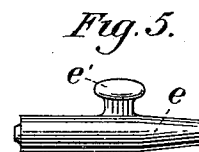
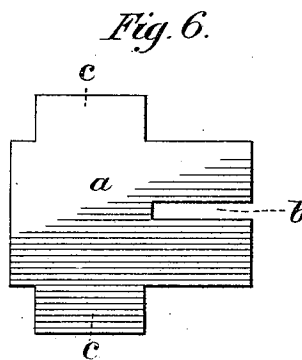
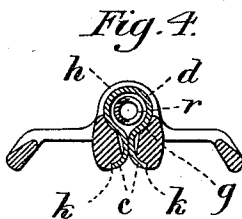
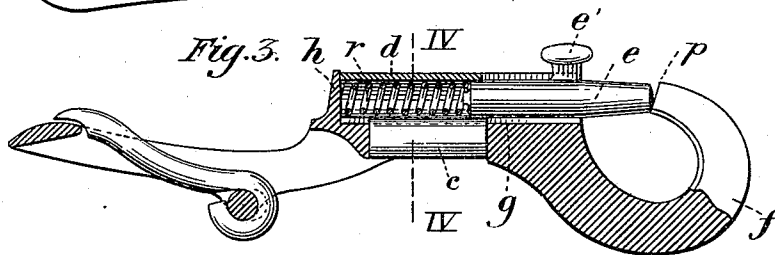
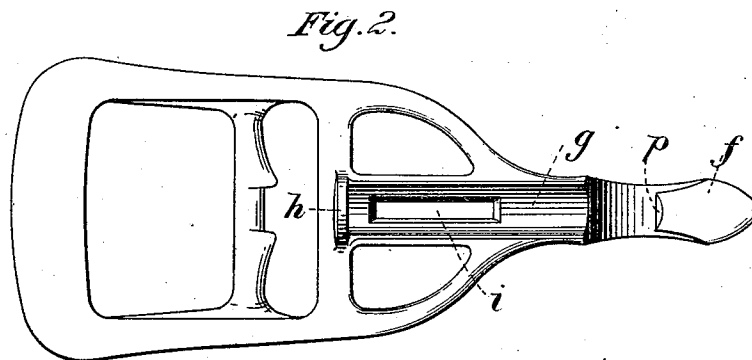
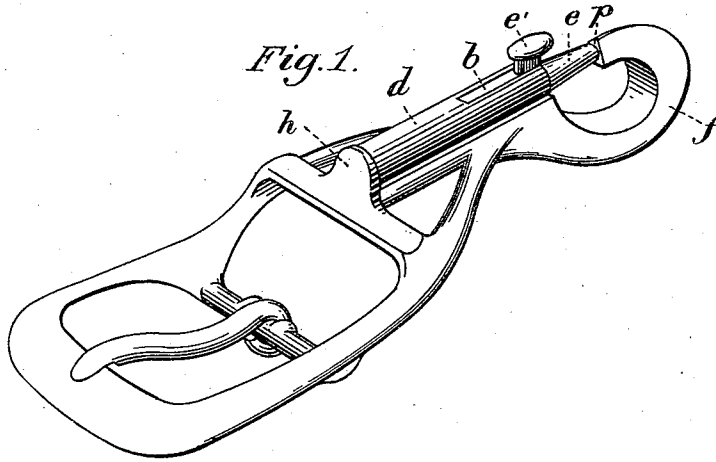


(No Model.)

E. L. HOWE.
SNAP HOOK.

No. 473,315.

Patented Apr. 19, 1892.



WITNESSES.

N. D. Conner
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UNITED STATES PATENT OFFICE.

EUGENE L. HOWE, OF CLEVELAND, OHIO.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 473,315, dated April 19, 1892.

Application filed October 2, 1891. Serial No. 407,511. (No model.)

To all whom it may concern:

Be it known that I, EUGENE L. HOWE, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Snap-Hooks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the snap-hook. Fig. 2 is a plan view of the body of the hook. Fig. 3 is a longitudinal sectional view of the hook, snap-pin, and barrel. Fig. 4 is a cross-section on the line IV IV of Fig. 3. Fig. 5 is a detached view of the snap-pin, and Fig. 6 is a plan view of the blank from which the barrel is formed.

My invention relates to the manufacture of snap-hooks; and it consists in an improved snap-hook in which the entire barrel is formed separately from the body and united thereto by lugs or flanges upon the barrel, which pass through a slot in the body and are clinched.

I will now describe my invention, so that others skilled in the art may employ the same.

In the drawings, *a* represents the blank, cut from sheet-iron or other suitable metal and having the slot *b* and projecting flanges *c c*. This blank is bent into a cylindrical shape, so as to form the barrel *d*, which has the projecting flanges *c c* and slot *b*. The snap-pin *e* may be cast in one piece of malleable iron, (having the retracting lug *e'* integral with the body of the pin,) or it may be formed of any other suitable metal in the usual manner. The hook *f* is cast or formed of brass, bronze, or other suitable metal, and is provided with the concave seat *g* for the reception of the barrel *d*. At the rear of this seat is the shoulder *h*, against which the open end of the barrel rests, and in the bottom of the seat is the slot *i* for the reception of the flanges *c c*. This slot *i*

on the under side of the hook is provided with offsets *k* to receive the ends of the flanges *c c*, which are doubled into the offsets, so as to make a smooth surface on the under side of the hook. The parts being formed as described, they are placed in position and attached to each other, as follows: The pin *e* is placed inside of the barrel *d*, the lug *e'* projecting through the slot *b*. A spiral spring *r* is placed in the rear end of the barrel, and the barrel is then placed in the seat *g*, the flanges *c c* extending through the slot *i*, the rear end of the spring bearing against the shoulder *h* and the forward end of the snap-pin bearing against the end *p* of the hook *f*. The barrel is then secured in the seat *g* by bending the projecting ends of the flanges *c c* into the offsets *k*.

The advantages of my invention are numerous. The barrel *d*, being made separately of steel, &c., has a smooth surface, unlike that of cast-iron, and the pin works easily in it. The barrel is straight, while bores formed in the snap are often not true. The lugs passing through the slot prevent the barrel from turning and being displaced.

I claim as my invention—

As an improved article of manufacture, a snap-hook comprising a hook-body having a longitudinal recess, a slot in the bottom thereof and offsets on its under side, a barrel having projecting flanges passing through the slot and bent into the offsets, the snap-pin, and spring within the barrel bearing upon the pin, substantially as described.

In testimony whereof I have hereunto set my hand this 26th day of September, A. D. 1891.

EUGENE L. HOWE.

Witnesses:

MARTIN O. SENSENY,
EMIL W. JAITE.