

D. H. COWEY.
SHEET-METAL CAP.

No. 178,048.

Patented May 30, 1876.

Fig: 1.

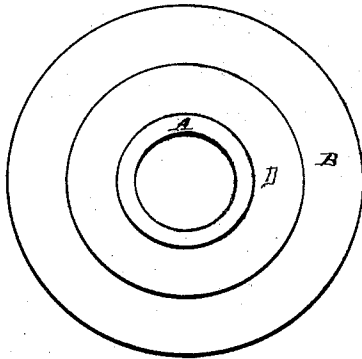


Fig: 2.

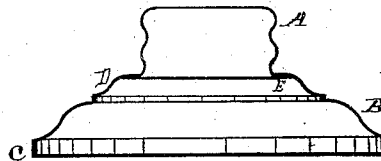


Fig: 3.

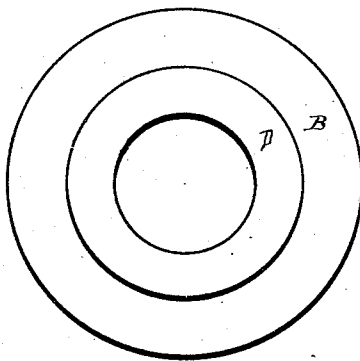


Fig: 4.



Witnesses
John Chase
Ab. A. Greenheart

Inventor
Daniel H. Cowey
by atty
Charles L. Smith

UNITED STATES PATENT OFFICE.

DANIEL H. COWEY, OF NEW YORK, N. Y., ASSIGNOR TO BENJAMIN COLLINS,
OF SAME PLACE.

IMPROVEMENT IN SHEET-METAL CAPS.

Specification forming part of Letters Patent No. **178,048**, dated May 30, 1876; application filed
March 3, 1876.

To all whom it may concern:

Be it known that I, DANIEL H. COWEY, of the city, county, and State of New York, have invented a new Improvement in Sheet-Metal Screw-Caps, of which the following is a specification:

As a means of obtaining a proper understanding of the nature and extent of my invention, I will briefly refer to the state of the art of making sheet-metal screw-caps.

As a rule, sheet-metal screw-caps are made from a single disk of metal, by what is known as the spinning process, upon a lathe, with a suitably-threaded chuck. Screw-caps having, comparatively speaking, no flanges, are also sometimes made by dies, drawing out the metal to form a shallow cap, and then, by an after process, threaded upon a correspondingly-threaded mandrel. These two methods are the only ones practiced in the art of making sheet-metal screw-caps.

In the spinning process only can a wide base or flange be made. By means of the drawing process, by dies, flanges not more than one-quarter of an inch wide can be made. In each way of making them, however, the metal must be a soft metal, like lead, zinc, brass, or copper, that will spin up or stretch, so as to avoid rupturing the metal at the top corners of the cap or at its junction with the flange, or in the creasing of threads.

It will thus be obvious, from this brief outline of the present state of the art of making sheet-metal screw-caps, that there are limitations to their being made cheaply, expeditiously, and for universal application.

The object of my invention is to obtain all these advantages, and consists in the manufacture of sheet-metal screw-caps made of soft metal, and combined with a flange made of a different kind of metal, by means of dies, and united together by soldering, as hereinafter described.

But, to describe my invention more particularly, I will refer to the accompanying draw-

ings, forming a part of this specification, the same letters of reference wherever they occur referring to similar parts.

Figure 1 is a plan view of the screw-cap. Fig. 2 is a sectional view of the same. Fig. 3 is a detached view of the base or flange of the screw-cap. Fig. 4 is a detached side view of the screw-cap before being soldered to the flange.

Letter A represents the screw-cap as made from a disk of metal, by means of dies. It may also be made by the spinning process, as my invention does not relate to the way the screw-cap is made, irrespective of its connection with the flange at its base or open edge, for making which connection with the flange a ledge, E, is formed thereon. Letter B represents the base or flange of the screw-cap. This is made from a blank disk of metal, having a central opening in it, and, by means of suitable dies, concaved or dished up, so as to give to its outer edge, as shown at letter C, a shoulder or bearing of metal, for the twofold purpose of obtaining a level and tightly-fitting bearing upon the surface of the jar, can, or other article to which the cap may be applied, and, at the same time, a stiffening of the flange; also, at the same time forming a shoulder, D, on the edges of the central opening, for the ledge E of the screw-cap to rest upon, as a soldering-base for uniting the screw-cap and flange together, to complete the entire screw-cap. The metal of which the flange is intended to be made is tinned or galvanized iron, which, being much cheaper than zinc metal and at the same time equally as useful, and capable of being made of any diameter, is, therefore, preferred.

When the flange has been struck up to the proper shape, the cap is then inserted into the central opening from the under side, and then, by means of solder, the two parts are solidly connected together, as shown at letter D, Fig. 2.

Having now described my invention, I will

proceed to set forth what I claim and desire to secure by Letters Patent of the United States—

The new article of manufacture of sheet-metal screw-caps, to wit: the combination of the spun or roller-threaded screw-cap A, having a soldering-ledge, E, at its base, with the concave die-struck-up flange B, having a stiffening-ledge, C, at its lower edges, and a soldering-shoulder, D, at its central open-

ing, for soldering the screw-cap solidly thereto, substantially as and for the purposes described.

DANIEL H. ^{his} X COWEY,
mark.

Witnesses:

CHARLES L. BARRITT,
JOHN CHASE.