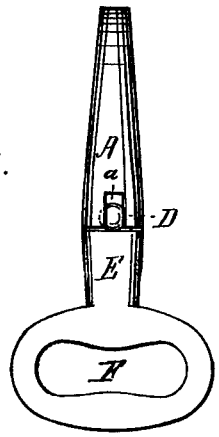
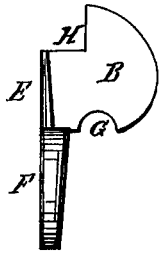


Fig: 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LOUIS J. JOHNSON, OF ELK FALLS, KANSAS, ASSIGNOR OF PART OF HIS RIGHT TO THOMAS P. FLETCHER AND WILLIAM A. SHELLADY, OF SAME PLACE.

IMPROVEMENT IN SNAP-HOOKS.

Specification forming part of Letters Patent No. **185,639**, dated December 26, 1876; application filed June 1, 1876.

To all whom it may concern:

Be it known that I, LOUIS J. JOHNSON, of the town of Elk Falls, county of Elk, and State of Kansas, have invented a new and useful Improvement in Harness-Snaps, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to provide a durable and cheap snap for harness without the use of a spring, either as a tongue for the snap or to operate a tongue, or in any connection whatever, the principal objection to a spring being that it is liable to break or become weakened in a short time, thus rendering the snap worthless, and at all times unreliable.

To accomplish the object for which a spring or tongue is used, to wit, closing the book of the snap, and securing the ring or loop to which the snap may be attached, I use a rotary tongue, B, working in and through a slot, *a*, in the hook or body of the snap A, as shown in Figure 2.

This snap is made of any hard metal in two parts. One is the hook A, with slot C in the end or base, having open places *a*, a movable unfastened ball, D, being in the slot C—the other part, loop F, with stem E and rotary tongue B, having lock-notch H and half-circular notch G, the parts being united by a rivet, *b*.

The method of using this snap is simple, and occasions no delay or trouble in fastening or unfastening.

To fasten the snap, the ring, loop, or bar, to which it is to be attached, is passed through the open front of hook A, the tongue being in the position described by dotted lines in Fig. 2, the hook A being turned upward, the ball D, or its equivalent, falls into the lock-notch H, and the snap hanging loosely or drawn forcibly, is securely fastened without liability to become strained or damaged.

To unfasten or loose the snap it is only necessary to reverse its position, bringing the loop F upward when the ball D, or its equivalent, falls back into the slot C, and the rotary tongue B passes through the open spaces *a*, leaving the hoop open to admit of the ring, loop, or bar passing out. When in an upright position the snap cannot become loosened or unfastened, as the ball D, or its equivalent, holds the tongue B firmly in position; and even if the ball D should be forced back into the slot C it would be necessary to entirely reverse the position of the snap before the ring, loop, or bar would pass out of the front. This is almost impossible, as the very force which would throw the ball D from its position would so draw on the snap as to securely fasten it without the ball D.

Fig. 1 represents the snap in an upright position and closed, with the ball D in its place in lock-notch H of rotating tongue B, and shows also a sectional view of slot C, with open space *a* and flange E, the tongue B closed against the point of the hook A.

Fig. 2 represents the snap reversed and open, the full line showing the position of the parts as closed, and the dotted lines showing the position of the same parts as opened; also, sectional view of slot C, with ball D fallen back, leaving the tongue B free to pass through the open space *a*.

Fig. 3 represents the back of the snap, showing the loop F and stem with flange E, the open space *a*, and ball D in position when snap is closed.

Fig. 4 represents the rotary tongue B, with lock-notch H, half-circular notch G, and the stem and flange E, the object of the circular notch G being to give sufficient room for a large bar, ring, rope, or other fastening to pass.

What I claim as my invention is—

The combination of the two-part riveted and slotted snap, the rotating tongue, and the ball or locking device, substantially as and for the purpose described.

L. J. JOHNSON.

Witnesses:

R. H. NICHOLS,

GEO. MAINPRIZE.