G. M. HUBBARD.

Snap-Hooks.

No. 136,728. Patented March 11, 1873.

Fig. 1

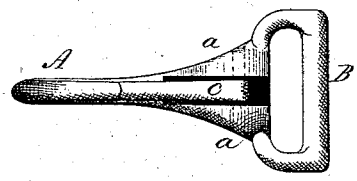


Fig. 2

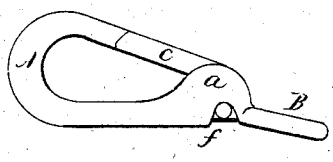


Fig. 3

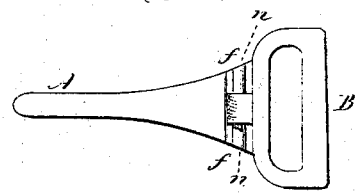


Fig. 4

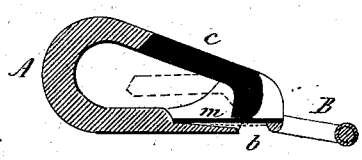


Fig. 5.

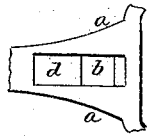
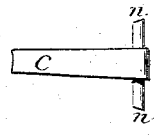


Fig. 6.



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UNITED STATES PATENT OFFICE.

GEORGE M. HUBBARD, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO W. & E. T. FITCH, OF SAME PLACE.

IMPROVEMENT IN SNAP-HOOKS.

Specification forming part of Letters Patent No. **136,728**, dated March 11, 1873.

To all whom it may concern:

Be it known that I, GEORGE M. HUBBARD, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Snap-Hooks; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents, in—

Figure 1, a top or front view; Fig. 2, a side view; Fig. 3, a rear view; Fig. 4, a longitudinal central section; Fig. 5, a top or front view of the hook with the latch and spring detached; and in Fig. 6, a top view of the tongue detached.

This invention relates to an improvement in what are known as rein-snaps or snap-hooks—that is, a hook combined with an elastic or spring tongue to automatically close the mouth of the hook; and the invention consists in forming the shank with an opening through from the rear, and with seats upon each side of the said opening for the pivot, and forming the pivot as a part of the tongue, so that the hook inserted from the back side and a spring placed beneath the pivot end of the tongue serve to close the tongue, as more fully hereinafter described.

A is the hook, its shank terminating in an eye, B, of any desirable form. The shank of the hook is formed with two cheeks, *a a*, with a recess, *d*, between, the width of the said recess corresponding to the width of the tongue C. Through the shank, in the recess, a perforation, *b*, is made, as seen in Figs. 4 and 5, of sufficient size to permit the tongue to be inserted from the back side. Upon the back side (each side of the mortise) a notch or seat, *f*, is formed, as seen in Figs. 2 and 3. The tongue C is constructed with a trunnion, *n*, upon each side of its rear or lower end, as seen in Fig. 6, these trunnions formed to fit the seat *f* upon the back side so that when the tongue is inserted from the back side these trunnions will lie in the said seats, as seen in Figs. 4 and 5, and form a pivot, upon which the tongue will turn. At the bottom of the recess *d* a flat or similar spring, *m*, is inserted beneath the tongue, as seen in Fig. 4, and the pivot end of the tongue made of cam shape relatively to the pivots, so that depressing the tongue, as denoted in broken lines, Fig. 4, will compress the spring. The reaction of the spring will cause the tongue to return when left free.

By this construction I am enabled to cast the tongue and trunnions in one piece, the hook in another; and the drilling or labor usually required to pivot the tongue is avoided, the parts, as they come from the tumbling-barrel, being in a condition to be immediately set together, the insertion of the spring completing the hook.

While I prefer a flat spring to lie beneath the tongue, as shown, it will be evident that springs of various kinds may be employed to hold the tongue in place and act to close the same. I therefore do not confine myself to any particular kind of spring.

I claim as my invention—

The hook A, constructed with the opening *b* through the shank and between the cheeks for the insertion of the tongue C, and with a seat, *f*, upon each side of said opening for the trunnions *n* of the tongue, and provided with a spring to hold said trunnions in said seats and act to close the tongue, all substantially as set forth.

GEORGE M. HUBBARD.

Witnesses:
JOHN E. EARLE,
A. J. TIBBITS.