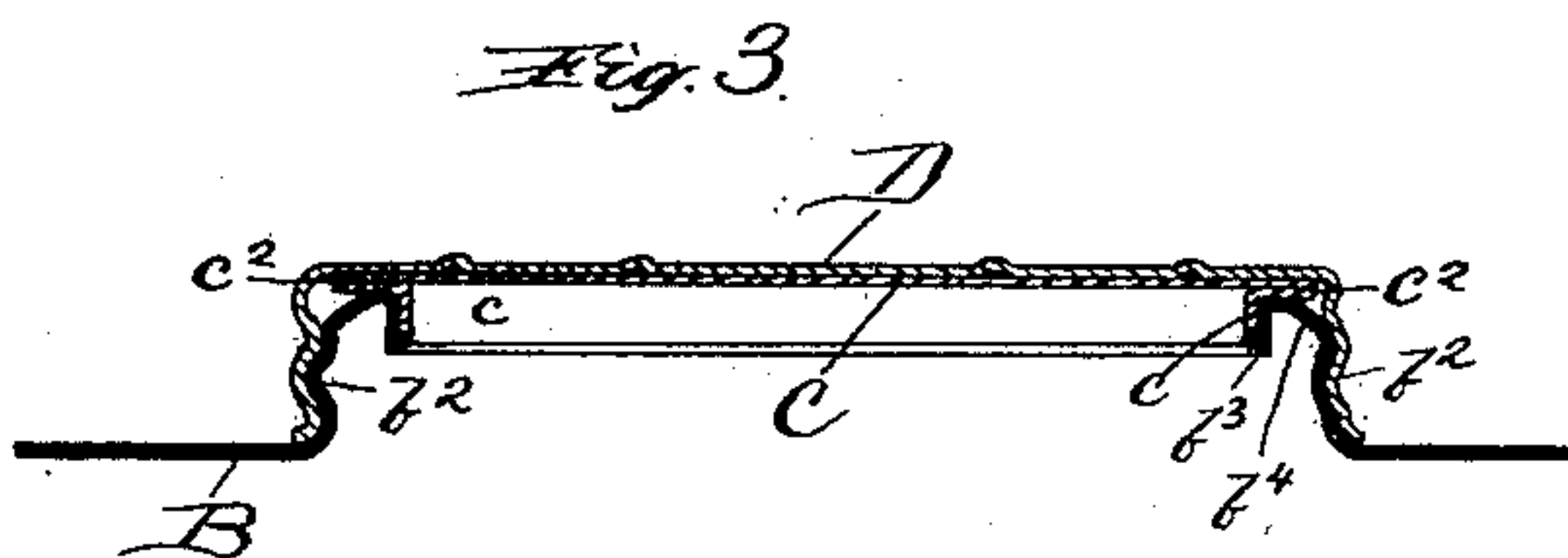
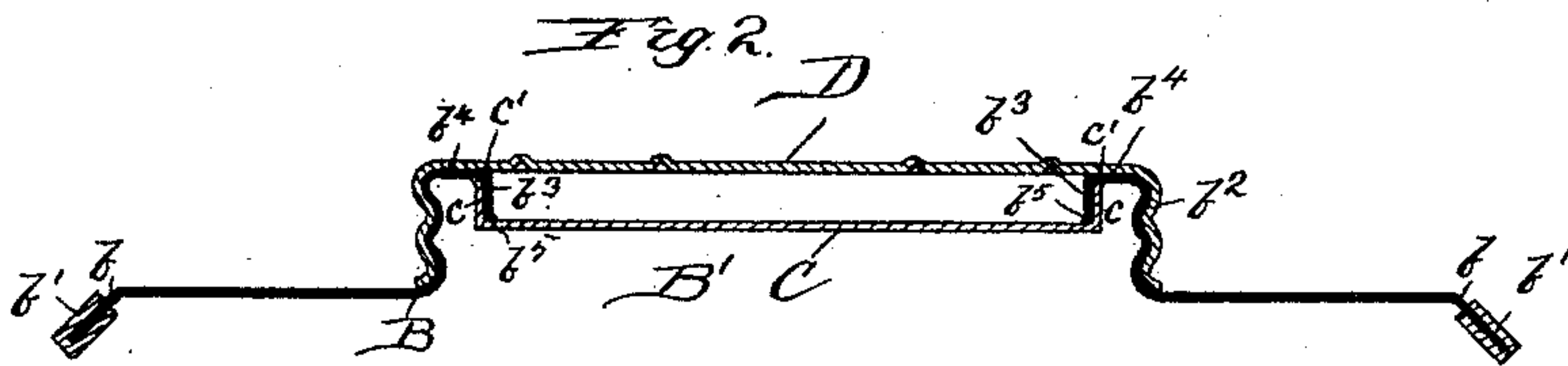
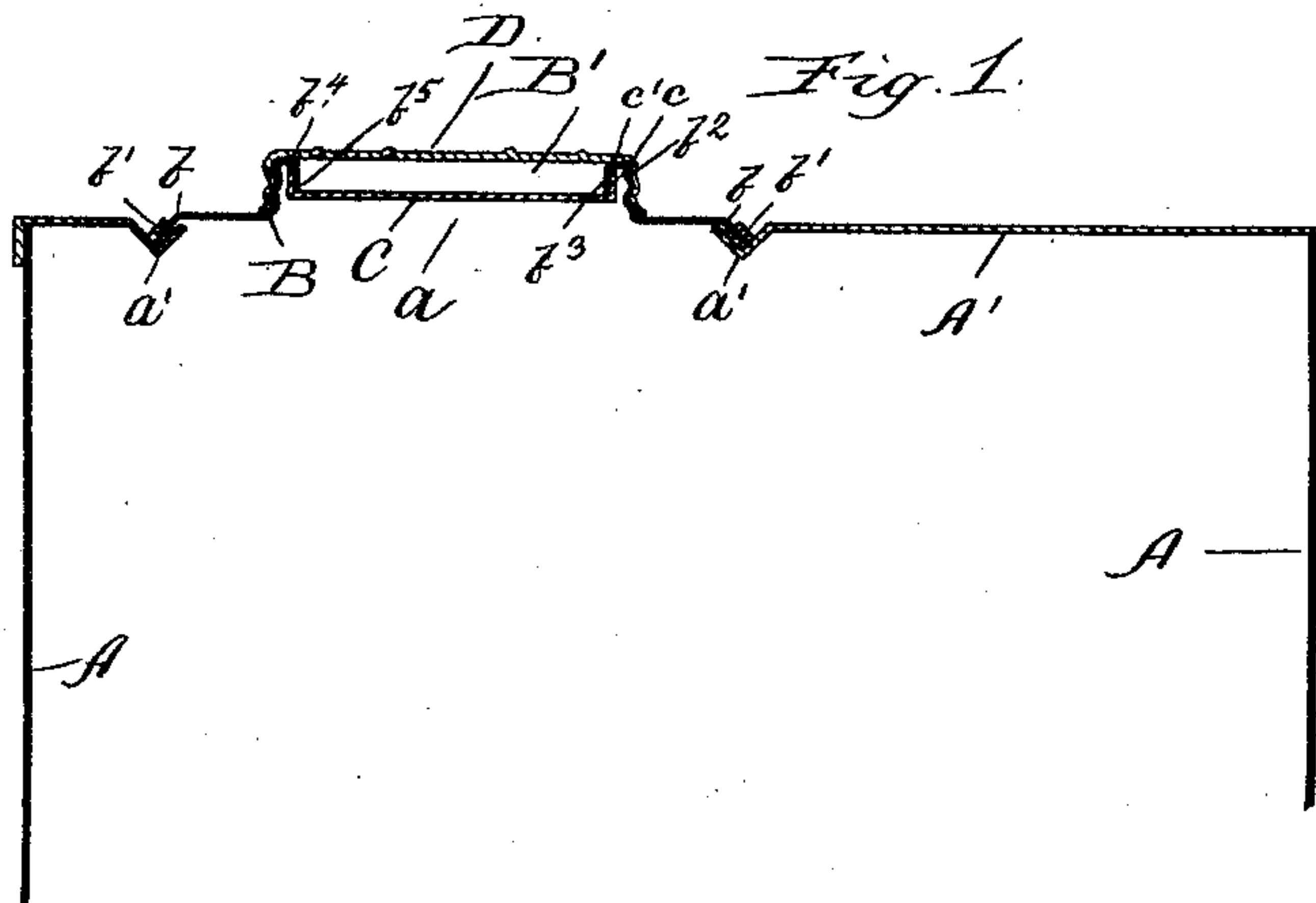


(No Model.)

E. NORTON.
POURING NOZZLE CAP FOR CANS.

No. 437,233.

Patented Sept. 30, 1890.



Witnesses:
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UNITED STATES PATENT OFFICE.

EDWIN NORTON, OF MAYWOOD, ASSIGNOR TO HIMSELF, AND OLIVER W. NORTON, OF CHICAGO, ILLINOIS.

POURING-NOZZLE CAP FOR CANS.

SPECIFICATION forming part of Letters Patent No. 437,233, dated September 30, 1890.

Application filed May 9, 1890. Serial No. 351,152. (No model.)

To all whom it may concern:

Be it known that I, EDWIN NORTON, a citizen of the United States, residing at Maywood, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Pouring-Nozzle Caps for Cans, of which the following is a specification.

My invention relates to screw-cap pouring-nozzles for cans.

Heretofore the nozzle-caps of the kind to which my improvement more particularly relates have usually or frequently been made with a continuous or solid cap-disk, to which the screw-nozzle is soldered or otherwise secured, a circular hole or opening being cut through the solid cap-disk when the can is opened.

The object of my improvement is to save the labor and expense incident to soldering two parts of the nozzle-cap together, and at the same time to provide a nozzle-cap of a simple, efficient, and durable construction, which may be opened without the usual inconvenient operation of cutting out an opening through the tin, in which operation the nozzle itself is often mutilated and destroyed.

I have discovered that a perfectly tight and efficient nozzle-closure may be made by simply turning an internal flange around the opening in or through the screw-nozzle and then driving a plain slip-cover onto this flange, the parts being made slightly wedging or tapering and to fit closely and tightly when driven home. The flange of the slip-cover may fit into the annular channel or groove between the body of the screw-nozzle and its internal flange when said flange is made depending, so that it is perfectly protected from injury or external influence. The depending flange turned on the screw-nozzle, in connection with the horizontal flange joining the body of the nozzle and its depending flange, gives great rigidity and firmness to the nozzle and makes a neat finish to the mouth thereof, as well as a seat for the screw-cover. To open the nozzle, all that is necessary is simply to remove the screw-cover and the slip-cover. This may be done by driving down on the cover, where an inverted cover is used, until it is driven off the depending flange on which it fits, or by

prying it out where the slip-cover is not inverted and no cutting is required, although it might be cut, as heretofore, if desired.

My invention consists in the novel devices and novel combinations of parts and devices herein shown and described, and more particularly pointed out in the claims.

In the accompanying drawings, which form a part of this specification, and in which similar letters of reference indicate like parts, Figure 1 is a central vertical sectional view of a can embodying my invention. Fig. 2 is a similar enlarged view of the nozzle-cap, and Fig. 3 shows a modified form.

In the drawings, A represents a can, which may be of any suitable construction.

a is the opening in the head A' of the can, which is closed by the nozzle cap or disk B. The cap-disk B has the usual peripheral flange b to fit the cap-groove a' in the can-head A'. This flange b may preferably be hemmed with a solder ring b' for soldering the same in place on the can-head. The cap-disk B has a pouring-opening B', surrounding which it is provided with an upturned screw-threaded flange b², which forms the body of the pouring-nozzle. The nozzle b² is provided with an internal flange b³, the same being united to the body of the nozzle by the intermediate horizontal flange b⁴. The lower edge of the depending flange b³ is made slightly tapering or beveled inward at b⁵ to facilitate the reception of the driving slip-cover C. The cover C has a projecting flange c, the mouth or edge c' of which is made slightly tapering or beveled, so that this cover will fit with a wedging action upon the depending flange b³. The cover C may be inverted, as shown in Figs. 1 and 2, or fit inside the flange b³, as shown in Fig. 3. By reason of the tight wedging fit between the cover C and the internal depending flange b³ of the nozzle, the cover C, when driven or pressed down on the flange b³, will make a perfectly liquid-tight closure.

D is the screw-cap, which fits upon the screw-threaded nozzle b² of the cap-disk B.

To open the nozzle the screw-threaded cover D is first removed, and then the wedging-cover C is driven down into the can by press-

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ing or striking against the seam with a suitable instrument or pried out by inserting a suitable instrument between the offset flange c^2 on the cover and the nozzle b^2 .

5 By my improvement the pouring-cap nozzle can be not only rapidly and cheaply manufactured, as there is no soldering together of the parts required, but it may be also very conveniently opened, as no cutting out of the tin is necessary.

I claim—

10 1. The combination of a screw-nozzle having a flange to receive a slip-cover with an internal sheet-metal slip-cover having a flange fitting the flange on said nozzle and forming a liquid-tight joint therewith by its frictional fit thereon and an external screw-cover, substantially as specified.

2. The combination, with a can, of a cap-disk

B, having a pouring-opening through the same, provided with an upwardly-projecting screw-threaded nozzle-flange furnished with an internal depending flange, an inverted tight fitting or driving sheet-metal cover having a flange fitting on said depending flange for closing the nozzle-opening, and an external screw-cover, substantially as specified. 20 25

3. The combination of disk B, having opening B' , upturned threaded flange or collar b^2 , inwardly-projecting flange b^4 , inwardly-de- 30 pending flange b^3 , with internal inverted sheet-metal cover C, having flange c , and external screw-cover D, substantially as specified.

EDWIN NORTON.

Witnesses:

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