

(No Model.)

G. M. HUBBARD.
SNAP HOOK.

No. 438,375.

Patented Oct. 14, 1890.

Fig. 1

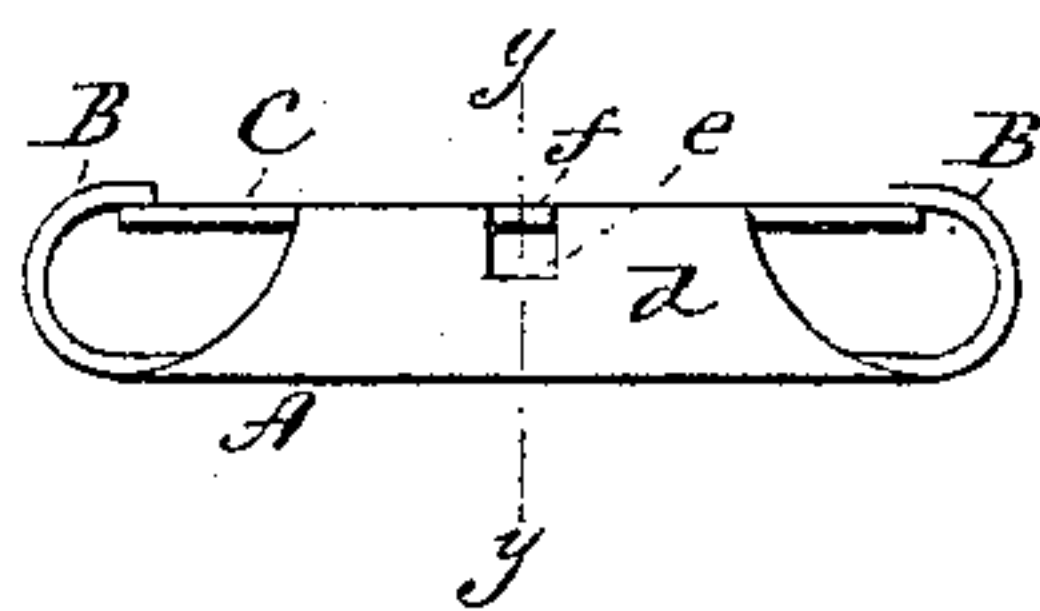


Fig. 2

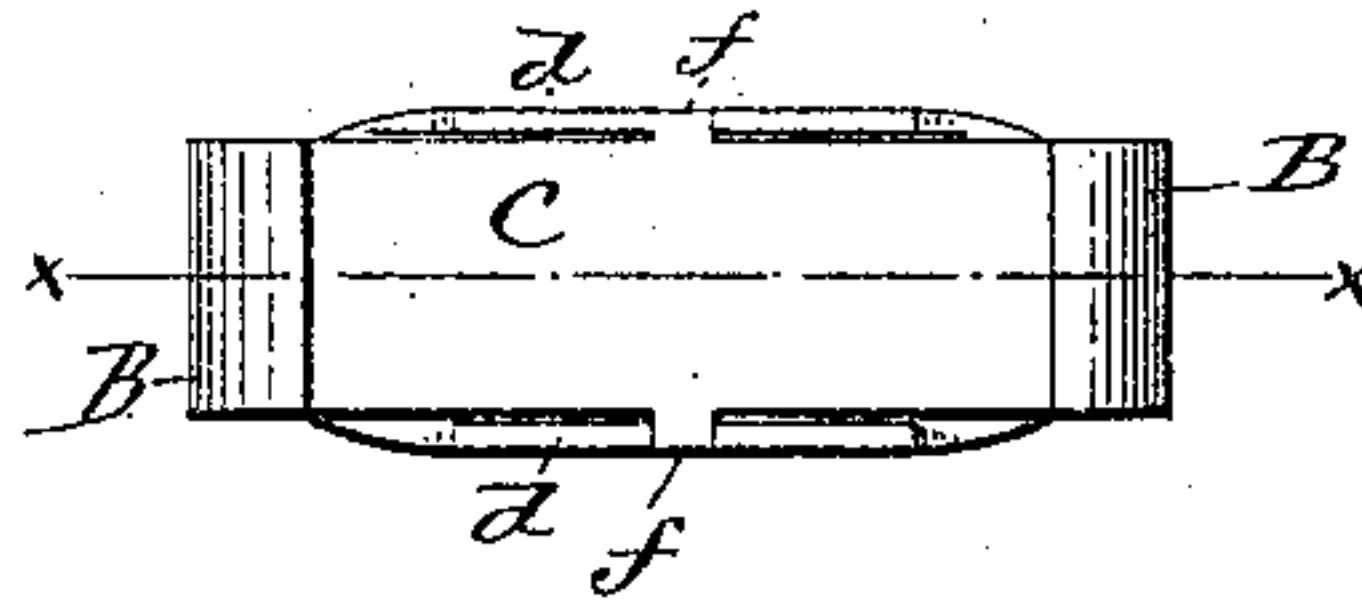


Fig. 3

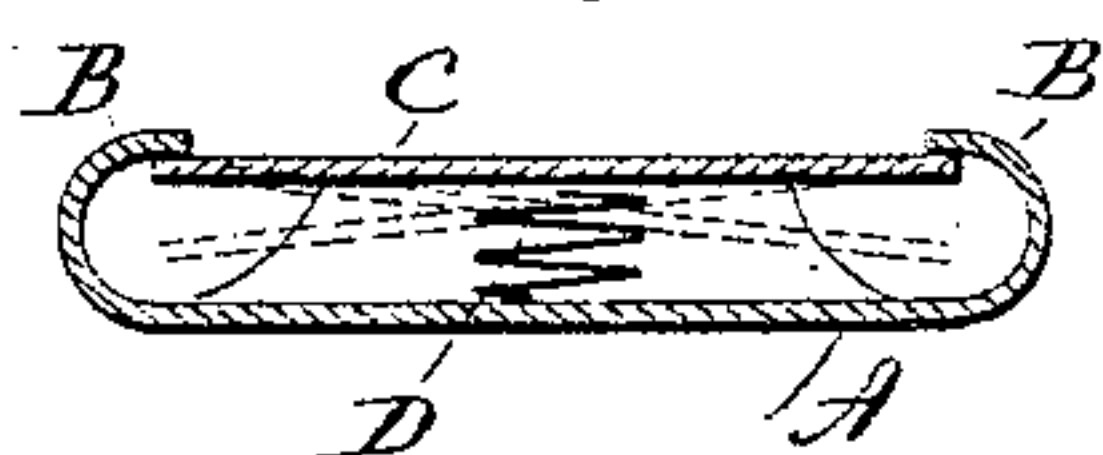


Fig. 4

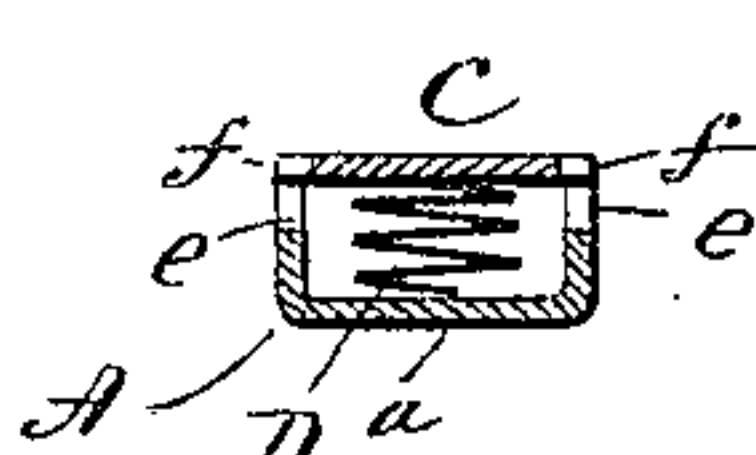


Fig. 5

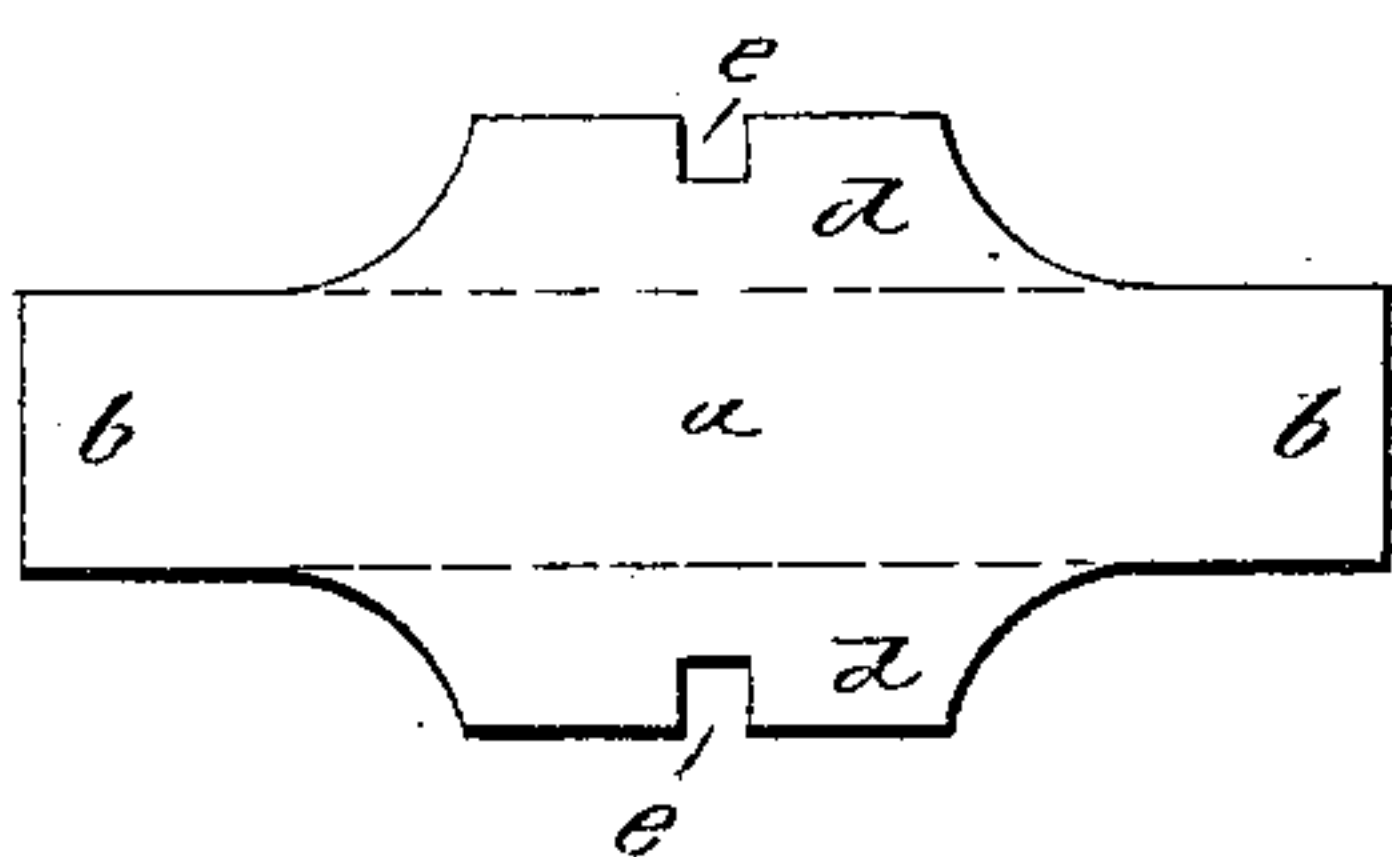


Fig. 6

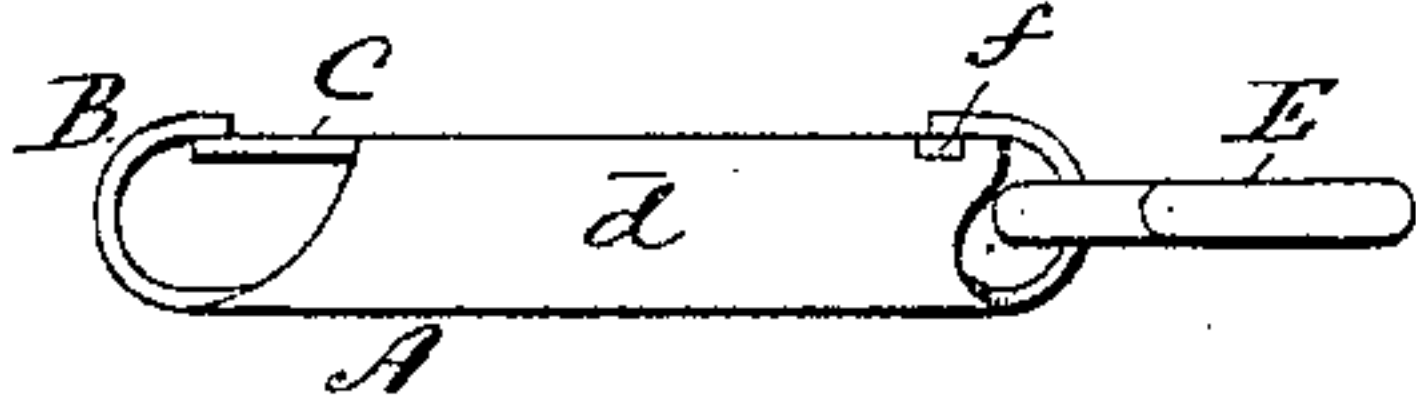


Fig. 7

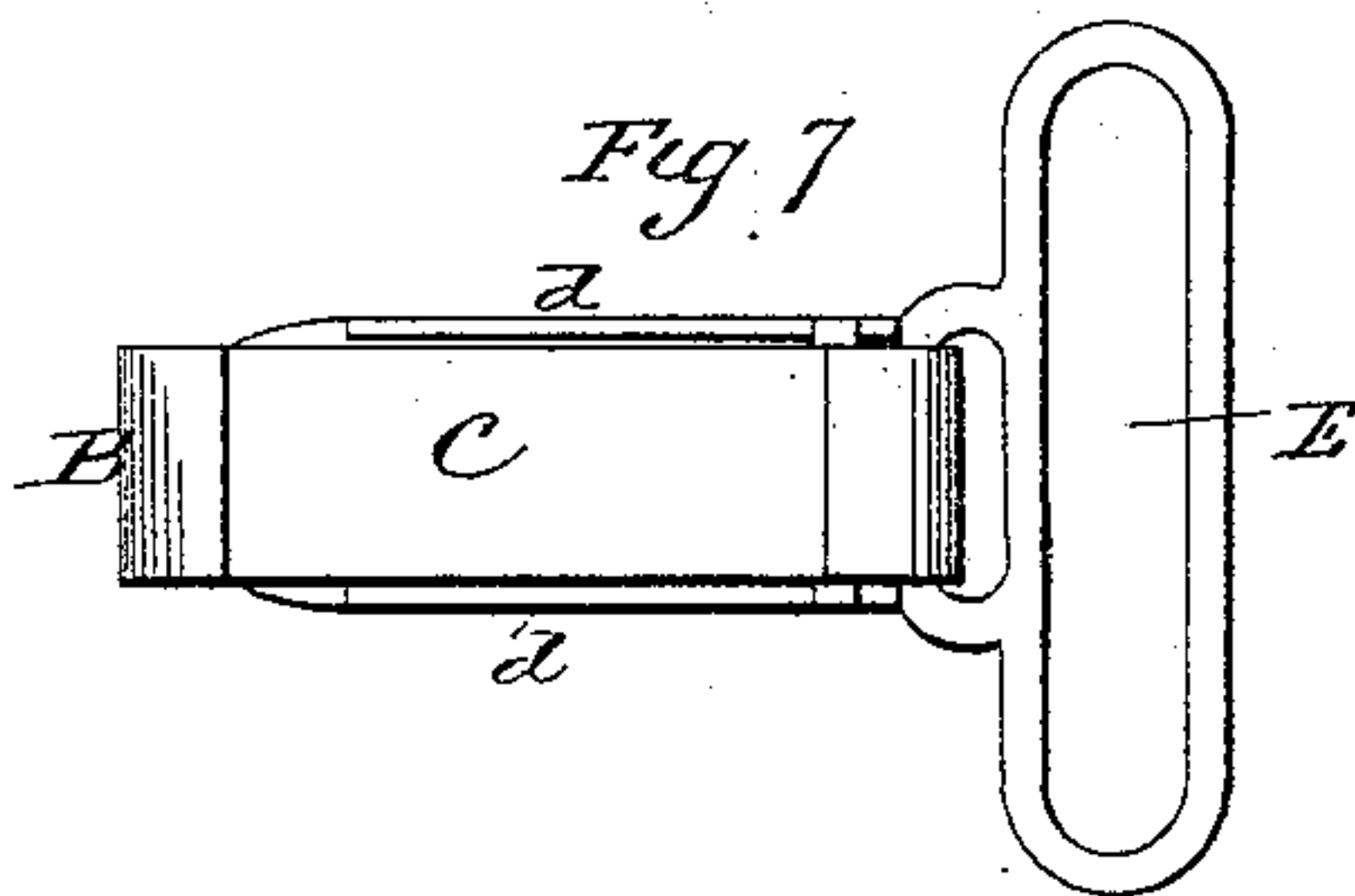


Fig. 8

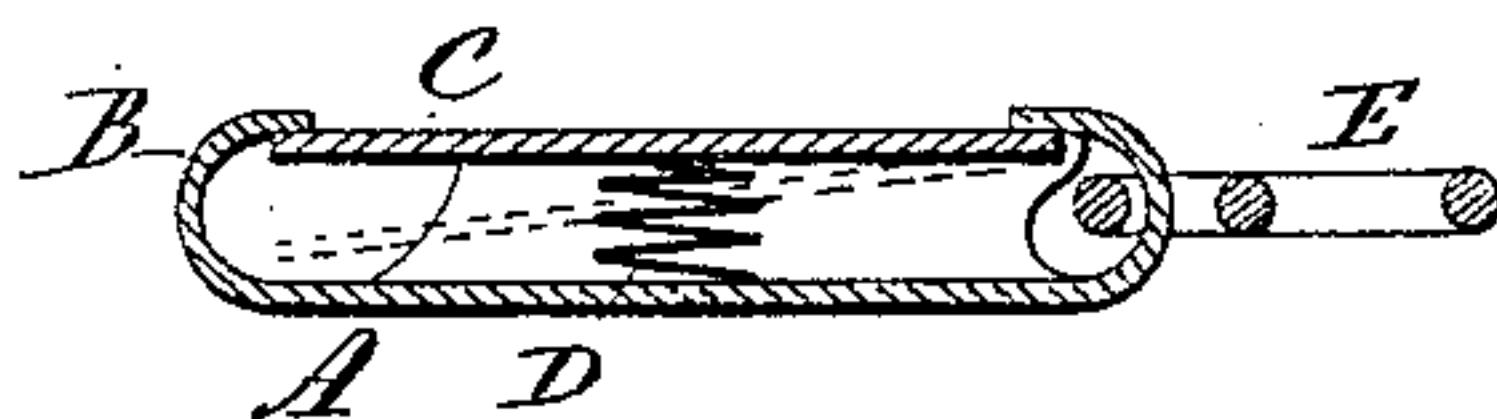


Fig. 9

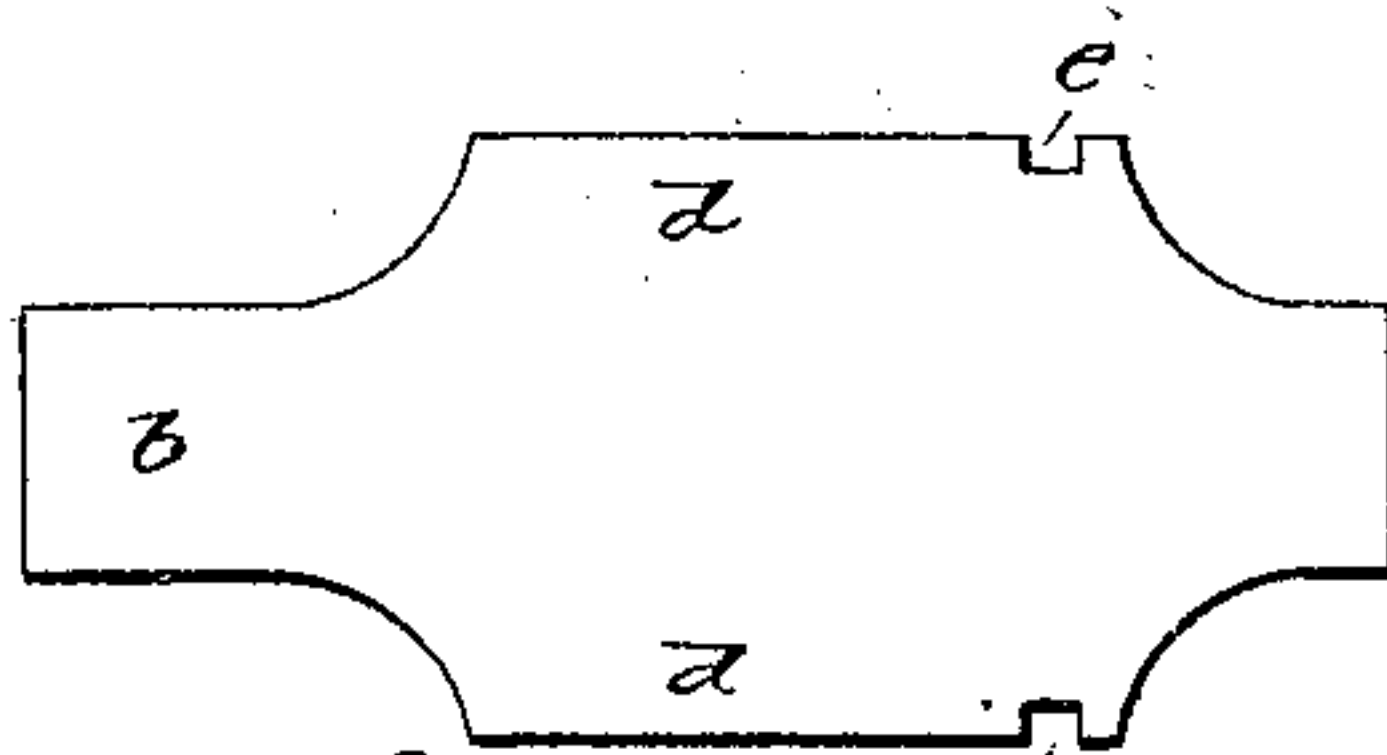
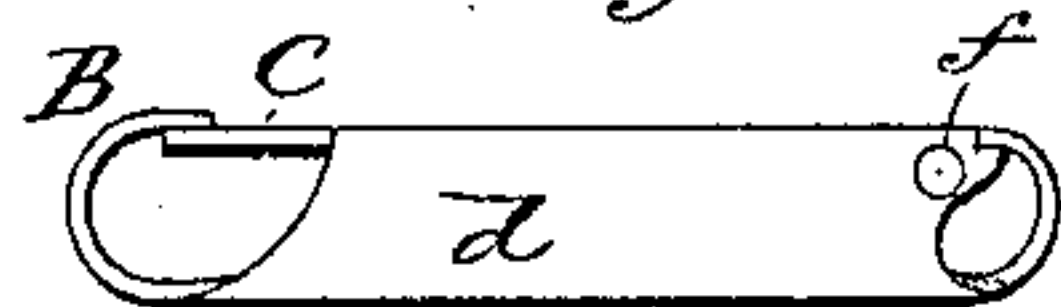


Fig. 10



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UNITED STATES PATENT OFFICE.

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

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 438,375, dated October 14, 1890.

Application filed May 19, 1890. Serial No. 352,367. (No model.)

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 accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of the hook complete; Fig. 2, a top view of the same; Fig. 3, a longitudinal central section of the same on line *xx* of Fig. 2; Fig. 4, a section on line *yy* of Fig. 1; Fig. 5, the blank from which the body is formed; Figs. 6, 7, 8, 9, and 10, modifications.

This invention relates to an improvement in the construction of that class of snap-hooks which are made from sheet metal, the object being to construct a double hook—that is, a hook adapted to engage at either end—especially adapted to belt-clasps and like purposes, but parts of the invention being applicable to a single hook, the object being a cheap and simple construction which will permit the work in the manufacture of the hook to be principally performed by means of dies; and the invention consists in the construction, as hereinafter described, and particularly recited in the claims.

A represents the body, which I will first illustrate as constructed with a hook B at each end. The body is made from sheet metal, as seen in Fig. 5, *a* representing the body proper extended at each end, as at *b*, to form the two hooks. On each side of the body is a projection *d*, which, turned up at right angles to the body, as seen in Fig. 4, form two flanges, producing a longitudinal recess in the upper side of the body between the two ends, the two ends *b b* bent upward and over to form the hooks B B, Figs. 1 and 3.

Midway of the length of each of the flanges *d d* a notch *e* is formed, opening through the upper edge of the flanges, as seen in Figs. 1 and 5.

C represents the tongue, which is made from sheet metal of a width corresponding sub-

stantially to the width between the two sides *dd* and of a length somewhat greater than the distance between the nose of the two hooks B B. This tongue is constructed with lateral projecting trunnions *f*—one upon each side—corresponding to the notches *e* and so as to set therein.

In assembling the parts the tongue is placed so as to bring the trunnions *ff* into the notches *ee* of the two sides. The spring, which may be a spiral spring D, is introduced between the two sides midway of the length of the tongue, so that the tongue may rest thereon, as seen in Fig. 3. The ends B B are brought over so as to stand over the corresponding ends of the tongue, and as seen in Fig. 3. The trunnions and notches prevent longitudinal movement of the tongue, while the nose of the hooks prevents the tongue from being thrown out of the notches. The notches are of a depth considerably greater than the thickness of the trunnions, so that depressing the tongue at one end, as from the end at the left, as indicated in broken lines, Fig. 3, the opposite end will rest against the under side of the hook at that opposite end as a hinge upon which the tongue may turn, so as to be depressed to open the hook at the left-hand end, as indicated in broken lines; or the tongue may be depressed at the right-hand end, as also indicated in broken lines, Fig. 3, the left-hand end then operating as the hinge upon which the tongue turns.

The hook thus constructed is adapted to engage a loop at each end and serves a good purpose as a belt-clasp.

In some cases it is not desirable that the hook should be detachable except at one end. In this case the body is constructed substantially the same as described in the first illustration, except that the flanges forming the sides extend nearer to the to-be-closed end, as seen in Fig. 9, and the notches *ee* in the flanges are made nearer that end, as seen in Figs. 6 and 9, and the tongue is constructed with trunnions at the corresponding end, as seen in Fig. 7; but that end of the body is turned over the trunnions of the hook in the same manner as described in the first illustration, so as to hold the tongue in place, the

spring being arranged between the tongue and the body, so as to permit the depression of the tongue, but yet yieldingly hold the tongue against the under side of the nose of the hook at the opening end. In this case a loop E is constructed to be hung upon the closed end of the body, the projection at that end of the body being passed through the loop, as seen in Figs. 6, 7, and 8, and so that the turned-up portion of the body at that end serves to form a hinge upon which the loop may swing; or the loop may be attached in any desirable manner, the essential feature of the invention being the turning up and over of the two ends of the body, so that both ends come over the tongue and serve to hold the tongue in its seat, yet permit its free play. The turning up of the ends gives substantially the same shape to both ends and produces a neat and smooth finish for the end of the buckle opposite the hook when employed as a single hook. In case of the single hook the turned-over end need not extend so far as to project over that end of the tongue, but may be turned up against the end of the tongue, as seen in Fig. 10, the tongue in such case being pivoted to the sides by extending the trunnions or pintles into corresponding holes in the sides *d*, as seen in Fig. 10. The loop is applied in the same manner as before described, and the same round smooth finished end is preserved. I, however, prefer to hinge the tongue by the notches in the sides, as before described, and extend the end of the body onto the tongue, so as to hold it in its seats.

I do not wish to be understood as claiming broadly a double-ended snap-hook or a snap-hook the body of which is formed from sheet metal with side flanges between which the

tongue is held; as such, I am aware, is not new; but

What I do claim is—

1. A snap-hook composed of a body *a*, constructed with flanges *d d*, forming a longitudinal recess in the body of the hook, the said flanges constructed with notches in their upper edge to form seats for the tongue, and a tongue in width corresponding substantially to the width between the said two sides and constructed with trunnions corresponding to the notches in the said sides, the two ends of the body turned upward and over, so as to bear upon the upper surface of the said tongue, with a spring between the said tongue and body, substantially as described.

2. A snap-hook, the body *a*, having longitudinal flanges *d* upon opposite sides, the said flanges constructed each with an open notch *e* midway of their length, the ends of the body projecting and turned upward and over to form the hook B at each end of the body, combined with a tongue in width corresponding substantially to the width between the said two flanges and of a length greater than the distance between the nose of the two hooks, the said tongue constructed with trunnions *f* resting in the said notches *e* of the body, the tongue extending beneath the nose of the hooks at both ends of the body, and a spring between the said body and hook, substantially as described, and whereby the tongue is adapted to open the hook at either end, substantially as specified.

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