

(No Model.)

J. ZIMMERMAN.  
KEY OPENING SHEET METAL CAN.

No. 566,958.

Patented Sept. 1, 1896.

Fig. 1.

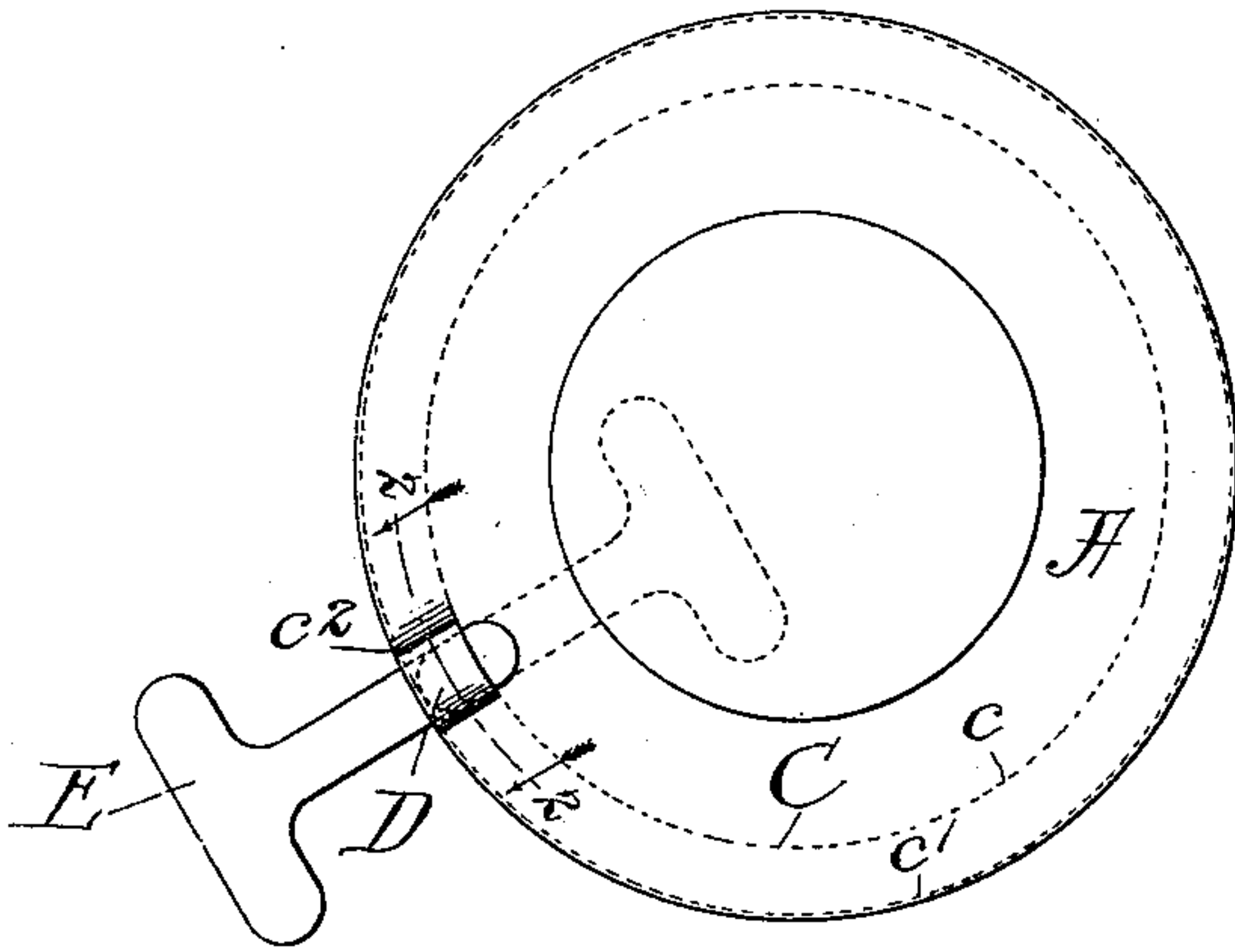


Fig. 2.

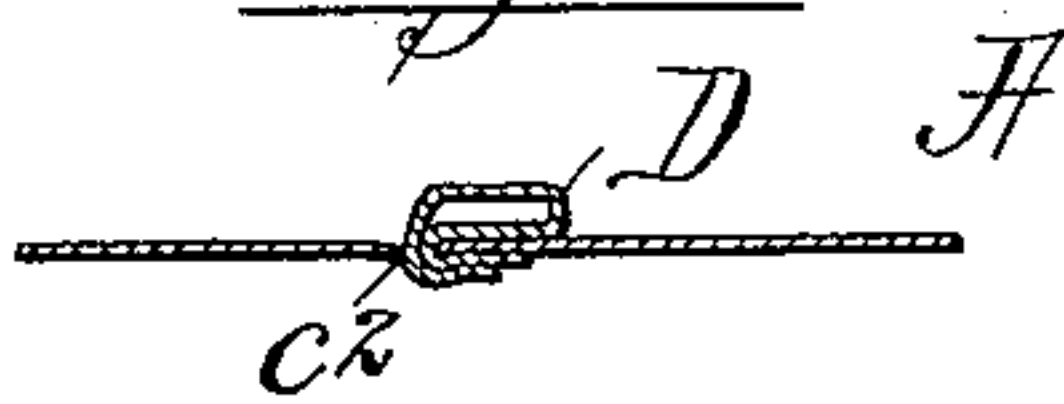


Fig. 6.

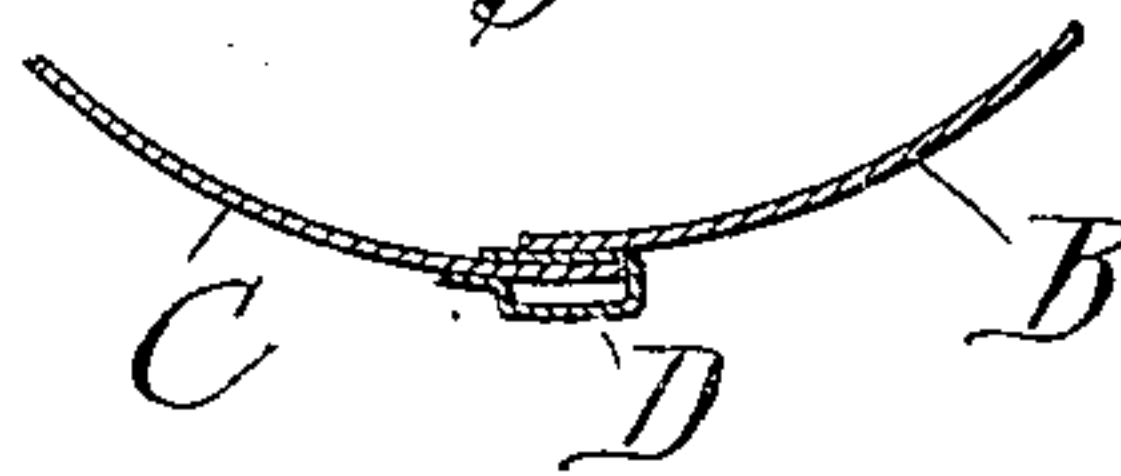


Fig. 3.

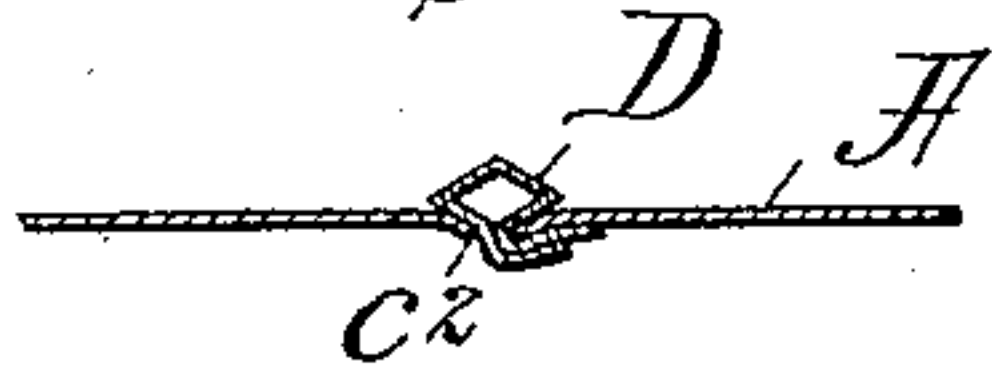


Fig. 7.

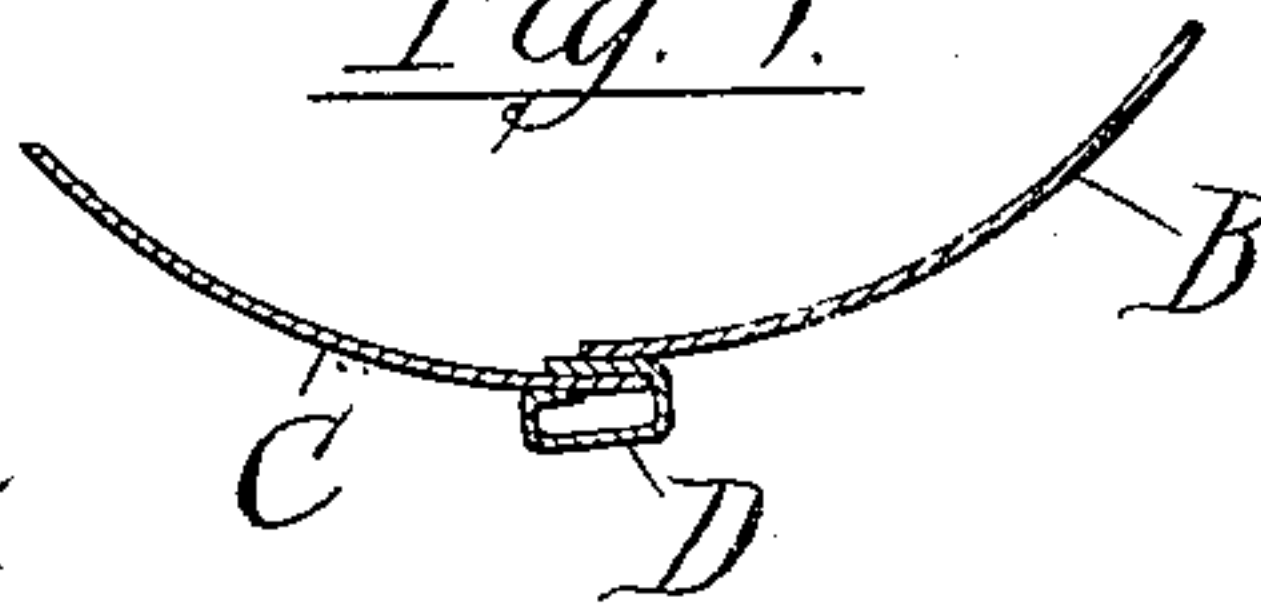
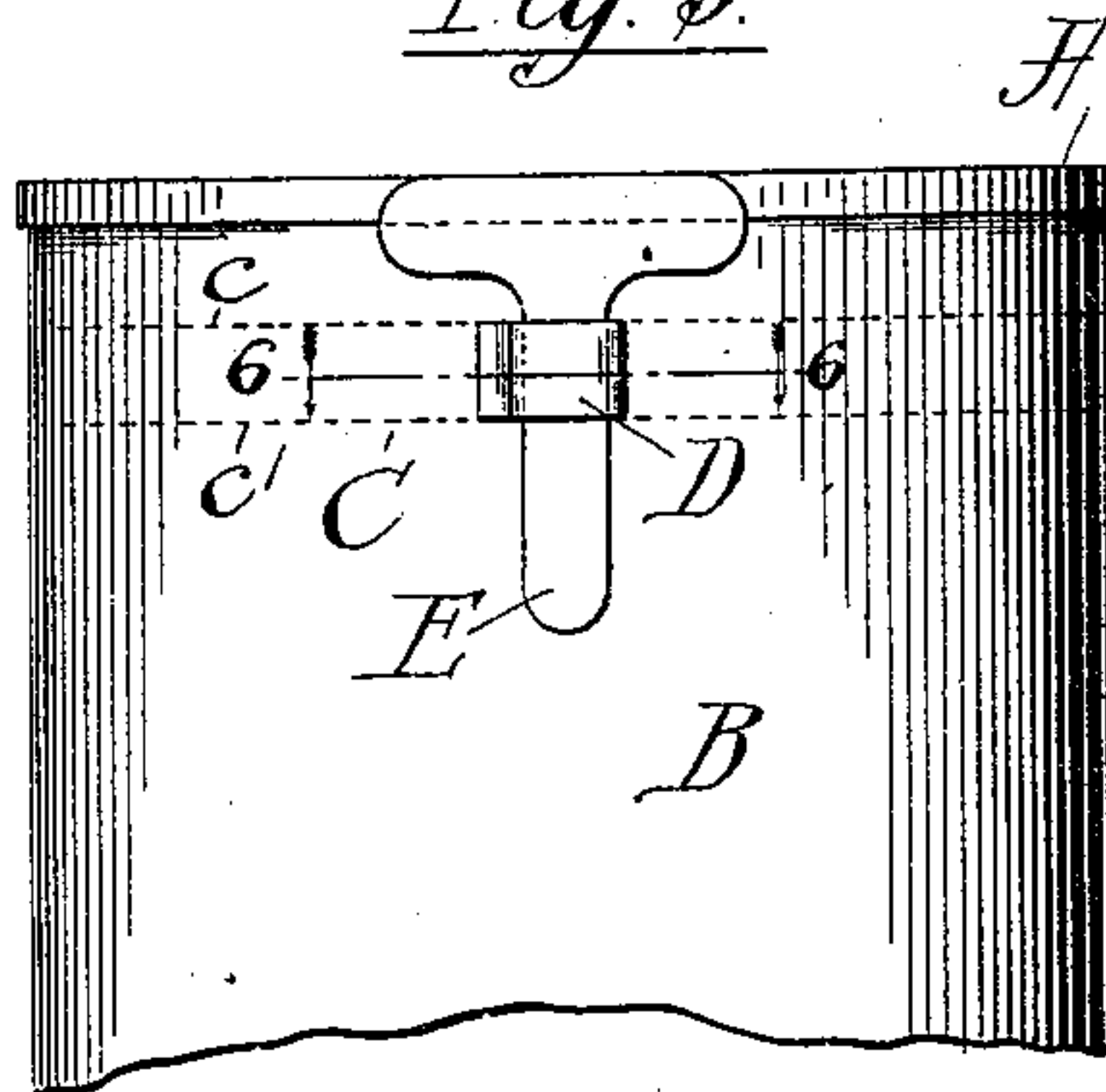


Fig. 4.



Fig. 5.



Witnesses:-

John W. Adams.

L. Clinton Hamlin.

Inventor:-

John Zimmerman.

by:- Dayton Cook & Brown  
his Attys.

# UNITED STATES PATENT OFFICE.

JOHN ZIMMERMAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE NATIONAL KEY-OPENING CAN COMPANY, OF SAME PLACE.

## KEY-OPENING SHEET-METAL CAN.

SPECIFICATION forming part of Letters Patent No. 566,958, dated September 1, 1896.

Application filed January 2, 1894. Serial No. 495,293. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN ZIMMERMAN, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Key-Opening Sheet-Metal Cans; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to so-called "key-opening cans," or, in other words, to sheet-metal cans which are provided in some parts with a detachable strip or portion by the removal of which the can is opened, the can being accompanied by a key or instrument upon which the detachable strip or part is wound in tearing it from the can.

The object of the invention is to provide a key-retaining device upon a detachable part where it may serve the additional purpose of giving the key an additional hold upon said part to facilitate the starting of the latter in the operation of tearing it from the can by winding it upon the key.

The invention will be fully understood by reference to the accompanying drawings, in which—

Figure 1 is a plan view of a can-head having a circumferential detachable strip in its body portion and a loop at the end of said strip. Fig. 2 is a sectional view on line 2 2 of Fig. 1. Fig. 3 shows a modified form of the loop seen in Fig. 2. Fig. 4 is a transverse section of the particular form of key which is adapted for use with the loop shown in Fig. 3. Fig. 5 shows in side elevation a can having a circumferential detachable strip in its body portion. Figs. 6 and 7 are sectional views showing still other forms of loops.

A is a can head, end, or cover; B, the can-body; C, a detachable strip in the body; D, a key-loop, and E a key for removal of the detachable strip C.

In Fig. 1, showing the end of a sheet-metal can, the detachable strip C is shown as being situated in the can-head, said strip being bounded by suitable weakened lines of any appropriate construction, here represented

by dotted lines  $c c'$ . At  $c^2$  is indicated a cut which extends across the detachable strip and which will be called the "severing" cut for the purpose of conveniently distinguishing it. D is a loop applied to the detachable strip C adjacent to the severing cut  $c^2$ , said loop being secured by having both its ends inserted through the slit  $c^2$  and attached to the inner surface of said strip, the body of the loop projecting from the outer surface of the cover, so as to admit the key E. When said key is so inserted in the loop, as shown by full lines in Fig. 1, the latter forms a secure connection with the detachable strip adjacent to the severing-line, whereby said key, when forcibly rotated backwardly away from said severing-line, may first rupture the solder holding the strip at said line, and thereafter wind the strip upon the key and thus tear it from the head in the usual manner. When the can is prepared for the market, the key will be held movably or removably in the loop and thus be kept with the can without danger of loss and will be ready for use when wanted. If the strip C be situated at the margin of the head A, as shown in Fig. 1, the key will be placed for packing in the position shown by dotted lines in said figure, and will be wholly withdrawn and reversed for use, as indicated; but if the strip and its loop be situated at some distance inward from the edge the key may be packed with its T-head outward, as shown, and will merely be slid outwardly to the desired position for use in opening the can.

The loop D in Figs. 1, 2, and 3 has both of its ends thrust through this severing cut and bent backwardly beneath that end of the strip which is to be first lifted by the key, the cut being tightly closed and the loop properly fastened by solder both to the inner and outer surface of the strip.

The loop D may be shaped as shown in Fig. 3, in which case the key will be shaped as seen in Fig. 4. Said loop may also be made of a piece secured at one end externally to the strip C, as shown in Figs. 5, 6, and 7, with its opposite ends folded over the end of said strip and inserted beneath the same, this construction being used where the detachable



strip terminates at the seam in the side wall of a can, and where meeting edges of the sheet metal overlap, as shown in Fig. 5. The outer end of the loop in such case may be  
5 turned outward, as in Fig. 5, or inward, as in Fig. 6. In both cases it is fastened by solder to both the outer and inner faces of the strip.

The attachment of the loop to both the inner and outer faces of the strips affords such  
10 a secure attachment of the loop as avoids possibility of the loop being torn from the strip in an effort to start the tearing out of the latter.

For convenience the word "strip" will alone be used in the appended claim as re-  
15 ferring to the detachable parts, but it is to be understood that said word includes the de-

tachable part whether literally in form of a strip or of other form.

I claim as my invention—

In combination with a detachable strip, a  
20 loop secured to the strip and having a part which extends over and beneath and is attached to both sides of that end of the strip which is to be started in opening the can.

In testimony that I claim the foregoing as  
25 my invention I affix my signature in presence of two witnesses.

JOHN ZIMMERMAN.

Witnesses:

M. E. DAYTON,  
TAYLOR E. BROWN.