J. B. SARGENT.

Snap-Hooks.

No. 215,246. Patented May 13, 1879.

fig. 1

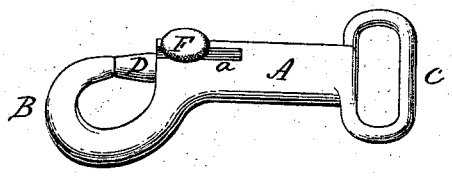


fig. 2.

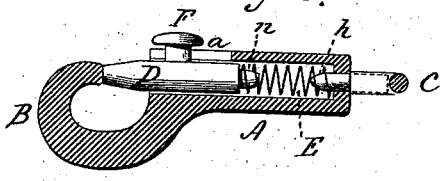
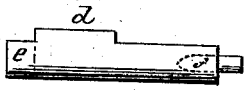


fig. 3



Witnesses,

J. K. Shumway.

Jos. C. Edle

Jos. B. Sargent.

Inventor.

By attys.

Wm. G. Earle

UNITED STATES PATENT OFFICE.

JOSEPH B. SARGENT, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN SNAP-HOOKS.

Specification forming part of Letters Patent No. **215,246**, dated May 13, 1879; application filed March 31, 1879.

To all whom it may concern:

Be it known that I, JOS. B. SARGENT, 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 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, perspective view; Fig. 2, longitudinal central section; Fig. 3, side view of the core.

This invention relates to an improvement in that class of snap-hooks in which the tongue is made to slide to and from the end view of the hook to close and open the mouth.

In the usual construction the tubular portion of the body of the hook, in which the tongue or bolt slides, is cast with an aperture at the rear end for the support of the core in casting. This opening is objectionable, because it allows the entrance of foreign matter, which interferes with the proper working of the spring and tongue.

Again, in this construction the spring is simply placed into the tubular portion and rests upon the extreme inner end, with nothing to locate it at a particular point relatively to the barrel or tube; hence in operation the spring is left so free in the tube that it rubs against the surface of the tube and otherwise changes its position so as to interfere with its perfect working.

Sometimes the barrel in which the bolt slides has been made open at the top, and the bolt made with a tail extending through a guide at the rear, and the spring placed on the tail; but this leaves the spring too much exposed for practical use.

The object of the invention is to overcome these difficulties; and it consists in the construction, as hereinafter described, and particularly recited in the claim.

The general outline of the hook is common and well known.

A is the tubular portion, terminating at the forward end in a hook, B, and at the other end in a loop, C, or other securing device; D, the bolt, arranged to slide within the tube, forced outward by a spring, E, and provided with a knob or handle, F, working through a longitudinal slot, *a*, in the tube, all in the usual manner of this class of hooks.

In casting the body of the hook the core for the tube is made as seen in Fig. 3. The part *d* represents that part which will produce the slot *a*. The forward end, *e*, is extended longer than the tube as a support for the core at that end. From that point rearward the core corresponds to the cavity to be made in the body to receive the bolt and spring.

Into the rear end of the core a piece of wire is introduced, so as to project and correspond to a core-print at that end within the loop C, and also extending forward into the core, so that the said piece *f* forms a support for the core at the rear end. After casting, the core is removed in the usual manner, but leaves the piece *f* firmly held by the casting at the rear or loop end, and extending into the cavity in the form of a stud, *h*. That portion of the piece *f* which lies within the loop, as indicated in broken lines, Fig. 2, is then cut off flush with the end of the body.

The stud *h* within the cavity in the body and concentric therewith receives the spring around it, as indicated in Fig. 2, serving as a guard to hold the spring in its proper concentric position, and so as to properly work within the said cavity.

The bolt D is constructed with a corresponding stud, *n*, to enter the opposite end of the spring.

By this construction the piece F, therefore, serves to support the core, to fill the cavity through which such support is made, and also to form the stud to hold the spring.

I claim—

In snap-hooks consisting of the tubular body and hook end, with bolt and spring arranged in said tubular portion, the stud *h* at the rear end of the tubular portion of the body, all substantially as described.

J. B. SARGENT.

Witnesses:

F. A. JACKSON,

D. T. MALLETT.