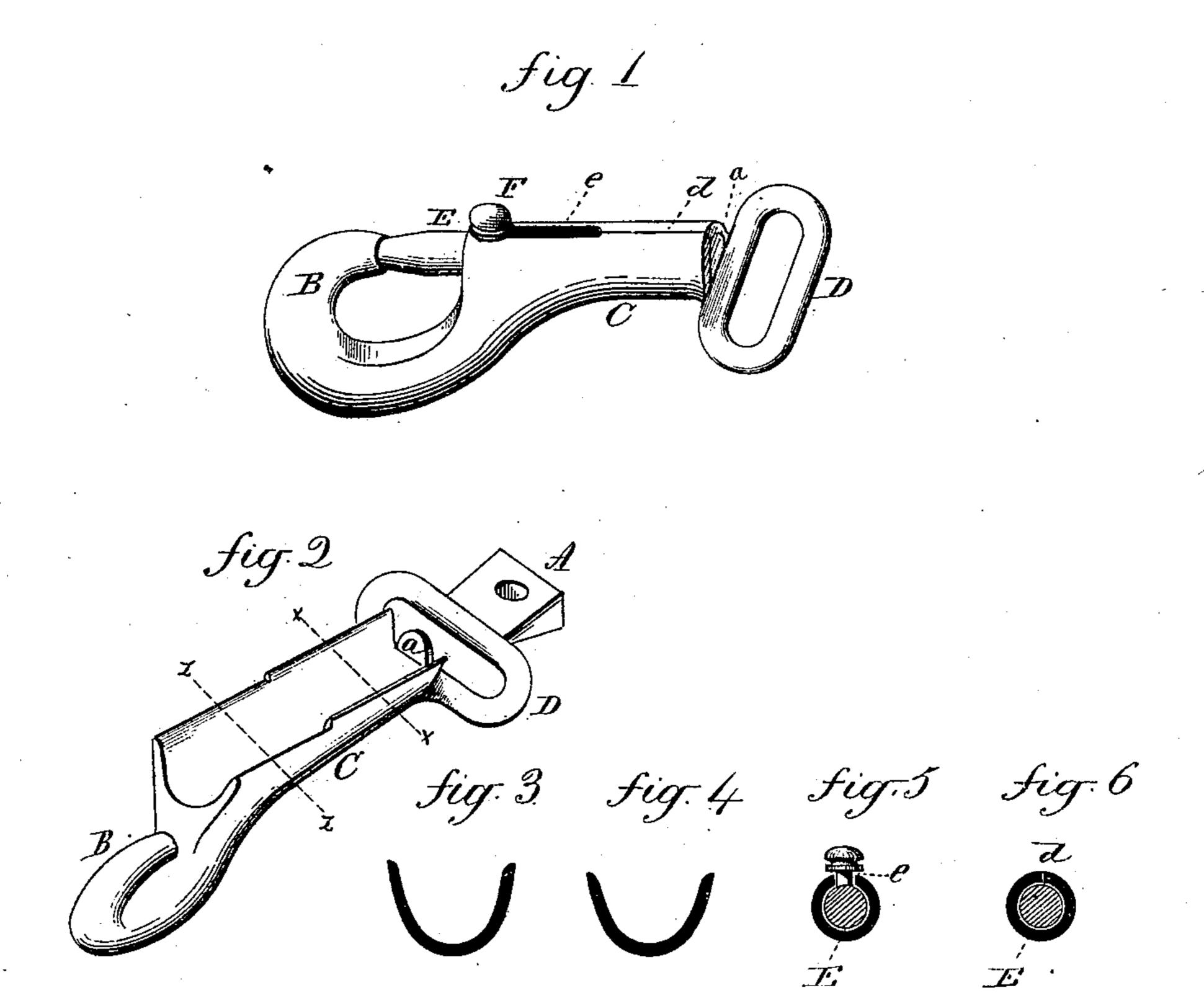
(No Model.)

## A. S. HENN.

SNAP HOOK.

No. 250,534.

Patented Dec. 6, 1881.



Witnesser Josephanes Josephanes Atfred S. Henn, By atty.

## United States Patent Office.

ALFRED S. HENN, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO W. & E. T. FITCH, OF SAME PLACE.

## SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 250,534, dated December 6, 1881.

Application filed October 28, 1881. (No model.)

To all whom it may concern:

Be it known that I, Alfred S. Henn, 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, a perspective view; Fig. 2, perspective view of the casting; Fig. 3, transverse section on line xx; Fig. 4, transverse section on line zz of Fig. 2; Figs. 5 and 6, tranverse sections on same lines of the completed hook.

This invention relates to an improvement in the manufacture of that class of snap-hooks in which a bolt is arranged in the shank of the hook to slide longitudinally toward and from the point of the hook, so as to close or open the mouth of the hook.

As usually constructed, the shank of the hook is cored to make a chamber for the bolt and spring. Such coring is an expensive part of the manufacture, not only because of the additional labor, but because of the unavoidable loss of many castings.

The object of this invention is avoid the use of a core and form the barrel or the seat for the bolt independent of a core; and it consists in casting the shank longitudinally open, and then closing the two edges together to complete the barrel, as more fully hereinafter described.

In Fig. 2 I show a pattern from which the hook is cast, or, what is the same thing, the hook as it comes from the sand, A representing the part of the gate through which the metal flows to the mold, the hook B being turned to

one side into the position necessary for molding that part. The shank C, which terminates at one end in the hook B and at the other end in the loop D, is made open upon its upper surface, as seen in Figs. 3 and 4—that is, substantially U shape in transverse section. The sides 45 at the forward or hook end are made slightly narrower than the rear portions. At the rear or loop end a vertical end piece, a, is cast of a shape to form the rear end of the barrel when complete.

The mold is prepared in the usual manner, and the casting made of the shape as seen in Fig. 2. Then the casting is taken to dies fitted for the purpose, and the two sides are bent together, as seen in Figs. 5 and 6, bringing the 55 two edges of the rear portion together, as at d, Fig. 6, and leaving the groove e at the front part or hook end, as seen in Fig. 5, which completes the barrel ready to receive the bolt E, which is introduced in the usual manner, with 60 the thumb-piece F extending through the groove e, also in the usual manner. The sides close over the rear end piece, a, as seen in Fig. 1, so as to completely close the rear end of the hook, the said end piece having a rest for the 65 rear end of the spring in the usual manner.

I make no claim to a hook having a longitudinal sliding bolt arranged in a barrel in the shank of the hook; but

What I do claim is—

The herein-described blank for snap-hook, consisting of the cast blank C, adapted to be closed to form the complete barrel, provided with the slot e, substantially as described.

ALFRED S. HENN.

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Witnesses:

JAMES B. JESSOP, GEO. A. JOHNSON.