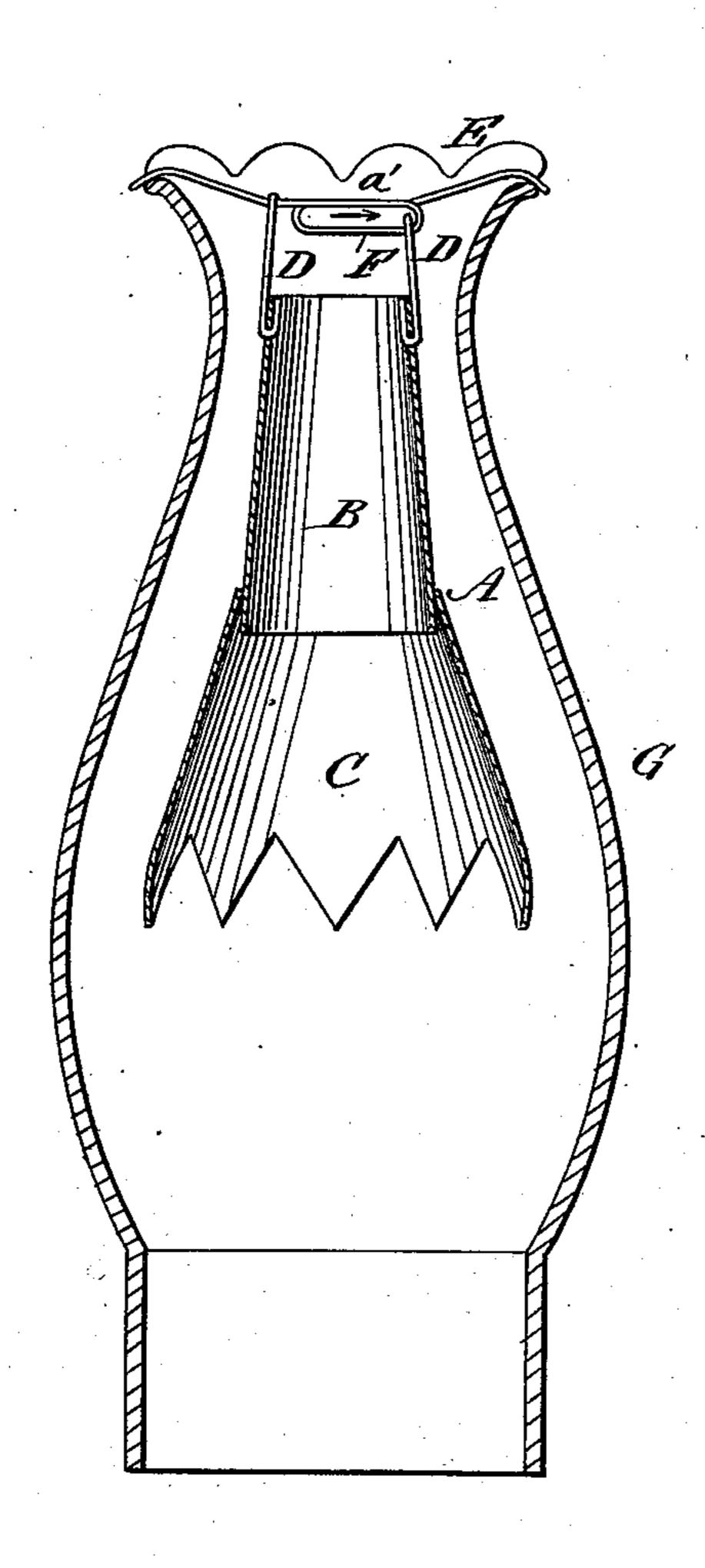
## J. S. BUTCHER. Lamp Chimney Protector.

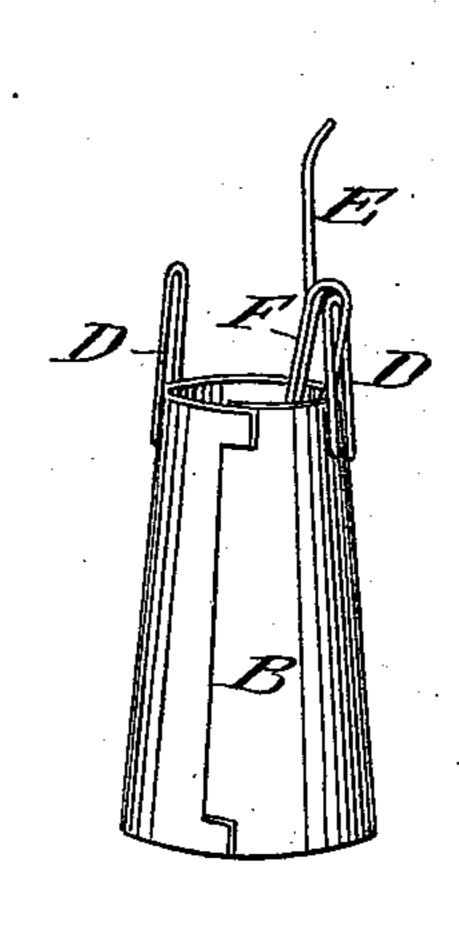
No. 230,466.

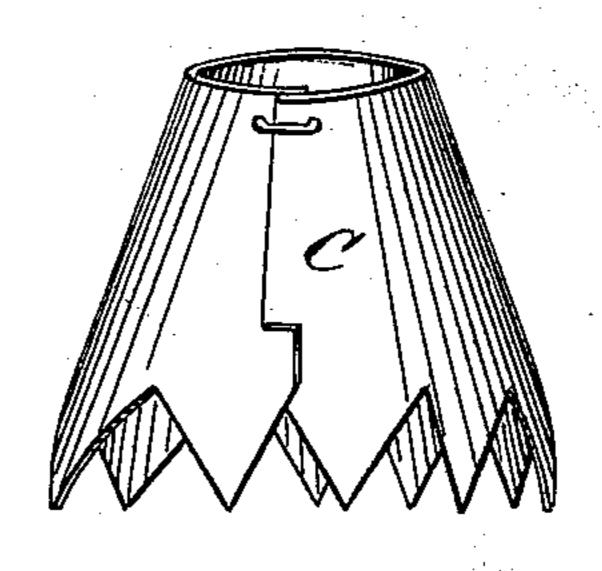
Patented July 27, 1880.

Hig. 1

Fig. 2







WITNESSES:

C. Neveux Congwick INVENTOR:

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ATTORNEYS.

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## United States Patent Office.

JOHN S. BUTCHER, OF YORKTOWN, ASSIGNOR TO HIMSELF AND JAMES J. BUTCHER, OF BRIDGEPORT, NEW JERSEY.

## LAMP-CHIMNEY PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 230,466, dated July 27, 1880.

Application filed January 12, 1880.

To all whom it may concern:

Be it known that I, John Sooy Butcher, of Yorktown, in the county of Salem and State of New Jersey, have invented a new and Improved Lamp-Chimney Protector, of which the following is a specification.

The object of my invention is to provide a new and improved protector for lamp-chimneys, which prevents the breaking of the same to by the heat of the burner, and is simple in construction and convenient in use.

The invention consists in a protector for lamp-chimneys formed of two tapering metal tubes, one of which has a greater taper, and is suspended from the lower edge of the other, which in turn is suspended from a looped wire resting on the upper edge of the lamp-chimney.

In the accompanying drawings, Figure 1 20 represents a cross-section of a lamp-chimney provided with my improved protector, also shown in section. Fig. 2 is a perspective view of the tapering tubes of which the protector is made.

Similar letters of reference indicate corresponding parts.

The lamp-chimney protector A is formed of the tapering tube B and the tube C, which has a greater taper than the tube B, but the upper diameter of which is smaller than the lower diameter of the tube B, thus permitting the former to be suspended from the latter, as is shown in Fig. 1.

The tapered tube B is provided at the up-35 per end with two slotted ears, D D, formed of wire, as shown, or in some other suitable man-

ner, and by means of these ears it is suspended from a wire, E, provided with a longitudinal loop, F, and resting on the upper edge of the lamp-chimney G.

The tubes B and C may be plain or ornamental, and of any desired size or pattern.

The protector is placed in the chimney in the following manner: The tube B is passed through the tube C from below, so that the 45 latter is suspended from the former, as shown. The wire E is then drawn in the direction of the arrow a', and one end is passed into the upper opening of the tube B, so that it is in the position shown in Fig. 2. The protector 50 is then passed into the chimney from below, the wire E is taken out of the upper opening of the tube B and its ends are rested on the upper edge of the chimney, and the protector is suspended therefrom. The lower tube, C, 55 collects the intense rays of the burner and conducts them upward into the tube B, thereby preventing an overheating of the glass chimney.

I am aware that it is not new to suspend 60 within a chimney a removable expanding and contracting shield; but

What I claim is—

The looped wire E F, adapted to rest on the top of a lamp-chimney, in combination with 65 the tapered tubes B and C, the former having slotted ears D D, substantially as shown and described.

JOHN SOOY BUTCHER.

Witnesses:

HENRY V. FOSTER, JAMES J. BUTCHER.