

R. T. BUSH.
Nozzle for Cans.

No. 159,896.

Patented Feb. 16, 1875.

Fig 1.

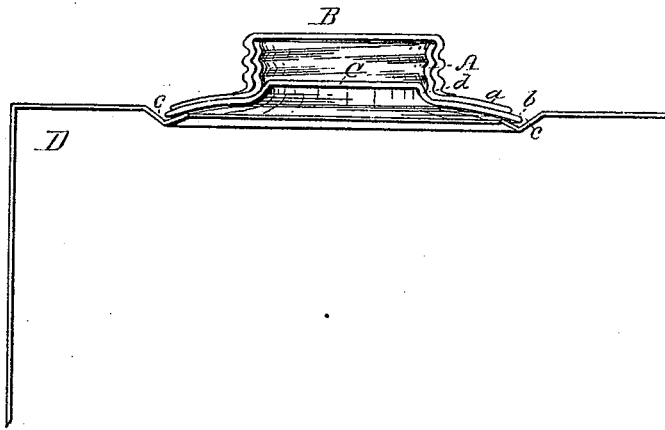


Fig 2.

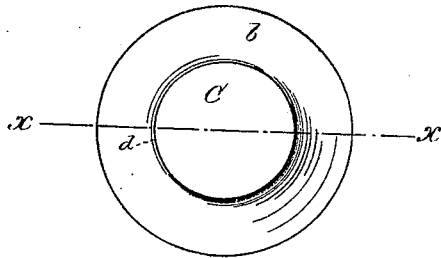
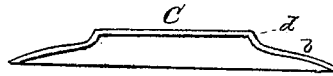


Fig 3.



WITNESSES

B. C. Pole
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INVENTOR

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RUFUS T. BUSH, OF NEW YORK, N. Y.

IMPROVEMENT IN NOZZLES FOR CANS.

Specification forming part of Letters Patent No. 159,896, dated February 16, 1875; application filed January 22, 1875.

To all whom it may concern:

Be it known that I, RUFUS T. BUSH, of New York, in the county of New York and State of New York, have invented a new and valuable Improvement in Screw-Cap Nozzles for Sheet-Metal Cans; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a sectional elevation taken on a line through the center of my improvement. Fig. 2 is a plan view of my cap or plate. Fig. 3 is a section through line *x x* of Fig. 2.

This invention relates to that class of devices known as screw-cap nozzles for cans, wherein a plate or disk of metal is used to close the orifice in the same, for the purpose of making a perfect sealed top, that may be opened when desired by cutting an opening in the plate or disk, which is afterward closed by securing a screw-cap over the mouth of the nozzle. In the process of attaching this class of screw-cap nozzles to the can the lower closing plate, disk, or cap which is used is required to be first secured to the upper zinc nozzle, and then both soldered over the opening in the top of the can. The object of attaching these pieces together before connecting or soldering them to the can is that, in consequence of the upper surface of the plate or cap being perfectly flat and smooth, the act of soldering would cause the nozzle to be easily moved about, spoiling the joint intended to be made; and it is therefore the purpose of making a perfect sealed joint, and at the same time a nicer finished piece of work, that these two upper and lower pieces are connected before they are placed upon the can, so that they will be firmly held in position while being soldered thereto. It will be seen that the necessity of securing the plate or cap to the nozzle before attaching them to the can involves two operations of soldering, requiring additional time, besides using more metal than in a single operation. It is therefore the object and purpose of my invention to overcome the difficulties heretofore experienced and economize the use of the solder, as well as saving time in the operation, thereby greatly reducing

the cost in the manufacture of the cans. My invention therefore consists in forming, in any suitable manner, upon this lower sealing cap or plate, an annular shoulder, designed to enter the opening in the lower end of the screw-nozzle, thereby keeping the two together and preventing any danger of the nozzle slipping while being soldered to the can, and also extending the flange, so that the cap and screw-nozzle may be soldered simultaneously, as will be hereinafter more fully set forth.

In the drawings, A represents the nozzle, having at its base an annular extended flange, *a*, and provided with suitable screw-threads, to receive a cap, B, having correspondingly-formed screw-threads to engage with those on the nozzle.

The above-described screw-cap and nozzle do not differ materially from those in common use.

C represents the cap or plate, having the outer edge or flange *b* slightly turned down to enter into an annular depression or groove, *c*, formed around the opening in the top of the can D, to secure it to the same; and as it is much easier and requiring much less metal to solder tin to tin than zinc to tin, the flange *b* is made to project a little beyond the flange *a* of the zinc cap A, thereby greatly facilitating the operation of soldering. This plate or cap C is milled or pressed out at the center, so as to form an annular shoulder, *d*, the same fitting snugly into the opening in the lower part of the screw-nozzle A, holding them firmly together, and thus preventing the screw-nozzle from slipping while being soldered to the can.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with a screw-nozzle having an outwardly-projecting flange, of a cap or plate provided with an annular shoulder and an outwardly-projecting flange, whereby the two are held together and simultaneously soldered to the can, substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

RUFUS T. BUSH.

Witnesses:

B. E. ARROWSMITH,
JNO. C. HOOPER, JR.