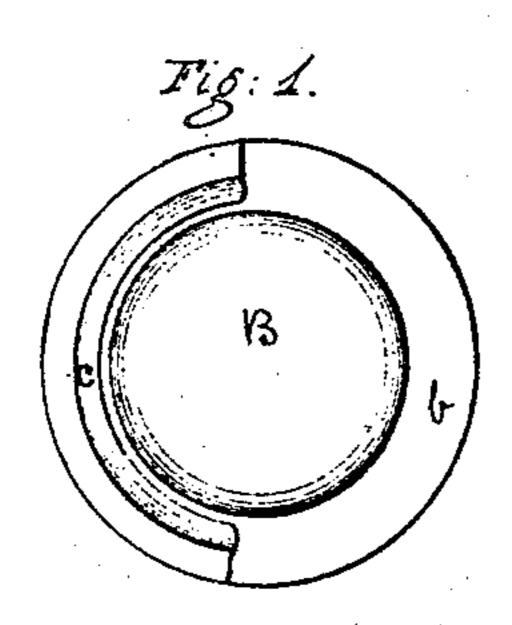
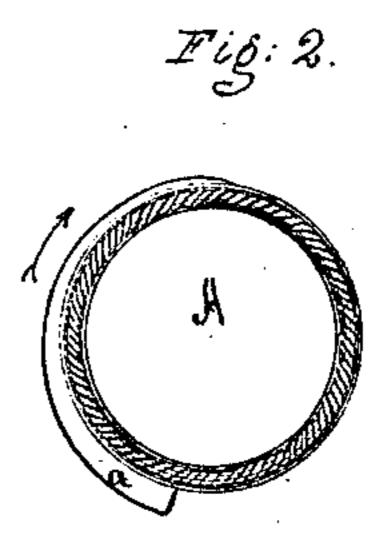
## E. T. COVELL.

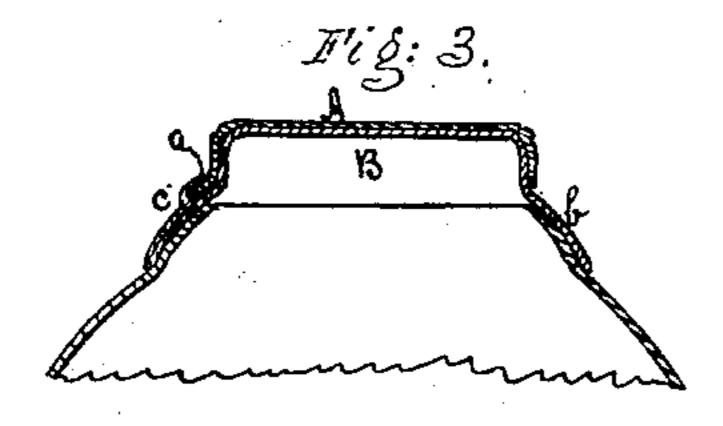
## METALLIC CAP AND NOZZLE

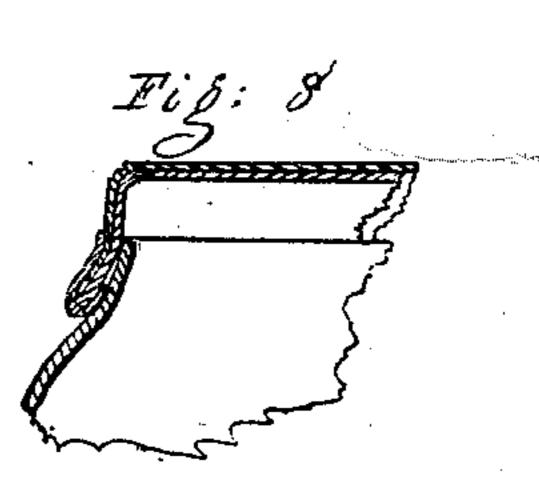
No. 103,988.

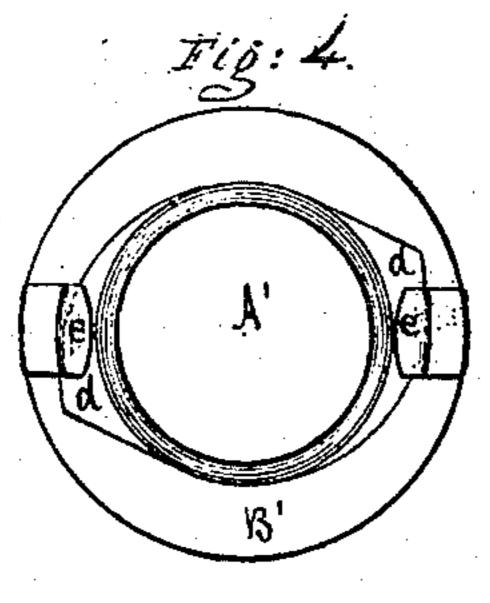
Patented June 7, 1870.

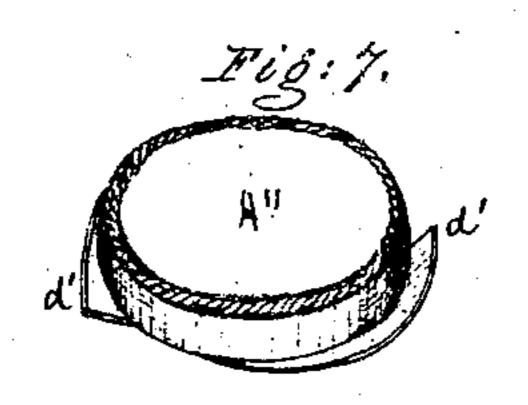


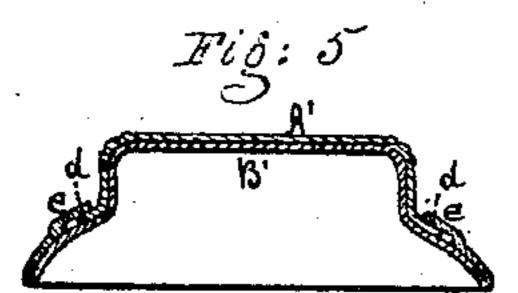


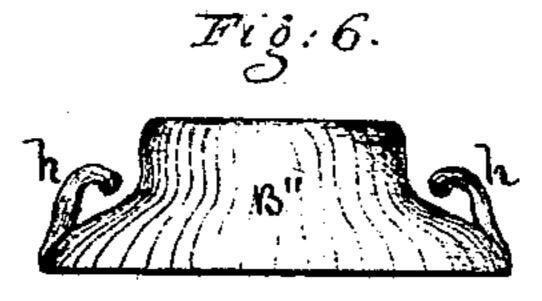












Witnesses Journg

Edward J. Carell Inventor By David assurr

## UNITED STATES PATENT OFFICE

EDWARD T. COVELL, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN METALLIC CAPS AND NOZZLES.

Specification forming part of Letters Patent No. 103,988, dated June 7, 1870.

I, EDWARD T. COVELL, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Nozzles and Caps for Metallic Vessels, of which the following is a specification:

My invention relates to the combination of wedge-shaped flanges or wings projecting from a metallic cap or cover with one or more recesses, lips, or hooks formed or secured upon or at the base of the nozzle upon which the cap is to be fitted, to receive said flanges and overlap the same, and thus fasten the cap upon the nozzle and secure the joint between the two.

Figure 1 is a plan or top view of my improved nozzle; Fig. 2, a similar view of my improved metallic cap or cover to the same, and Fig. 3 a central vertical section illustrating the two when combined. Fig 4 is a top view of a cap and nozzle combined, illustrating a modification of my invention, in which two flanges are formed on the cap, Fig. 5 being a central vertical section in line x x of Fig. 4. Fig. 6 is an elevation of a nozzle, illustrating another modification of my invention, Fig. 7 being a perspective view of the cap to fit on said nozzle; and Fig. 8 is a detached view, illustrating one mode of combining an outer rim with the nozzle to form the clamping-recess.

A is a cap, and B a nozzle, for metallic cans

or other vessels.

My improved caps and nozzles are struck up in the usual manner, of metal, the cap A being formed with a projecting flange or rim, a, which is cut into a wedge shape—that is, on a spiral curve more or less acute, beginning at the body of the cap, and gradually enlarging to the outer rim of the flange, as fully illustrated in Fig. 2.

An outer plate or semicircular piece, c, is fitted upon the base b of the nozzle B, and secured thereto either by a soldered edge, as shown in Fig. 3, or else by being turned and folded under the rim to form a lap-joint therewith, as shown in Fig. 8. The upper edge of 1 this outer plate c is slightly lifted from the face of the nozzle, so as to leave a narrow space or recess between the two, into which

the flange a of the cap may slide.

The flange a in the cap is made less than a semicircle in length, so that when the cap is fitted down over and upon the nozzle, with its flange resting upon the plain or single portion of the rim or base, and then turned toward the recess in such directions as that the narrow edge or point of its flange shall be foremost, the flange will pass under the outer plate cinto the recess, and by being turned until its wider part shall fill the recess and wedge therein, it may be made very tight.

Instead of a single wedge-shaped flange, a, upon the cap, two such flanges (see d d, Figs. 4 and 5) may be formed thereon, and in this case I secure at opposite points on the base of the nozzle two narrow lips, e e, so that they shall project and overlap the flanges dd when the latter are turned under the same, as shown

in Fig. 5.

In order to obtain a more powerful pressure of the cap upon the nozzle to make a closer joint between the two, the wedge-shaped flanges on the cap may be turned up, as shown in Fig. 7, and made to work under and bear against hooks h h, Fig. 6, secured to the base of the nozzle. This form of device is more especially useful in connection with caps and nozzles in which a packing of rubber, cork, or other elastic material is used.

I claim as my invention—

One or more wedge-shaped flanges projecting from the rim of a metallic cap or cover, in combination with one or more recesses, lips, or hooks formed or secured upon the nozzle upon which the cap is to fit, to fasten and secure the one upon the other, substantially as herein set forth.

E. T. COVELL.

Witnesses:

THEO. F. JACKSON, J. H. S. DOLMAGE.