

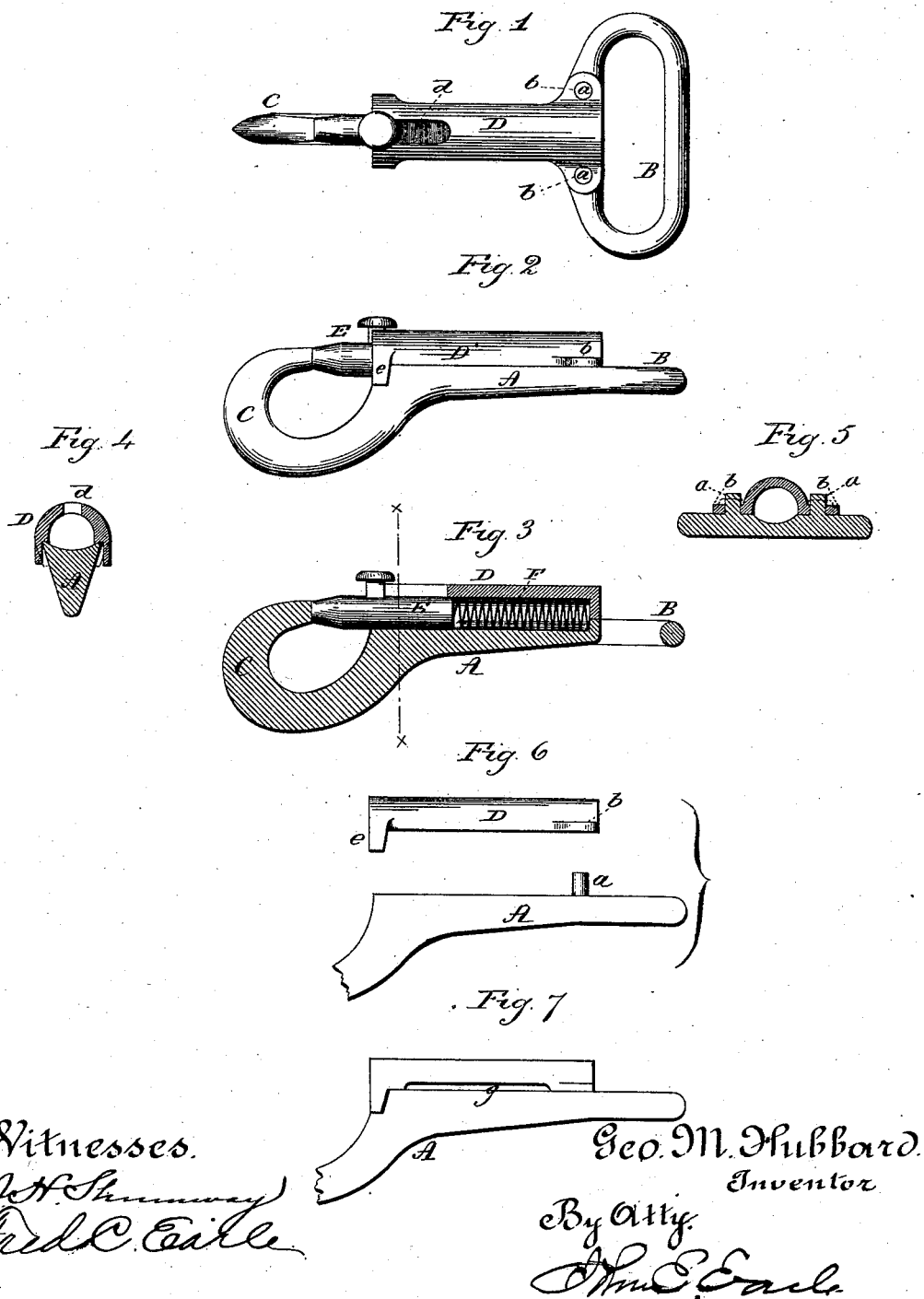
(No Model.)

G. M. HUBBARD.

SNAP HOOK.

No. 347,108.

Patented Aug. 10, 1886.



UNITED STATES PATENT OFFICE.

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

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 347,108, dated August 10, 1886.

Application filed May 24, 1886. Serial No. 203,110. (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 top view of the snap complete; Fig. 2, a side view; Fig. 3, a longitudinal central section; Fig. 4, a transverse section through the cap and body on lines *xx* of Fig. 3; Fig. 5, a transverse section through the rivets at the rear end; Fig. 6, a side view of the cap and hook as in the act of being set together; Fig. 7, a side view of the hook, showing the opening for the escape of foreign matter.

This invention relates to an improvement in that class of snap-hooks in which the body is tubular, with a hook at one end and with a loop at the opposite end, and with a spring-bolt arranged in the body, said bolt adapted to be moved longitudinally by a thumb-piece extending through a longitudinal slot in the body. In the more general construction of this class of snaps the bodies are cast with the end of the hook turned to one side, and after the spring and bolt have been placed in position the hook is bent into the same plane as the body of the snap. In such bending of the hook many are broken and lost.

The object of this invention is to avoid this difficulty; and it consists in constructing the top of the body of the hook flat, or nearly so, and securing thereto a cap, which will form the barrel in which the spring-bolt is arranged, as more fully hereinafter described, and particularly recited in the claims.

A represents the body of the hook, the top of which is flat, or nearly so, and is constructed with a loop, B, at one end, and with a hook, C, at the opposite end, as usual in this class of snaps. By making the upper surface of the body flat, or nearly so, as shown, I am enabled to mold and cast the body, hook, and loop in the position which they are required to occupy when the snap is complete, and so as to avoid bending the hook heretofore generally

necessary. On the top of the body, at the loop end at each side, a stud or rivet, *a*, is formed in casting.

D is a cap, its length and width corresponding to the length and width of the body A, to which it is to be secured to form the barrel. The cap is longitudinally recessed upon its under side, opening from the hook end, and of a shape corresponding to the shape of the bolt to be worked therein, and is constructed with lateral ears *b* on each side at the loop end, in each of which is a hole corresponding to the rivets *a* on the body, over which they are adapted to set. In the top of the cap, at the hook end, is a longitudinal slot, *d*, and on the edge of each side, at the hook end, is a lug, *e*. E is the bolt, and F the spring, of the usual construction.

The bolt and spring are placed on the top of the body A and the cap placed over them, the ears *b* passing over the rivets *a* and secured, and the lugs or arms *e* extending downward on each side of the body and bent inward, as shown in Fig. 4, to close beneath the body, there securely holding the cap in position. A thumb-piece on the bolt extends upward through the slot *d* in the cap, whereby the bolt is moved, as in the usual construction of this class of snap-hooks.

If openings in the barrel are desired to permit the escape of water and dirt, the lower edges of the cap between the ears *b* and the arms *e* are cut away, as shown in Fig. 7, forming a longitudinal opening, *g*, on one or both sides between the cap and the body.

Under this construction not only is the hook cast complete and in its finished shape, but the cap may also be cast complete with the rivet-holes through the ears. Thus I am enabled to make a very considerable saving in the cost of manufacture.

It will be understood from the foregoing that I am aware that snap-hooks having a body with a loop at one end and a hook at the opposite end, and with a longitudinal recess in the body in which the bolt may slide, are common and well known, and I am also aware that a hook has been constructed in which a cover has been placed over the bolt; but in such construction the recess was necessarily formed in the body of the hook, and therefore required

the turning of the hook out of its natural plane in order to cast it complete, and which required the bending of the hook into its natural plane after casting, as hereinbefore set forth; but I
5 am not aware that a hook has been constructed in which the recess for the bolt was formed substantially in a part to be attached to the body, and so that the body, hook, and loop
10 could be readily cast, each portion in the condition required for the finished hook, and thereby avoid the bending before mentioned, and which peculiar construction constitutes the essential feature of my invention.

I claim—

15 1. The combination of the body A, constructed with a loop at one end and with a hook at the opposite end, the said body substantially flat upon its upper side, the cap D, constructed with a longitudinal recess upon
20 its under side corresponding to the bolt and

spring, said recess opening at the forward end of the cap, the cap also constructed with a longitudinal slot, *d*, at its forward end, opening into the recess in the cap, the bolt and spring
25 arranged in the recess in the cap, and the cap secured to the upper or flat side of the body, substantially as described.

2. The combination of the body A, constructed with the loop at one end and the hook
30 at the opposite end, the cap D, secured to the said body, with a recess between the cap and body, the bolt and spring in the said recess, the cap constructed with a longitudinal slot, *d*, at its forward end, and with an opening, *g*,
35 between the cap and body, substantially as described.

GEO. M. HUBBARD.

Witnesses:

JOHN E. EARLE,
FRED C. EARLE.