

(No Model.)

C. B. BRISTOL.
SNAP HOOK.

No. 519,524.

Patented May 8, 1894.

Fig 1

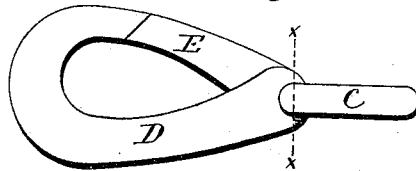


Fig. 2

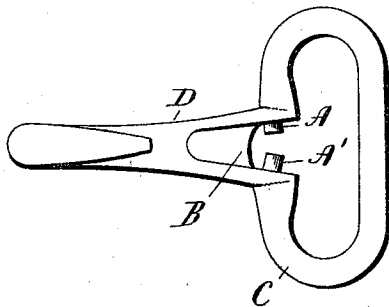


Fig 3

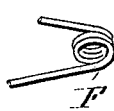


Fig 4

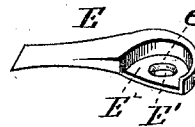
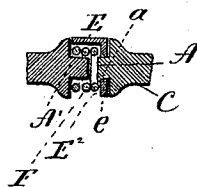


Fig 3



Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES B. BRISTOL, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE
W. & E. T. FITCH COMPANY, OF SAME PLACE.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 519,524, dated May 8, 1894.

Application filed October 30, 1893. Serial No. 489,475. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. BRISTOL, 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 view in side elevation of a snap-hook constructed in accordance with my invention; Fig. 2, a plan view of the hook with the tongue and spring removed, and showing the body of the hook as it is initially cast; Fig. 3, a sectional view through the base of the eye and hook proper, on the line $x-x$ of Fig. 1; Fig. 4, a detached perspective view of the tongue; Fig. 5, a corresponding view of the spring.

My invention relates to an improvement in snap-hooks, the object being to produce at a low cost for manufacture, a simple, and superior article, in which the tongue is very firmly held in place.

With these ends in view, my invention consists in a snap-hook having certain details of construction and combinations of parts as will be hereinafter described and pointed out in the claims.

In making my improved device, I cast two studs $A A'$ in line with each other, upon the opposite walls of the slot B formed at the bases of the eye C and the hook proper D , to receive the tongue E , and the coiled wire spring F . The stud A , which, as shown, is a trifle smaller and shorter than the stud A' , is constructed upon its lower face with a groove or bevel a , to co-operate with the beveled inner edge e of the stud-hole E' formed in the wall E^2 which closes one side of the base of the tongue which is studless. The coils of the spring F are adapted in size to fit over the spring-stud A' which supports the spring, the same being received within the chambered base of the tongue. It will thus be seen that the two studs respectively carry the tongue and spring, and act independently of each other. When the parts are assembled, the tendency of the spring will be to lift the

tongue, and crowd it toward the opposite wall of the slot B , whereby the bevel e will be caused to draw into the groove a in the lower face of the tongue-stud A , as shown in Fig. 3 of the drawings, and thus firmly hold the tongue in place without interfering with the freedom of its pivotal movement.

The parts of my improved hook are readily assembled, and when assembled the cheeks, which are initially cast open, as shown in Fig. 2, are closed together, as shown by Fig. 3. The use of the two pins as described, for supporting the tongue and spring respectively, simplifies the construction of the tongue, for in the form shown it is very easy to cast. Indeed, all the parts of my improved hook except the spring, may be cast and put together without finishing.

My improved snap-hook contains but three parts, all of which are adapted, by reason of their form, to be produced at a low cost, and with the rejection of very few pieces owing to imperfections. The tongue itself having no central stud to support the spring, is made very easy to mold and cast, while on the other hand tongues which have studs in their bases are difficult to mold, and many pieces are lost in casting, because the metal washes the sand away and fills the small chamber which should extend around the stud. Furthermore, the short studs A and A' of the hook proper are easier to cast and less liable to be broken in tumbling than one long stud, nor do they get out of shape in annealing as one long stud often does.

I am aware that a snap-hook having two studs projecting from the walls of its tongue slot, is broadly old, and that a hook having a chamber in its base to receive a spring is broadly old, and I do not therefore claim either of these constructions broadly.

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

1. The herein described snap-hook having two studs $A A'$ located in line with each other upon the opposite walls of the tongue-slot B formed at the bases of the eye C and the hook proper D ; a tongue E , having a chambered base, one side of which is closed by a wall E^2 , containing a hole E' , receiving the stud A ;

and a coiled wire spring F, adapted in size to fit over the stud A', and to enter the chamber in the base of the tongue through the open side thereof, and having its two ends
5 respectively adapted to be engaged with the hook and with the tongue, substantially as set forth, and whereby the tongue is exclusively supported by one stud, and the spring
10 exclusively supported by the other stud, substantially as and for the purpose set forth.

2. A snap-hook having two studs located in line, respectively formed upon the opposite walls of its tongue-slot, and a tongue and a spring mounted independently of each other

upon the said studs, the lower face of the spring-stud being grooved or beveled, and the stud-hole of the tongue having a corresponding bevel, whereby the tongue will be firmly held in place by the coaction of the bevels under the influence of the spring, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHAS. B. BRISTOL.

Witnesses:

FRED C. EARLE,
LILLIAN D. KELSEY.