

E. HARRIS.

Lamp.

No. 12,550.

Patented March 20, 1855.

Fig. 1

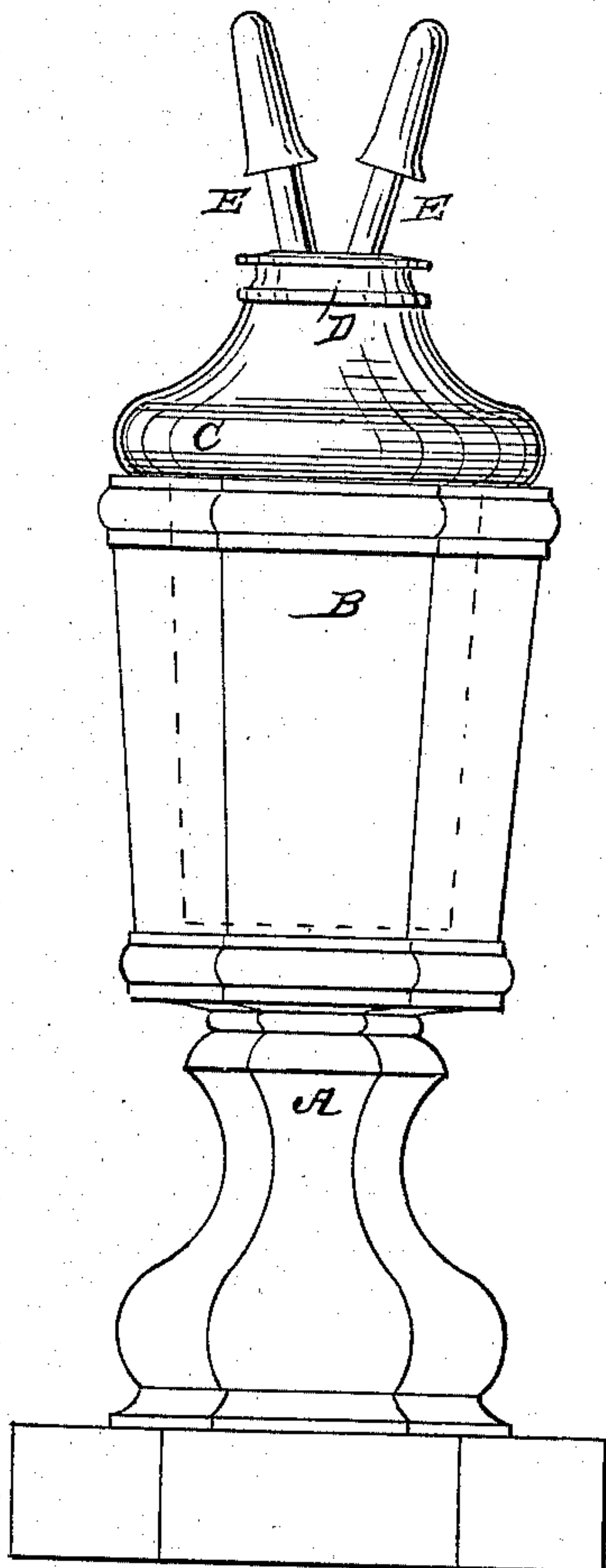


Fig. 2

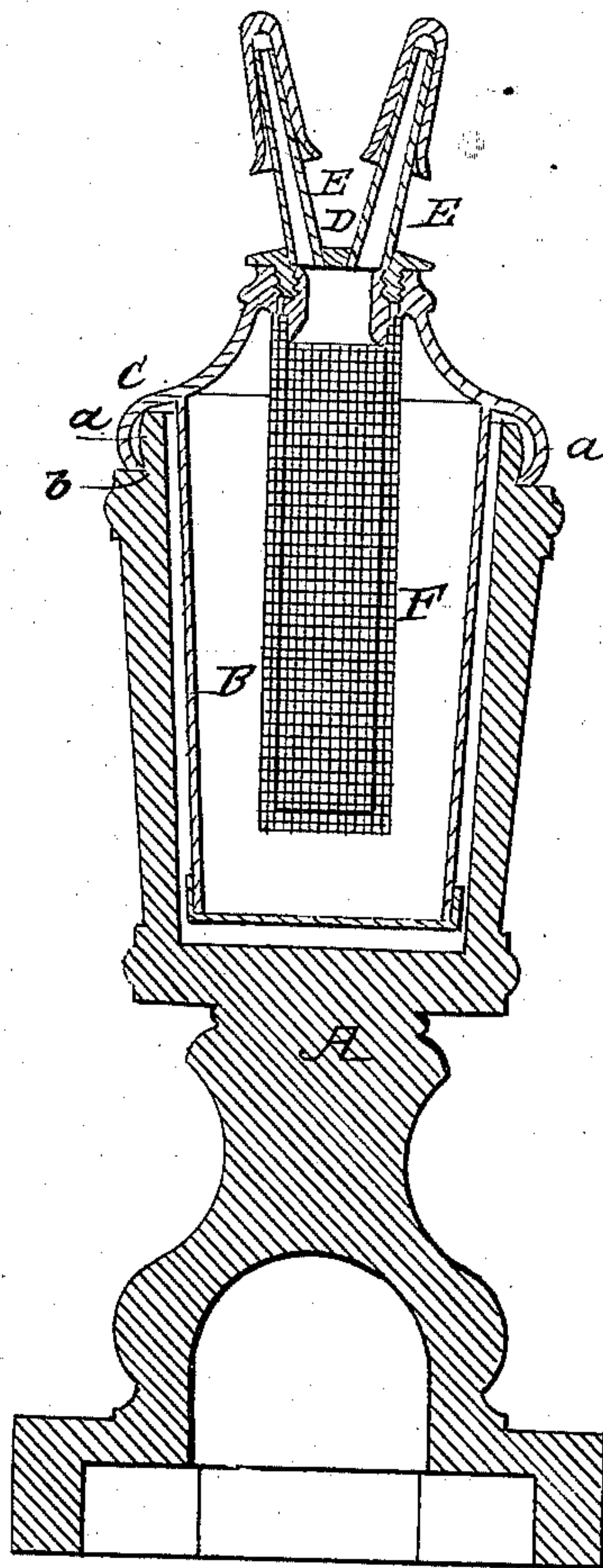


Fig. 3

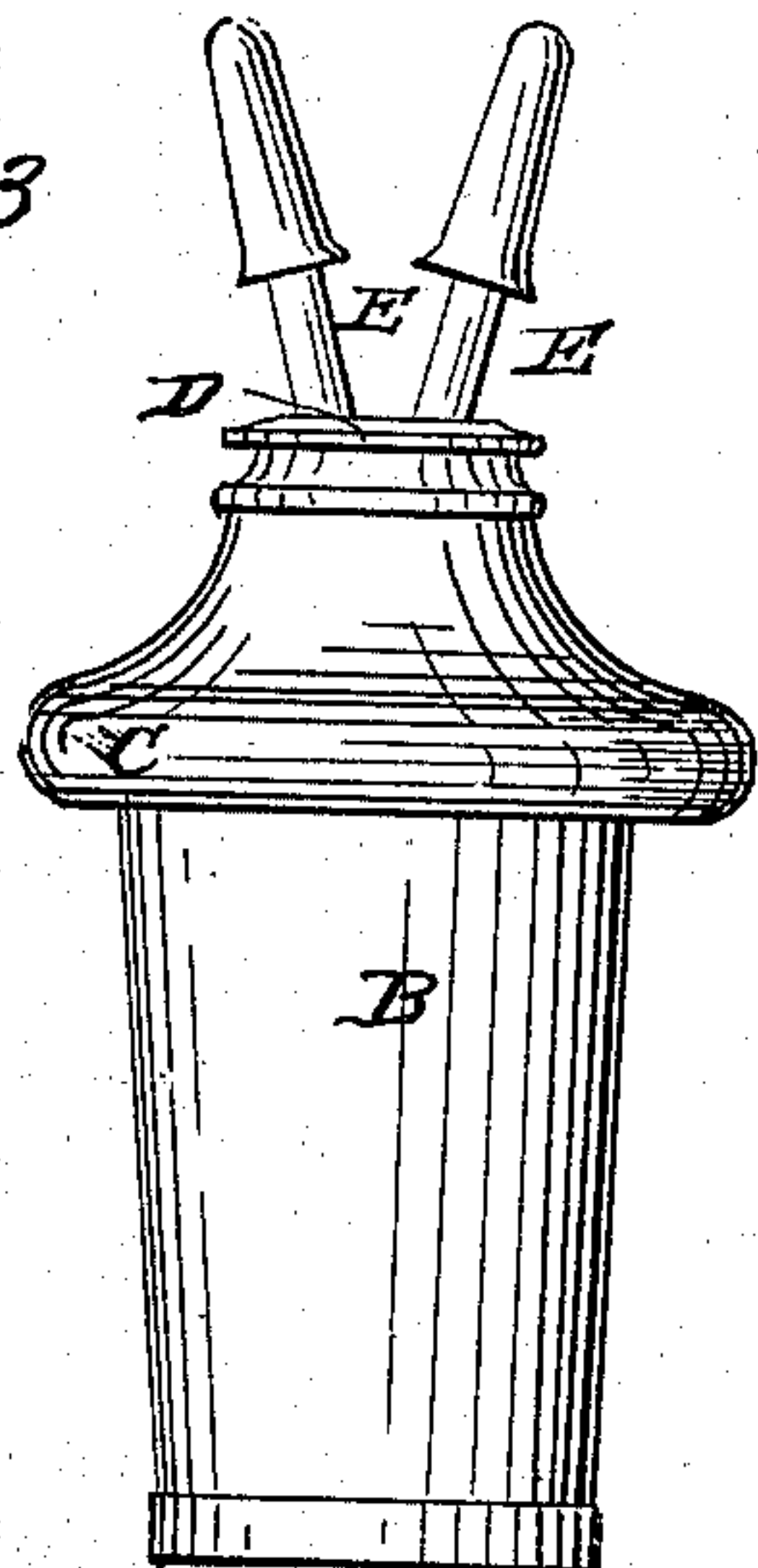


Fig. 4



UNITED STATES PATENT OFFICE.

ELBRIDGE HARRIS, OF BOSTON, MASSACHUSETTS.

LAMP.

Specification of Letters Patent No. 12,550, dated March 20, 1855.

To all whom it may concern:

Be it known that I, ELBRIDGE HARRIS, of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have made a new and useful Improvement in the Manufacture of Lamps by which the injury to clothing, furniture, and the danger to persons arising from the fracture of glass lamps are prevented; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a view of my improved lamp. Fig. 2 is a section through the same. Fig. 3 is the metallic reservoir detached from the glass body; Fig. 4, an ornamented paper covering of the reservoir.

The nature of my invention consists in introducing within the body of glass lamps as usually made receptacles formed of sheet metal, for containing the combustible fluids of whatever kind, so that any accidental or intentional fracture of the glass part of the lamp, will not cause the fluid contents to be spilled or inflamed.

To enable others skilled in the art to apply and use my improvement I will proceed to describe it more fully.

The glass part of the lamp A, is to be blown, or pressed into the desired form as usual, excepting that the body of the lamp is left open at the top, or bottom, like a drinking glass. Into the hollow space the cylindrical or hollow part of a metal reservoir B passes, while the top of the metal reservoir is made with a projecting curved cap C, which serves to attach the whole to the glass part of the lamp. Thus formed the lamp presents a metallic reservoir, contained within the glass body of the lamp, while the top of the lamp is of polished or ornamented metal. In the common form of hand lamps, the bottom of the glass part is left open and the metal reservoir fitting the body of the lamp is passed upward and secured to the cap. The metal reservoir has proper arrangements of screw caps D, and wick tubes E, and when filled for the use of burning fluid, protectors are added, seen at F, Fig. 2.

Several modes of securing the reservoir within the glass receptacle have been adopted; in one the curved edge of the metal top projecting over the sides of the metal reservoir, admits of a slightly oval projection *a*, Fig. 2, on the glass to enter, when by turning it the edge of the cap catches in notches

b which have been cut in the glass above the shoulder on which the cap rests; another mode allows the edge of the top of the reservoir to be burnished over a projecting bead formed on the glass, in which case the reservoir is firmly fixed. I also make the external part of the lamp wholly of glass, having a molded glass top to embrace the burner and cover the reservoir, its edge being cemented to the body.

As the metal reservoir may be made of burnished, or engraved metal surfaces, plated, gilded, or lacquered the lamps have an externally rich appearance and require very little cleaning when in use.

To meet the want of low priced lamps of this construction, I have devised a further improvement of using ornamented paper, for covering that part of the reservoir which is within the glass, such paper as is covered with polished or embossed metal of different colors is preferred. In this case the lower part of the reservoir is of ordinary tin plate, or zinc, and the paper is made to surround it, or caused to adhere by its ornamented surface to the interior of the glass. When the glass part of the lamp is plain, the figured metallic surface of the paper produces the effect of richly engraved metal, and when the lamp is of pressed or cut glass the plain paper has the rich appearance of polished gold or silver.

Lamps furnished with metal reservoirs, when to be used for consuming the heavier oils, such as whale and lard oils, offer the great advantage of conducting the heat from the wick to the half fluid oil, the glass protecting the metal from radiation. But my improvements have special claims in relation to security from accidents in the consumption of highly inflammable mixtures of alcohol and hydrocarbons. The metal reservoirs cannot be crushed or broken by filling.

What I claim as my invention and desire to secure by Letters Patent, is—

1. Using within glass lamps of any form reservoirs of metal, which are provided with the usual tubes for burning common oils or adapted by means of protectors to burn any fluid combustible.

2. I also claim the mode of ornamenting such reservoirs contained within glass by means of paper with metal or ornamented surfaces.

ELBRIDGE HARRIS.

Witnesses:

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M. DYER, Jr.