No. 777,739. PATENTED DEC. 20, 1904.

A. S. LYHNE.

BURNER CAP.

APPLICATION FILED FEB. 29, 1904.

NO MODEL.

Fig. 1.

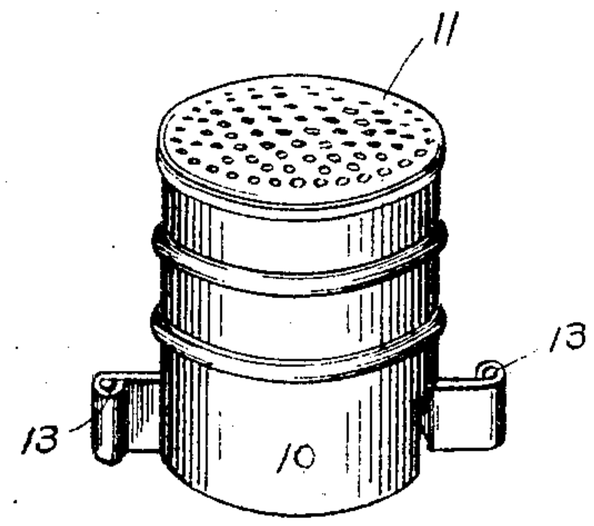


Fig. 2.

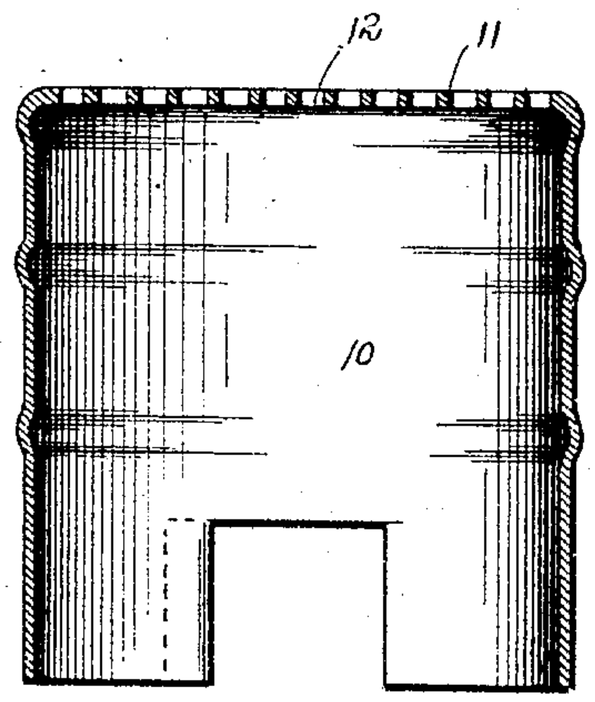


Fig. 3.

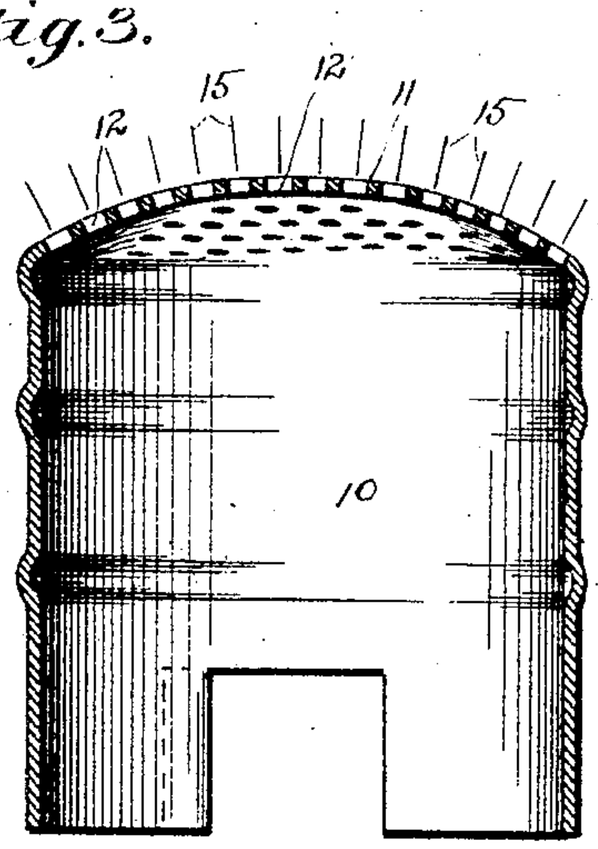


Fig. 4.

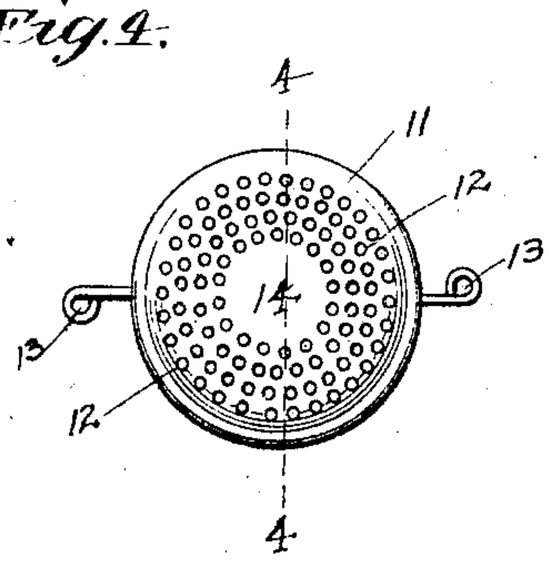
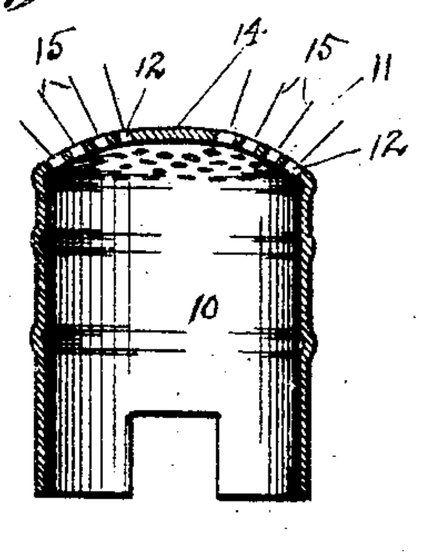


Fig. 5.



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Witnesses
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No. 777,739. Patented December 20, 1904.

UNITED STATES PATENT OFFICE.

ANKER S. LYHNE, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE BRIDGEPORT BRASS COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

BURNER-CAP.

SPECIFICATION forming part of Letters Patent No. 777,739, dated December 20, 1904.

Application filed February 29, 1904. Serial No. 195,751.

To all whom it may concern:

Be it known that I, ANKER S. LYHNE, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented a new and useful Burner-Cap, of which the following is a specification.

My invention relates to the manufacture of burner-caps for incandescent-gas burners, and has for its object to produce an integral burner-cap that is a complete cap, including a spreader, if required, and eyes for mantle-supports, if required, drawn and formed complete from a disk of sheet metal and provided with perforations so formed that the mixed gas and air which passes therethrough instead of passing upward vertically will pass outward in lines diverging from a central line—that is, the gas passes outward in lines diverging from the center of the cap and in the direction of a mantle suspended over the cap. It should be understood that my present invention eliminates the wire-gauze top for burner-caps heretofore in use and provides the complete top in a single piece.

With these and other objects in view I have devised the novel burner-cap which I will now describe, referring to the accompanying drawings, forming part of this specification, and using reference characters to indicate the several parts.

Figure 1 is a perspective of my novel burner-cap on an enlarged scale. Figs. 2 and 3 are longitudinal sections thereof on a greatly-enlarged scale in order to illustrate the process of manufacture and also to show by increased thickness of metal the divergence of the holes through the cap, Fig. 2 showing the cap as formed and perforated, but before the top is rounded or domed, and Fig. 3 showing the completed cap with the rounded or domed top; Fig. 4, a plan view on the scale of Fig. 1, showing a slightly-variant form of construction in which the central portion of the top is left imperforate in order to provide an integral spreader at the central portion thereof; and Fig. 5 is a vertical section on the line 4 4 in Fig. 4.

10 denotes the body of my novel cap, and 11 the top, which is formed integral therewith and is provided with perforations 12.

13 denotes eyes to receive the mantle-support, which may, if required, be formed opposite to each other by making angular cuts in the bottom of the body, leaving one end of the strip attached and turning the free ends of the strips outward and coiling them to form the mantle-supporting eyes, as clearly shown in the drawings.

In Figs. 4 and 5 I have illustrated a form in which the central portion of the top is left imperforate to form a spreader, which I have indicated by 14. I thus avoid riveting a disk of metal at the center, as is required where the tops of the caps are made of wire-gauze and are provided with spreaders.

In practice the perforations 12 in the top are made after the cap has been drawn, but while the top remains flat, as in Fig. 2—that is, before the top has been rounded or domed. This operation of rounding or doming the top changes the plane of the perforations, but without displacing metal sufficiently to distort the perforations, the walls of the perforations remaining after the rounding or doming operation straight lines, as before, but the general line of said walls being divergent from the central line of the cap, as indicated by the lines 15 in Figs. 3 and 5. This insures that the mixed air and gas which passes through the perforations will not pass upward in lines parallel with the central line of the cap, but after passing through the perforations the mixed gas and air will spread outward toward a mantle suspended above the cap, which, however, is not illustrated in the drawings, as it forms no portion of my present invention.

Having thus described my invention, I claim—

1. A sheet-metal burner-cap comprising a tubular portion open at one end and having at its other end an integral domed or rounded portion provided with divergent perforations, the sides of the tubular portion being bent outward and formed with vertical mantle-supporting eyes.

2. A sheet-metal burner-cap comprising a tubular portion open at one end and having at its other end an integral domed or rounded portion provided with divergent perforations, the central part of said rounded portion being imperforate to form a spreader, the upper surface of which is flush with the surface of the surrounding perforated portion, the sides of the tubular portion being bent outward and formed with vertical mantle-supporting eyes.

In testimony whereof I affix my signature in presence of two witnesses.

ANKER S. LYHNE.

Witnesses:
CHARLES FERRY,
ARTHUR H. MOORE.