

945,136.

H. E. NOCK.  
FRAME FOR BAGS OR PURSES.  
APPLICATION FILED AUG. 7, 1909.

Patented Jan. 4, 1910.  
2 SHEETS—SHEET 1.

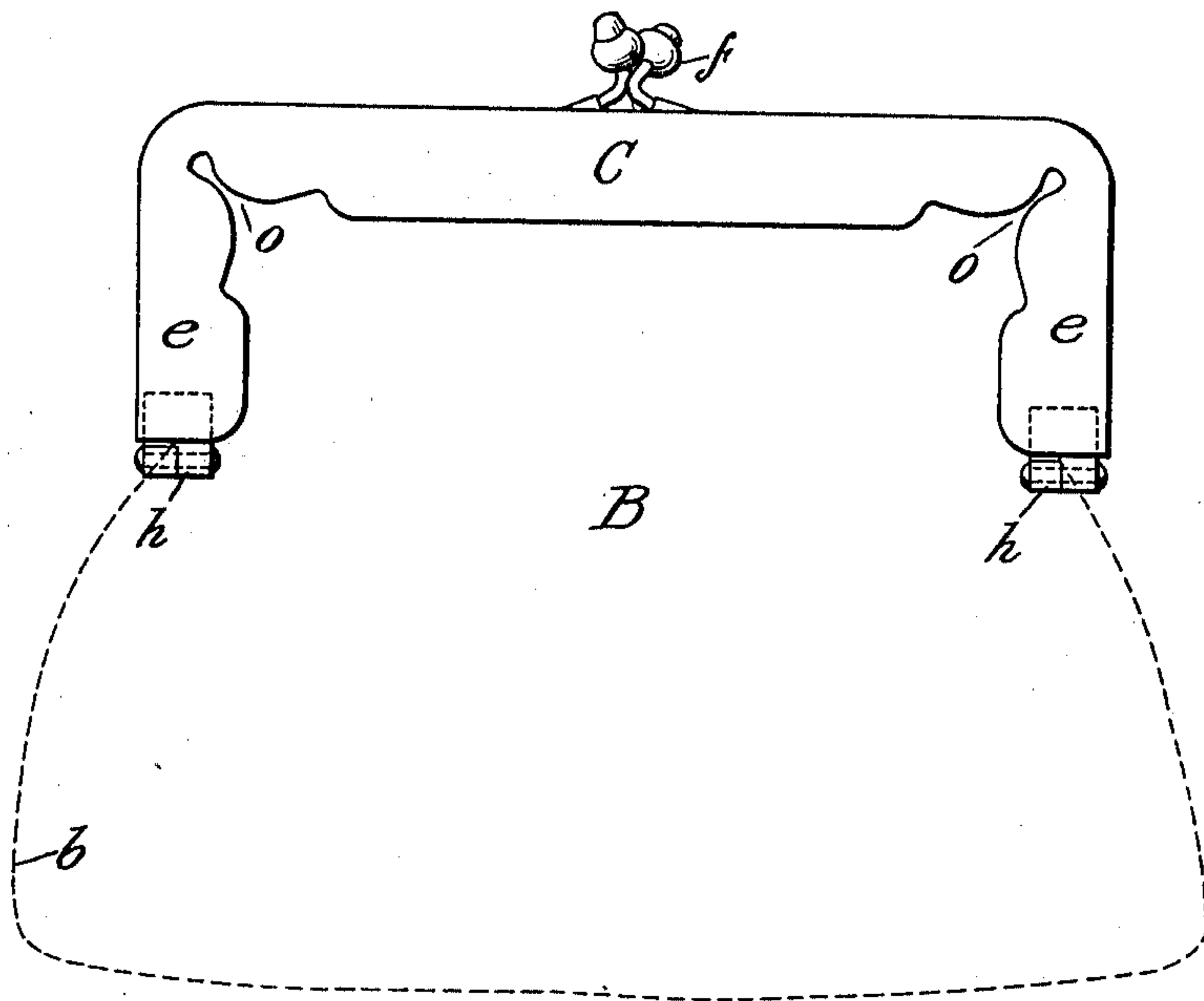


Fig. 1.

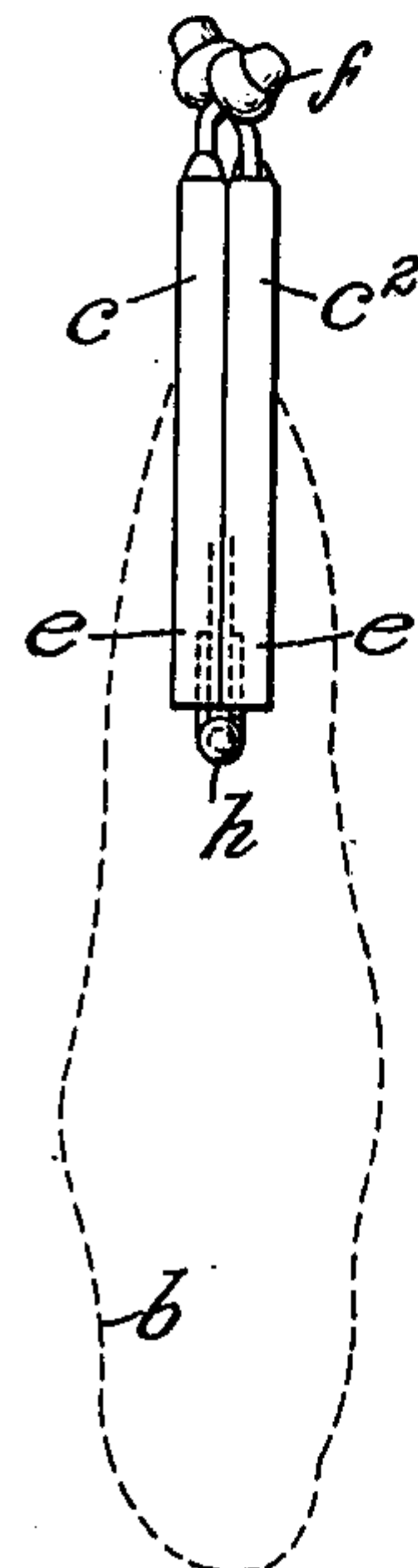


Fig. 2.

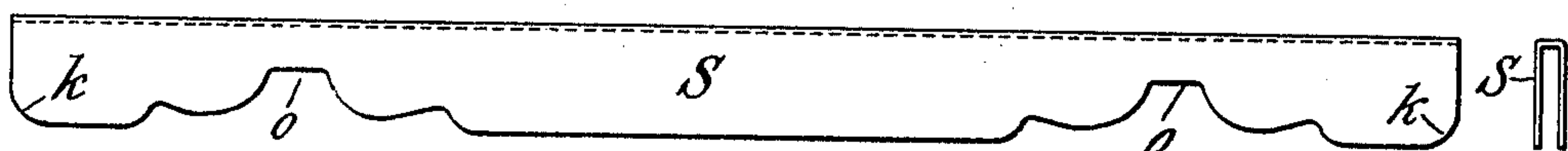


Fig. 3.



Fig. 4.

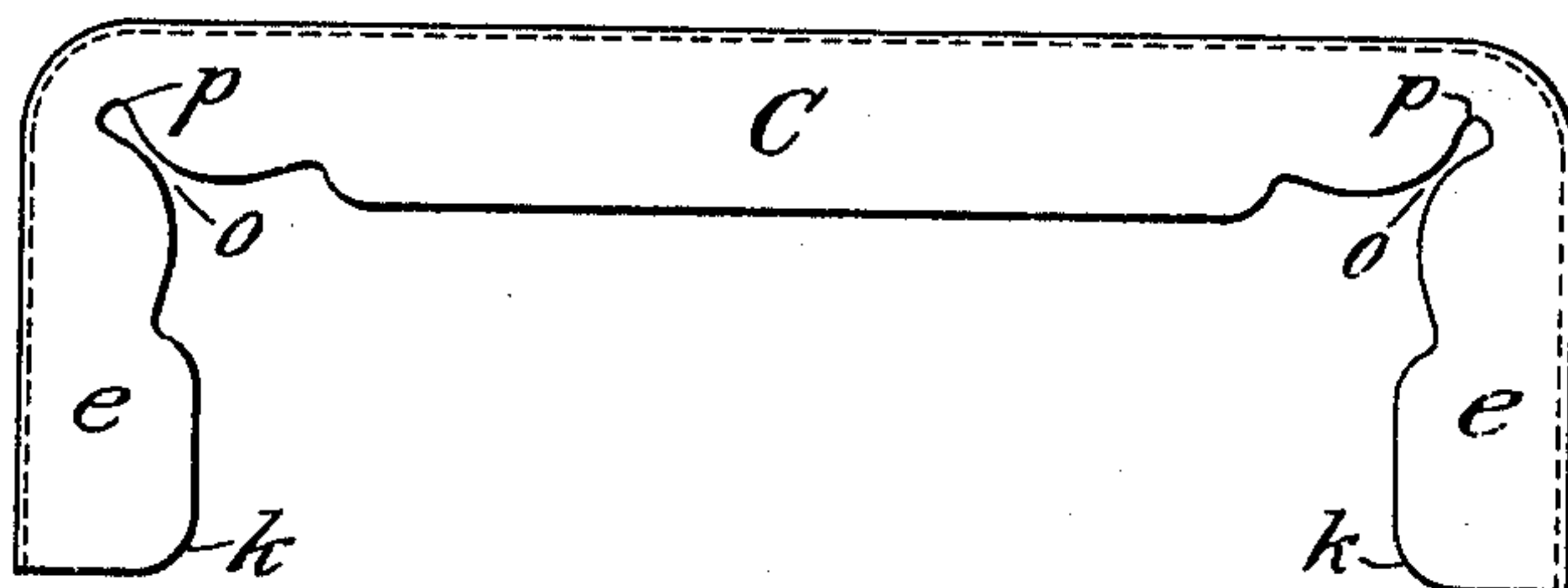


Fig. 5.

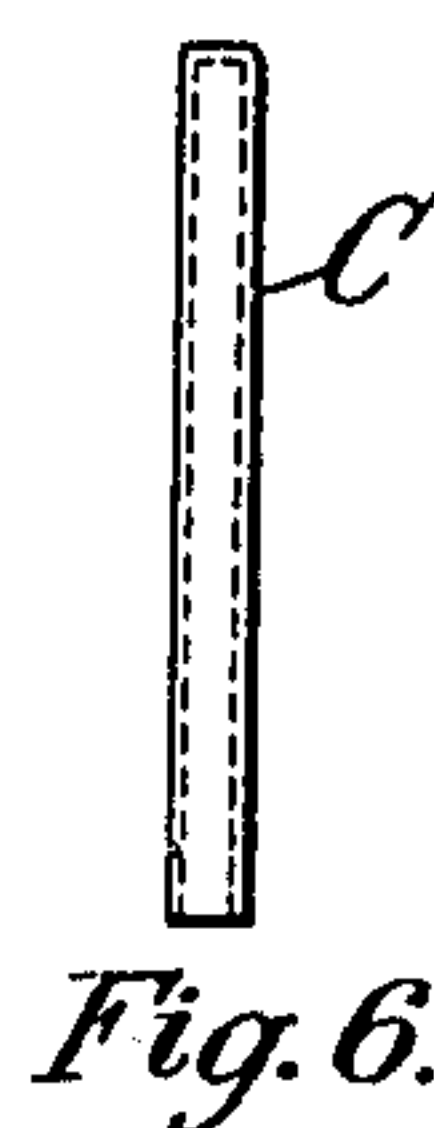


Fig. 6.

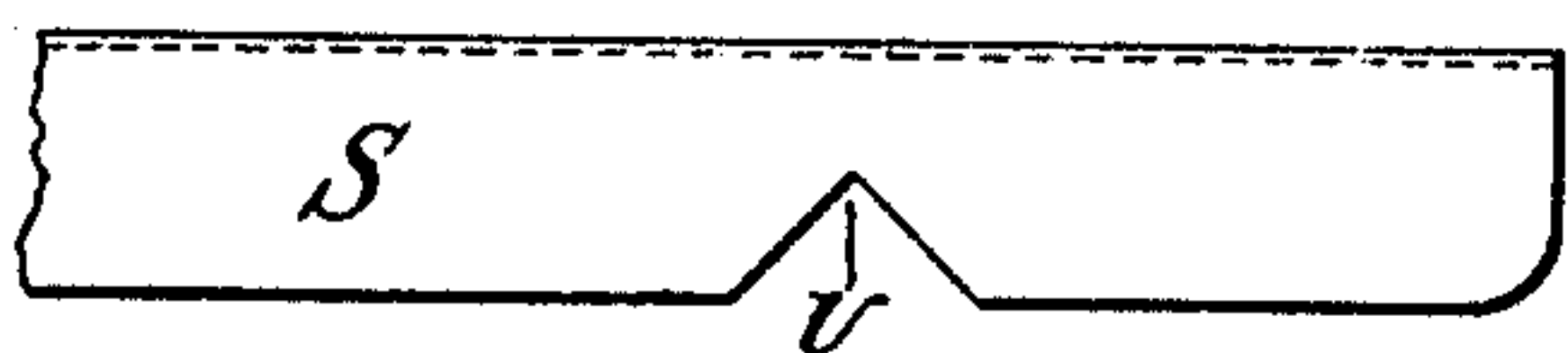


Fig. 7.

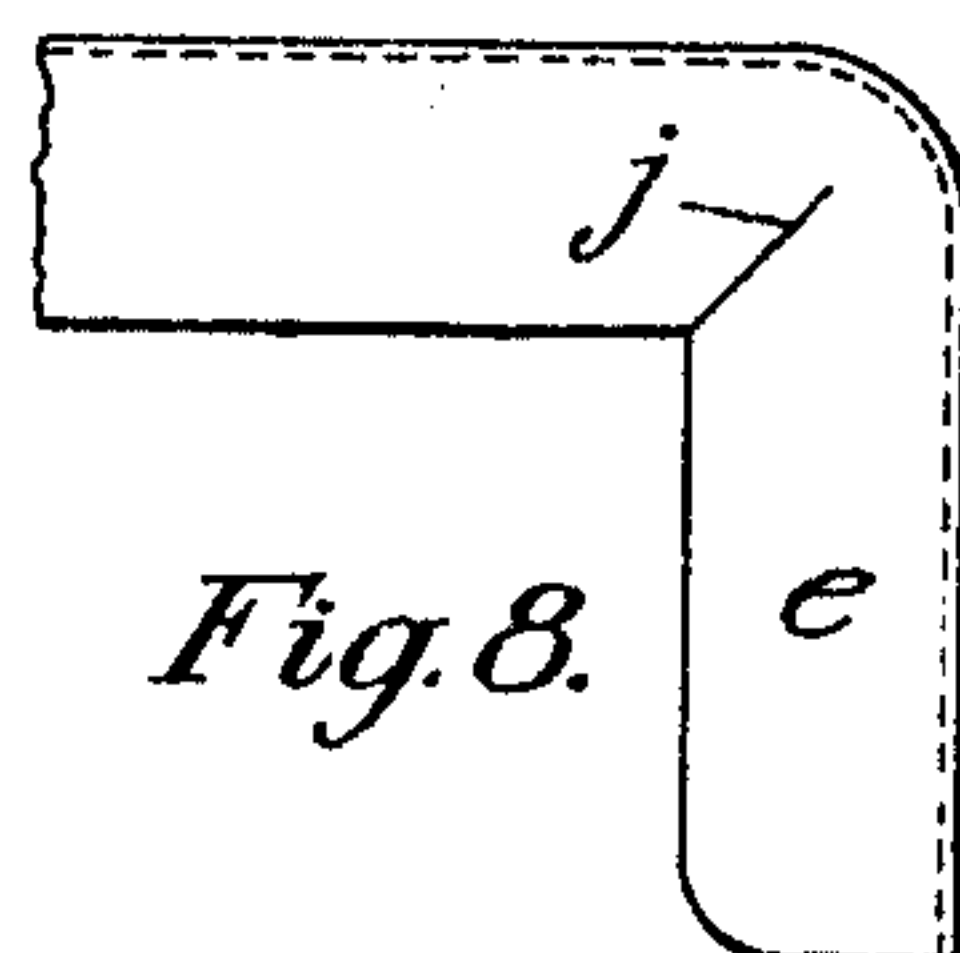


Fig. 8.

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2 SHEETS—SHEET 2.

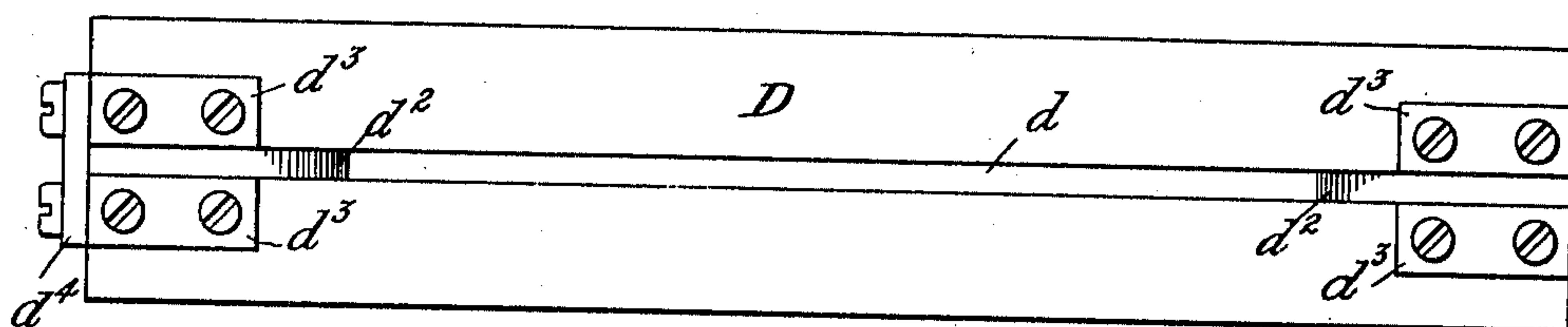


Fig. 9.

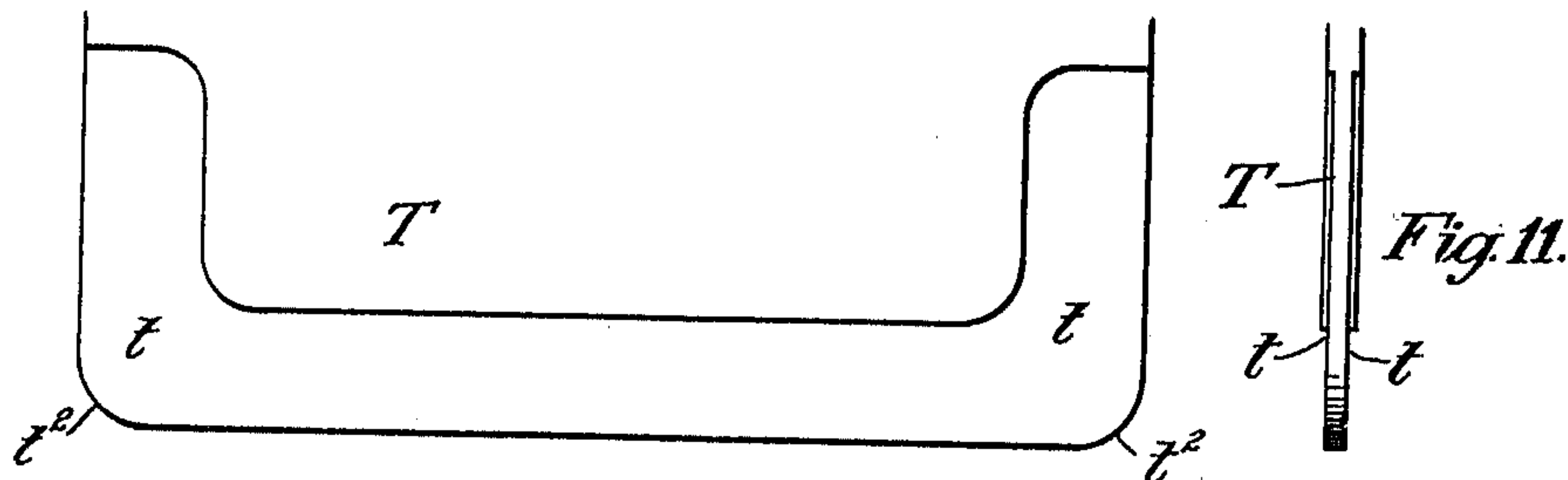


Fig. 11.

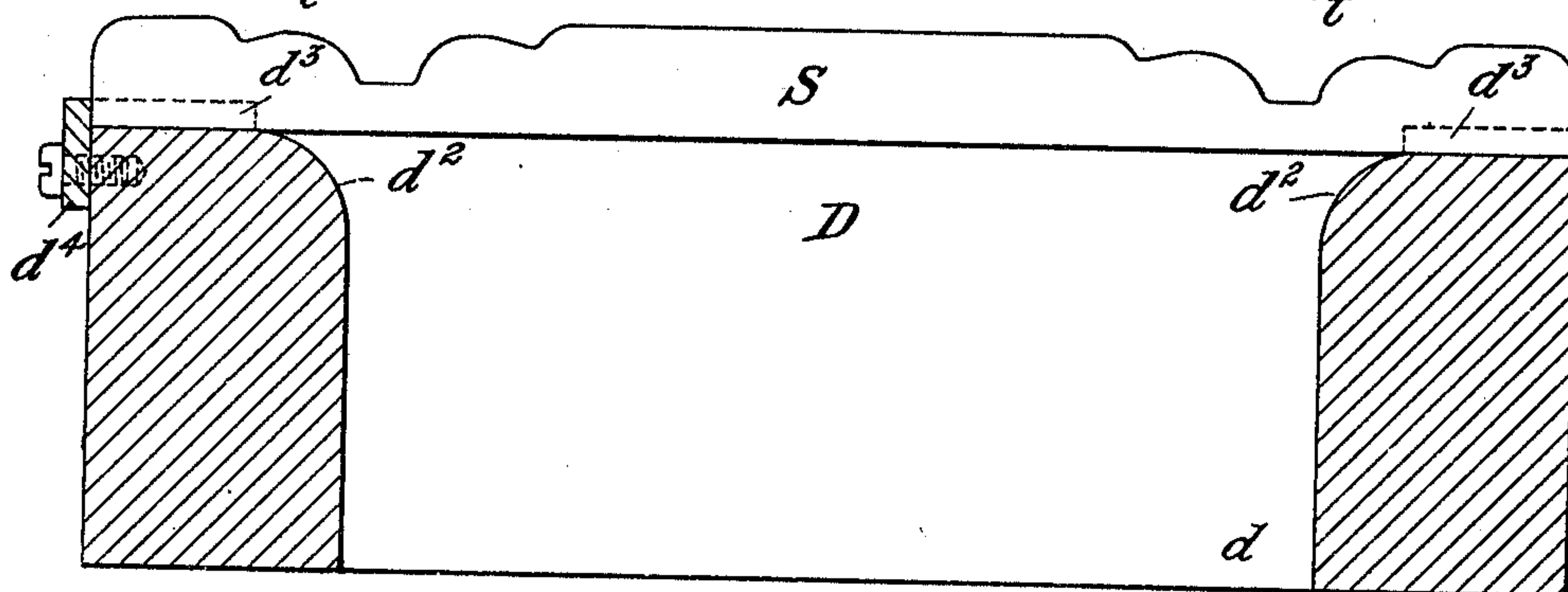


Fig. 10.

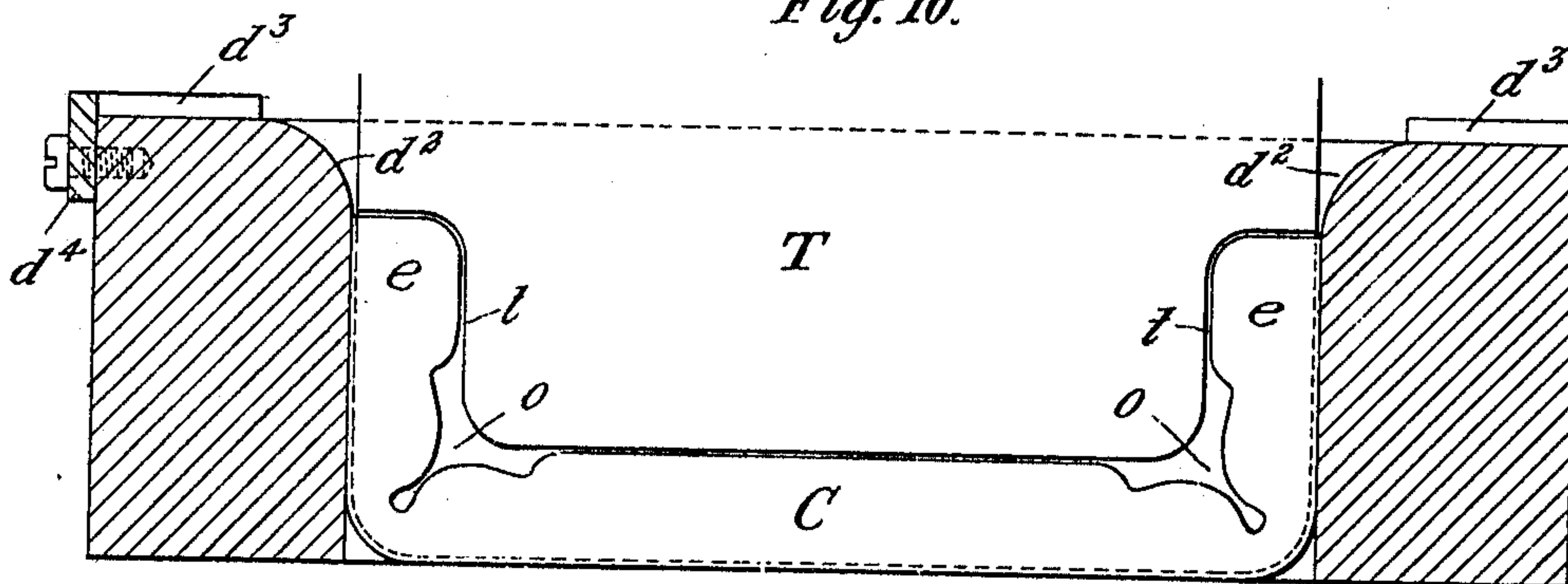


Fig. 12.

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# UNITED STATES PATENT OFFICE.

HAROLD E. NOCK, OF NORTH ATTLEBORO, MASSACHUSETTS, ASSIGNOR TO PAYE & BAKER MANUFACTURING COMPANY, OF NORTH ATTLEBORO, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

## FRAME FOR BAGS OR PURSES.

945,136.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed August 7, 1909. Serial No. 511,693.

*To all whom it may concern:*

Be it known that I, HAROLD E. NOCK, a citizen of the United States, residing at North Attleboro, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Frames for Bags or Purses, of which the following is a specification.

My invention relates to the art of manufacturing frames for bags or purses and consists of improvements in the form of said frames and in the method of shaping them from metal tubing.

The invention is fully described in the following specification illustrated by the accompanying drawings, in which:—

Figure 1 is a front elevation of the bag or purse frame or top shown applied to the article; Fig. 2, an end elevation of the same; Fig. 3, a side view of the blank from which the frame is formed; Fig. 4, an end view of the same; Fig. 5, a side view of the formed up blank; Fig. 6, an end view of the same; Figs. 7 and 8, views showing a modification in the form of the blank and the frame shaped therefrom; Fig. 9, a plan view of the die in which the blank is shaped; Fig. 10, an elevation of the die and forming tool with the blank in position to be operated upon; Fig. 11, an end view of the forming tool; Fig. 12, a view showing the method of operation of the tools.

The essential feature of my invention is the method of forming a bag or purse frame with rounded corners from open tubing having sides of considerable width. Previous to my discovery and invention it has not been possible to bend U-shaped tubing of the proportions shown with rounded corners. In some cases open tubing having relatively narrow sides has been so formed, but where the tubing is made with sides of considerable more width than the distance between them, when it has been attempted to bend it the stock would buckle and the sides be distorted from their flat shape. If the sides are held from bulging or buckling the stock will break through at the top.

Heretofore the usual method of forming frames of this style has been to cut away the sides with V-shaped openings extending clear to the top of the tubing and then to bend the stock with square corners. The

edges of the cut out portions will meet in a miter joint and are soldered together to stiffen and strengthen the structure of the frame.

My improved form of frame has a much more ornamental appearance than that of frames with square corners and therefore of greater commercial value. The square corners on the usual form of frame, besides being unsightly, are liable to catch in the clothing and their sharp points are apt to scratch or injure the hands.

In Figs. 1 and 2, B represents a bag or purse having a frame C formed of two parts  $c$  and  $c^2$  having parallel sides extending across the top with end pieces  $e—e$  bent down and connected at their bottom edges by the hinges  $h—h$ . The two parts of the frame are adapted to swing apart to open the mouth of the bag and are held in their closed position by any suitable clasp arrangement, such, for instance, as that shown at  $f$ . The pouch of the bag or purse may be of any usual form, as represented by the dash-lines  $b$ , made of flexible material such as cloth, leather or meshed links of metal, and fastened to the frame with the edges of its opening secured between the sides of the tubing.

The parts  $c$  and  $c^2$  of the frame C are duplicates, both being formed in the same manner from tubing, as now described: In forming these parts I make use of stock of U-section, commercially called tubing. This stock is made from sheet metal drawn into the form shown in Fig. 4 with two relatively wide, flat sides and a narrow flat top connecting the latter. Usually the sides of the tubing are ornamented with varied designs either struck up in relief or etched or engraved upon the surface.

The tubing is cut into lengths according to the size of the frame to be formed and each length is pierced or cut out with openings  $o—o$  where the stock is to be bent to form the corners. These openings may be of any desired form, but preferably they are made with an artistic conformation to add to the ornamental effect. In Fig. 3 the openings are shown as having an outline made up of a series of curves extending along the edges to give a scalloped effect. The central portion of the opening is shown straight for



a short distance, but when the tubing is bent down to form the ends of the frame this edge will be carried around in a curve, as shown at  $p-p$ , Fig. 5.

5 In Fig. 7 I have shown the stock pierced with a V-shaped opening  $v$ , and when the end is bent down the edges of the opening will meet in a miter joint, as shown at  $j$ , Fig. 8, and can be soldered together. It is  
10 preferable, however, to have the edges cut away so that they will not meet when the tubing is bent. Besides the artistic effect gained by cutting the edges in ornamental shape, there is also the advantage of elimi-  
15 nating the necessity of soldering the edges of the joint together, so that the cost of manufacturing is cheapened. Where the tubing is pierced with a straight-edged opening the continuity of the design on the stock  
20 will be broken and when the edges are brought together the opposing features of the pattern will be abruptly and irregularly connected so that the appearance will not be as neat as with the form of opening first de-  
25 scribed. Further, it is difficult to connect the two edges without a rough unsightly line appearing at the joint, and when the frame is oxidized to bring out the ornamentation, unless particular care is taken, this  
30 line will fill up with the color and give an unfinished appearance. It will be noted that the openings  $o-o$  pierced in the stock do not extend across the whole width of the sides of the tubing. A portion of the stock is left  
35 between the bottom of the opening and the top of the tubing so that the latter will form with a round bend and not break in a sharp corner. The stock at this point will stretch to conform to the bend of the top or closed  
40 edge of the tubing and when the frame is completed it forms the parallel sides extending along the rounded bend and giving a smooth finish and graceful appearance to the corners of the frame. The depth of the  
45 opening  $o$  or  $v$  cut into the stock is proportionate to the width of the sides of the tubing and must be determined by experiment, as much stock being left beyond the bottom of the opening as will bend without buckling,  
50 or breaking away where it is joined to the top section.

When the stock is cut off and pierced the corners  $k-k$  at the ends of each piece are preferably rounded off for a finish and the  
55 blank shown in Fig. 3 is then ready for the bending operation. The blanks  $S$  are shaped in a power press by what is termed a drafting operation now described: The tools consist of a die  $D$ , shown in plan view in Fig. 9,  
60 and a forming tool  $T$  operating in connection therewith, as illustrated in Figs. 10 and 12. The die  $D$  is formed with a longitudinal slot or opening  $d$  of sufficient width to adapt it to receive the blank  $S$ , shown in Figs. 3  
65 and 4. The ends of the opening  $d$  have their

upper edges formed with the rounded corners  $d^2-d^2$ . Preferably guide-pieces  $d^3-d^3$ , etc. are secured to the top of the die to locate the blank  $S$  in lateral position in line with the slot  $d$  and a guide-piece  $d^4$  is secured at  
70 one end to serve as a stop to locate the blank in longitudinal relation to the die. The tool  $T$  is operated by the plunger of the press and adapted to be carried down through the slot  $d$  in the die. The thickness of the tool  
75  $T$  is equal to the width of the slot, but the opposite faces are cut away at  $t-t$ , etc. to provide a space for the sides of the tubing when the blank is formed up around the tool. The lower end of the tool  $T$  is formed with  
80 rounded corners  $t^2-t^2$  shaped to give the desired curve to the corners of the frame.

The operation of bending the blanks is as follows: The blank  $S$  is placed on the die between the guides  $d^3-d^3$ , etc. with one end  
85 abutting the stop  $d^4$ . When the press is operated the tool  $T$  descends and its lower edge enters the opening in the tubing. As the stroke of the tool is continued downward the stock will be drawn down into the open-  
90 ing  $d$  in the die  $D$  and the ends of the blank will slide over the rounded corners  $d^2-d^2$  and be bent up to form the end portions  $e-e$  of the frame. The top of the tubing will be forced against the round corners  
95  $t^2, t^2$  of the tool  $T$  and formed up around these edges to give the rounded corners at the ends of the frame. This method of piercing and bending the tubing enables  
100 me to form bag or purse frames with rounded corners from tubing having sides of relatively great width and therefore is extremely valuable as adding to the ornamental appearance of the article and lessening the  
105 cost of manufacture as compared with that for forming frames with square corners.

It will be understood that I do not here claim broadly, by itself, a frame formed with rounded corners nor do I claim the  
110 method of bending the frame with the tools described; but what I desire to secure protection for is a frame formed of tubing having sides of considerable width in proportion to the space between them; with the  
115 sides of the tubing pierced with openings extending from their edges a portion of their width; and the tubing bent with round corners at points adjacent the cut out portions to form the end pieces of the frame.

What I claim is:—

1. An improved frame for bags or purses formed of tubing of U-section having sides of considerable width in proportion to the space between them, with the sides of the tubing pierced with openings extending  
125 from their edges only a portion of their width, and the tubing bent with round corners at points adjacent the cut out portions to form the side pieces  $e-e$  of the frame, the metal of the side portions of the tubing  
130



adjacent the piercings being drafted to conform to the curve of the top portion of the tubing at the corners.

2. An improved frame for bags or purses  
5 formed of tubing of U-section having sides of relatively greater width than the top portion of the tubing which connects the sides, with the sides of the tubing pierced with openings o—o extending from the  
10 edges of the sides only a portion of the distance to the top of the tubing, said openings formed with ornamental contours, and the ends of the tubing bent down to form the

side portions of the frame with the top of the tubing bent with round corners at points 15 adjacent the cut out portions and the sides of the tubing drafted at these points to conform to the curve of the top of the tubing.

In testimony whereof I affix my signature 20 in presence of two witnesses.

HAROLD E. NOCK.

Witnesses:

FRED B. BYRAM,  
FRANK W. WOODBURY.