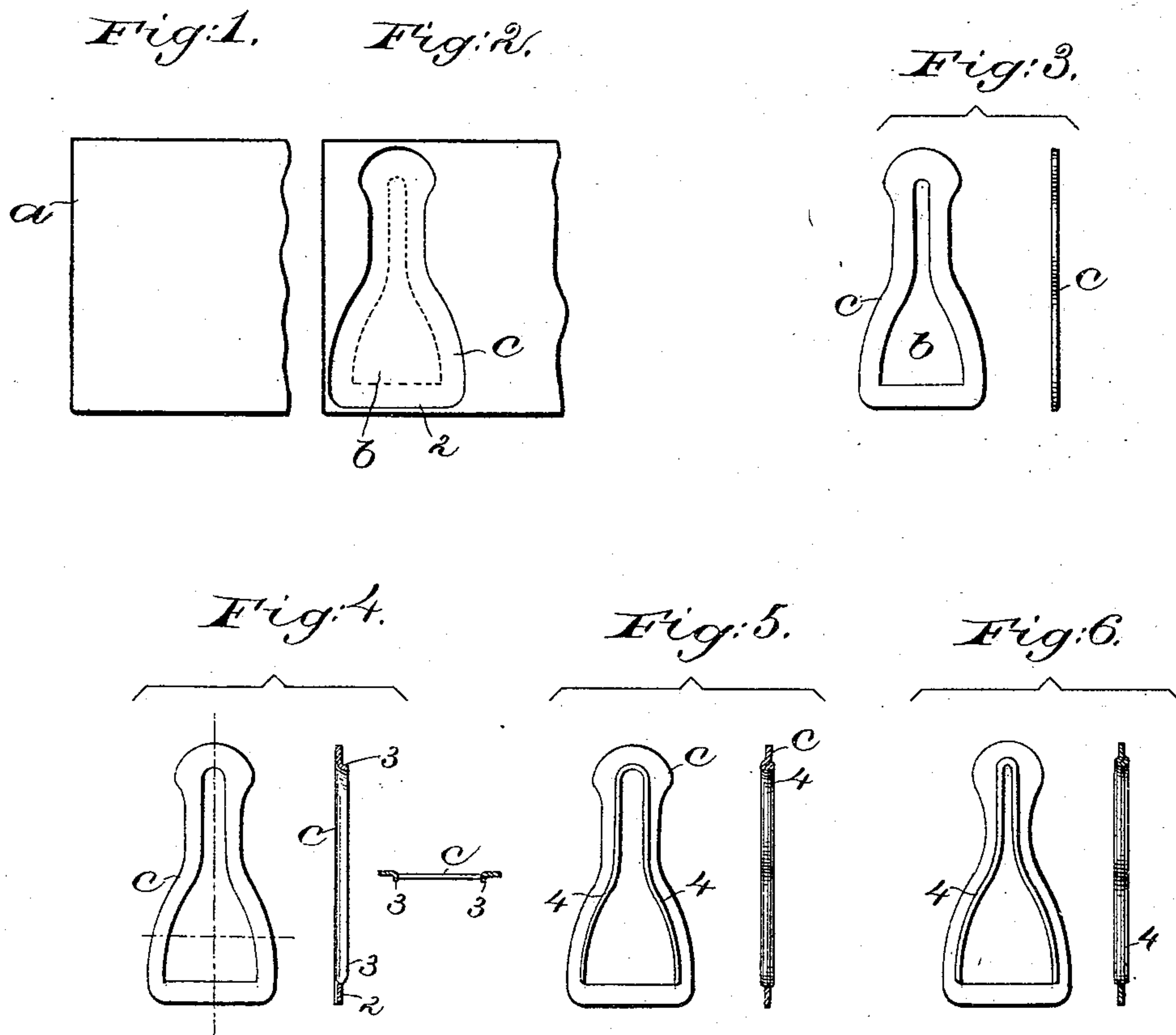


(No Model.)

E. S. SMITH.
METHOD OF MAKING GARMENT CATCHES.

No. 488,135.

Patented Dec. 13, 1892.



Witnesses.

Fried. S. Greenleaf.
Oscar F. Hill.

Inventor.

Edward S. Smith.

by Lemby & Gregory Attys.

UNITED STATES PATENT OFFICE.

EDWARD S. SMITH, OF WATERBURY, CONNECTICUT, ASSIGNOR TO GEORGE FROST, GEORGE H. PHELPS, AND GEORGE A. FROST, OF NEWTON, MASSACHUSETTS.

METHOD OF MAKING GARMENT-CATCHES.

SPECIFICATION forming part of Letters Patent No. 488,135, dated December 13, 1892.

Application filed June 6, 1891. Serial No. 395,372. (No specimens.)

To all whom it may concern:

Be it known that I, EDWARD S. SMITH, of Waterbury, county of New Haven, State of Connecticut, have invented an Improvement
5 in Methods of Making Garment-Catches, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

10 This invention has for its object the production in a novel method of that class of garment-catch having a somewhat V-shaped slot to engage the material and made of sheet metal. This class of catch to be effective must have
15 the acting edges of the V-slot smooth, so as not to cut the fabric, and the best edge is one that is thickened and rounded.

Figure 1 represents a piece of sheet metal. Fig. 2 shows the same punched through to
20 form the body of the catch, and the dotted line showing the shape of the mouth to be subsequently cut; Figs. 3 to 6, different steps to be referred to in the description of my method of making the catch.

25 The sheet metal *a* is first punched through, as at *b*, to form the body of the catch, and next it is placed in a recessed die and punched out centrally on the dotted line, Fig. 2, to form the body *c*, (shown in Fig. 3,) having a contracted substantially-V-shaped mouth *b*. The
30 blank *c* is next placed on a die-block having an opening a little larger than the opening then in the catch, except as to the bar 2 of the catch, and a tool shaped substantially
35 like the mouth *b*, but wider, is pushed into the said slot and made to overturn the inner edges of the catch except at the bar 2, leaving the blank in the condition shown in Fig. 4, where the same is shown in plan and longitudinal and cross section. This operation
40 or step leaves a lip 3 extended entirely from one side of the metal.

In the next step the lipped blank or body is preferably laid on an anvil having a groove

of the shape of the lip, but of less depth, and 45 in this condition a drop having a like groove is dropped on the blank, which causes a portion of the metal of the lip previously at but one side of the body of the blank to be so upset or carried back bodily beyond the other 50 side of the body of the blank as to slide upon and be folded over against itself at that side to present a raised edge or flange 4, which extends from each side the body of the catch, as in Fig. 5. This last step finishes the act- 55 ing edge of the catch, so that it will not tear or cut the fabric or material it is designed to hold.

The next operation is one to close the width of the slot, which is directly pinching the catch, 60 so as to carry its side arms toward each other, as from the condition shown in Fig. 5 to that shown in Fig. 6. It is not absolutely essential that the lip 3 extend entirely about the mouth *b*; but it will be so extended about all 65 the narrower parts of the slot.

Having described my invention, what I desire to claim by Letters Patent is—

The herein-described method of making V-shaped loops for stocking-supporters, consisting in forcing a portion of the central part of the body of the catch through to one side thereof to form a lip wholly at one side of the body, then upsetting and swaging the said lip to form a bend, and thereafter carrying said 75 bent portion bodily back to and upon the other side of the body of the catch, leaving a central opening shaped substantially as shown and having a flange 4 extended from both sides of the catch, substantially as described. 80

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

EDWARD S. SMITH.

Witnesses:

GEO. E. TERRY,
HELEN J. BIRKENMAYER.