

(No Model.)

D. L. SMITH.

SNAP HOOK.

No. 389,329.

Patented Sept. 11, 1888.

Fig. 1

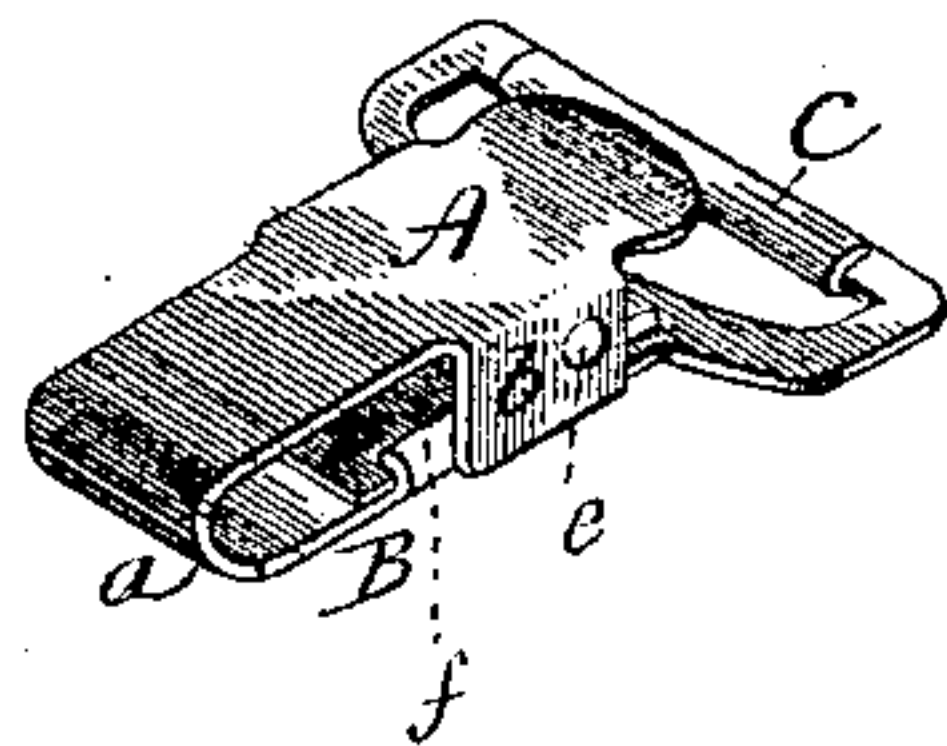


Fig. 2

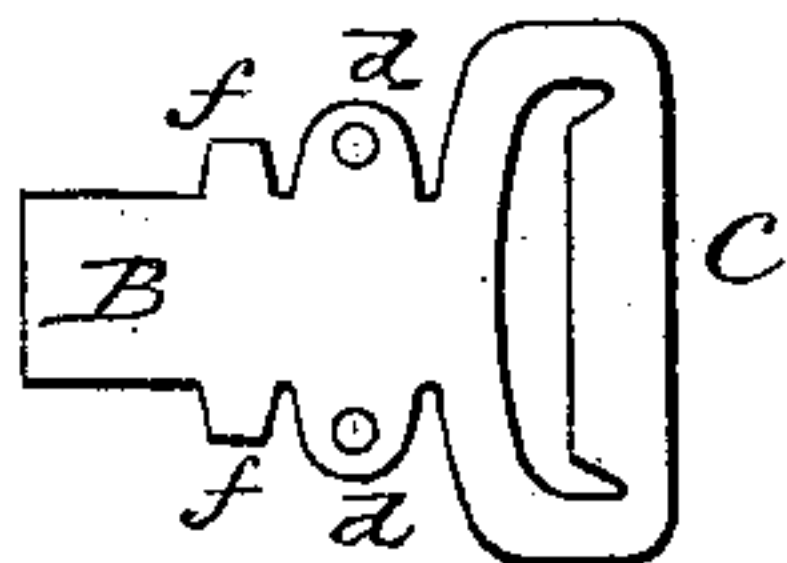


Fig. 3

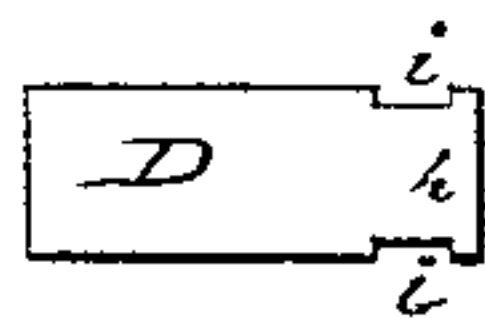


Fig. 4

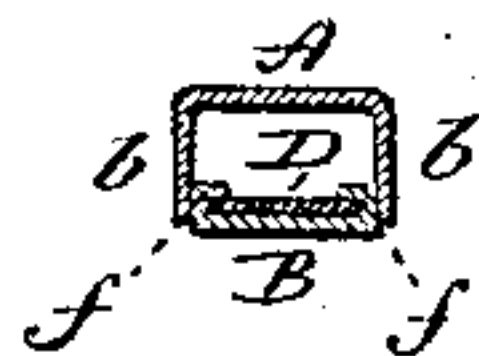
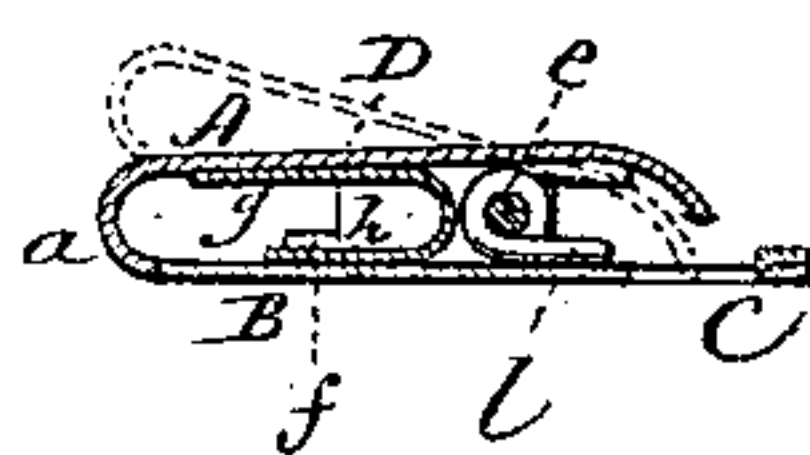


Fig. 5



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UNITED STATES PATENT OFFICE.

DWIGHT L. SMITH, OF WATERBURY, CONNECTICUT, ASSIGNOR OF ONE-HALF TO EARL A. SMITH, OF SAME PLACE.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 389,329, dated September 11, 1888.

Application filed June 18, 1888. Serial No. 277,480. (No model.)

To all whom it may concern:

Be it known that I, DWIGHT L. SMITH, of Waterbury, 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 perspective view of the hook complete; Fig. 2, the blank for the tongue; Fig. 3, the blank for the cast-off; Fig. 4, a transverse section cutting through the cast-off and the lugs by which it is secured; Fig. 5, a longitudinal central section.

This invention relates to an improvement in that class of snap-hooks which are constructed from sheet metal and used principally on suspenders for engaging the ends, but equally applicable for many other purposes, and particularly to that class of hooks which are provided with a cast-off—that is, a device which, when the hook is opened, will force the engaged loop or eye out of the hook.

In a previous construction the cast-off has been formed by cutting two longitudinal parallel slits in the tongue, the slit portion disconnected at the inner end and turned forward or toward the end of the tongue parallel therewith, and so that the loop engaged by the hook will stand between the tongue and this forwardly-turned portion, which forms the cast-off. In another case the tongue is extended considerably longer than is required for the finished tongue and the extension is bent back upon itself and then returned, forming, as in the before-mentioned case, a U-shaped cast-off. In the former case the tongue is necessarily weakened, and in the latter case there is a greatly-increased amount of metal required.

The object of this invention is to avoid these difficulties and produce a hook simple in construction and without increasing the cost of manufacture; and it consists in the construction as hereinafter described, and particularly recited in the claim.

A represents the body of the hook, which is constructed from sheet metal, with a hook-

shaped nose, *a*, at one end, and with ears *b* on each side turned upward at right angles to the body, as in the usual construction.

B is the tongue, which is also formed from sheet metal, and is provided with a loop, C, at one end, and with ears *d*, which are turned at right angles to the tongue, the distance between the ears being slightly less than the distance between the ears *b* on the body, and so that the ears *d* will set between the ears *b*. The ears on the tongue and body are correspondingly pierced for the introduction of the pintle *e*.

On each side of the tongue, slightly below the ears *d*, a lug, *f*, is formed, as seen in Fig. 2. The cast-off D is made from a strip of metal corresponding in width to the width of the tongue, bent into U shape, the leg *g* being longer than the leg *h*. On each side, near the end of the short leg *h*, a notch, *i*, is formed, the length of the notches corresponding to the width of the legs *f*. The cast-off is secured to the tongue by placing the short leg *h* upon the tongue and closing the lugs *f* upon it. The said lugs, entering the notches, firmly secure the cast-off to the tongue, as substantially as if a part of the tongue itself. The parts are connected by the pintle *e*, extending through the ears *b d*, and upon the pintle a spring, *l*, is arranged, one leg having a bearing upon the body and the other upon the tongue, the tendency of the spring being to hold the hook in the closed position, as in the usual manner, in which position the cast-off rests upon the body of the hook, as seen in Fig. 5.

In operation the hook is the same as in the previous construction of this class of hooks—that is, upon opening the hook the cast-off follows the tongue, and the loop engaged, being between the cast-off and the tongue, is forced beyond the point of the hook, as shown in broken lines, Fig. 5, and the loop is free.

Instead of forming the attaching-loop C upon the tongue, as hereinbefore described, it may be arranged upon the body—a common expedient in this class of hooks, too well known to require illustration. By this construction the tongue is strengthened rather than weakened by the cast-off, as in the first prior construction referred to, and not only is there a con-

siderable saving in the amount of metal over that required in the second prior construction referred to, but the cast-off may be made from a very much cheaper and lighter metal than
5 that required for the tongue itself.

I claim—

The herein-described snap-hook, consisting of the body A, provided with a hook, *a*, and ears *b*, combined with a tongue, B, constructed
10 with ears *d*, the cast-off D, made separate from

the tongue and secured to said tongue by an interlocking of the cast-off with the tongue, said tongue and body pivoted together through said ears, and a spring adapted to yieldingly hold said tongue and body in the closed posi- 15
tion, substantially as described.

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Witnesses:

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