

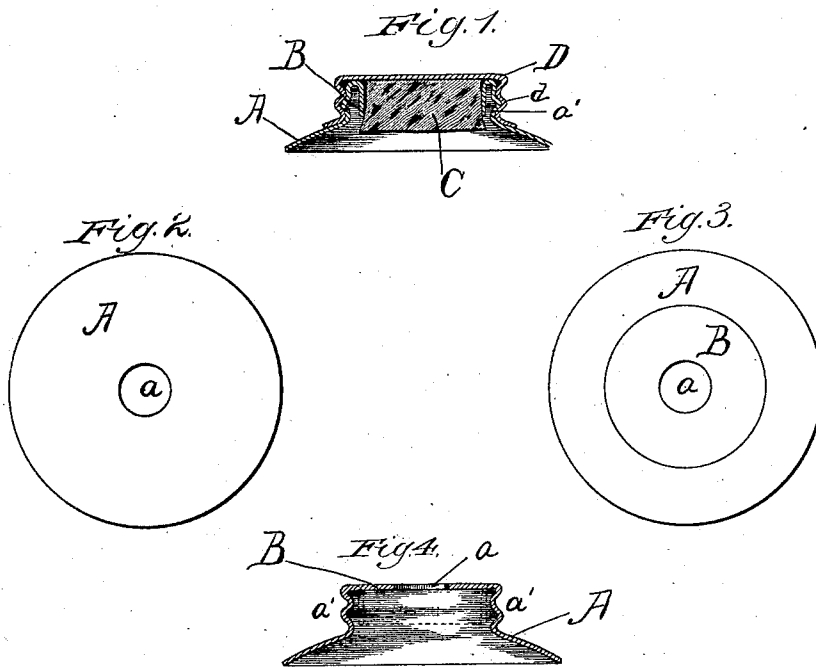
(No Model.)

E. NORTON.

COMBINED CORK AND SCREW NOZZLE.

No. 287,046.

Patented Oct. 23, 1883.



Witnesses.

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UNITED STATES PATENT OFFICE.

EDWIN NORTON, OF CHICAGO, ILLINOIS.

COMBINED CORK AND SCREW NOZZLE.

SPECIFICATION forming part of Letters Patent No. 287,046, dated October 23, 1883.

Application filed August 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWIN NORTON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in a Combined Cork and Screw Nozzle, of which the following is a specification.

My invention relates to screw-cap nozzles for cans and like packages. These nozzles are ordinarily made of zinc, and are usually formed from a single circular blank by spinning it up into the desired shape, the central portion of the blank being cut out to form the opening. In this way a screw-nozzle is formed very cheaply; but in cans or packages designed to contain many different articles it is also desirable or necessary to close the nozzle or opening with a supplemental cork in order to make it tight and prevent leakage. This heretofore has sometimes been done by placing a flat cork disk across the top of the nozzle, which is confined within the nozzle-cap and pressed with its end against the top of the nozzle by the screw-cap of the nozzle, the diameter of the cork being larger than the opening in the nozzle.

The object of my invention is to provide a combined screw and cork nozzle of simple construction, and which may be cheaply manufactured by a very simple process. This I do by simply turning the central portion of the blank (which heretofore has usually been cut away to form the nozzle-opening) down inside the nozzle, thus at once making or enlarging the opening in the nozzle, and forming a cork nozzle inside the screw-nozzle. It will be understood that a small central opening is cut out of the blank and the remainder of the central portion turned down inside the nozzle, to form the cylindrical wall for the cork to fit in.

My combined cork and screw nozzle, it will therefore be seen, is formed from a single piece or blank, is made in a very simple and cheap manner, and requires no more stock than an ordinary screw-nozzle, as the cork nozzle is formed from that part of the blank which heretofore has been cut out to form the opening in the screw-nozzle; and my cork and screw nozzle has also other advantages incident to its

being composed of a single piece than the saving of labor and material required in its manufacture, which will be readily understood by those skilled in the art to which my invention relates—as, for example, the greater neatness, strength, and durability of the nozzle itself.

In the accompanying drawings, which form a part of this specification, Figure 1 is a sectional view of a device embodying my invention. Fig. 2 is a plan view of the sheet-metal blank from which the nozzle is made. Fig. 3 is a similar view of the same after it is spun up into the form of a screw-nozzle; and Fig. 4 is a central section of the same as shown in Fig. 3, and showing also the cork nozzle in dotted lines.

In the drawings, A represents the blank from which the nozzle is made. It is first turned or spun up in the ordinary manner into screw-nozzle shape, as shown in Figs. 3 and 4. A small opening, *a*, is cut in the center of the blank. This may be done either before or after the blank is formed into screw-nozzle shape. The annular central portion, B, of the blank is then turned or spun down inside the screw-nozzle, so as to form a cork nozzle or cylindrical wall in which a cork, C, may be fitted.

D is the screw-cap, provided with screw-threads *d*, corresponding to the screw-threads *a'* on the nozzle. The annular central portion, B, when turned down, forms an intumed vertical flange at the top of the nozzle. In turning down the interior flange, B, a hollow or annular mandrel is inserted inside the nozzle, to form a support for said flange while it is being turned or spun down.

In operation the cork is first inserted in the nozzle and then the screw-cap applied.

I claim—

The combination, with a screw-cap, of a screw-nozzle provided with an intumed vertical flange at its top, and a cork fitting within said vertical flange, substantially as specified.

Chicago, Illinois, July 30, 1883.

EDWIN NORTON.

Witnesses:

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