

G. H. DIMOND & G. & T. B. DOOLITTLE.

Lamp Shade.

No. 86,824.

Patented Feb. 9, 1869.

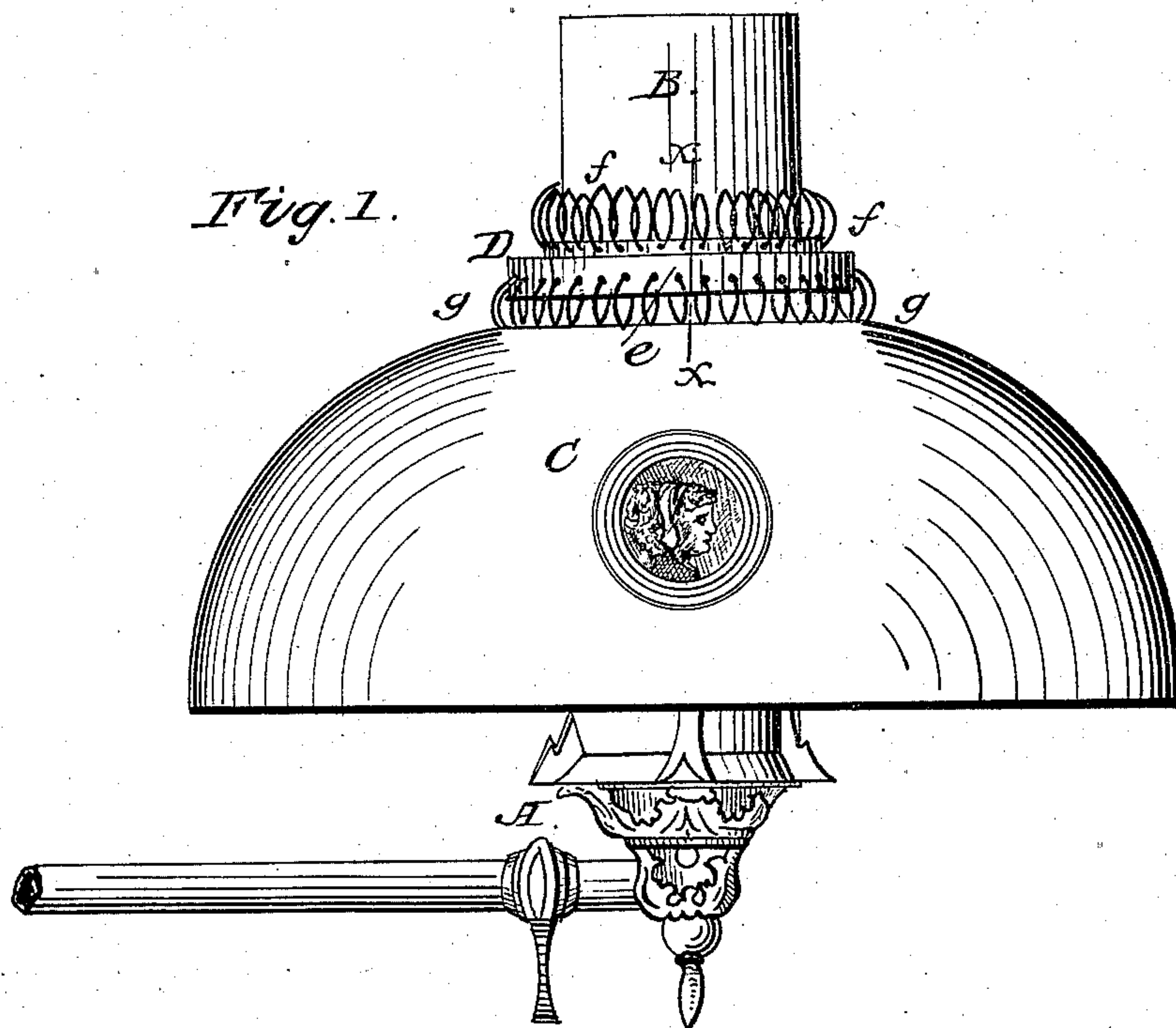


Fig. 2.

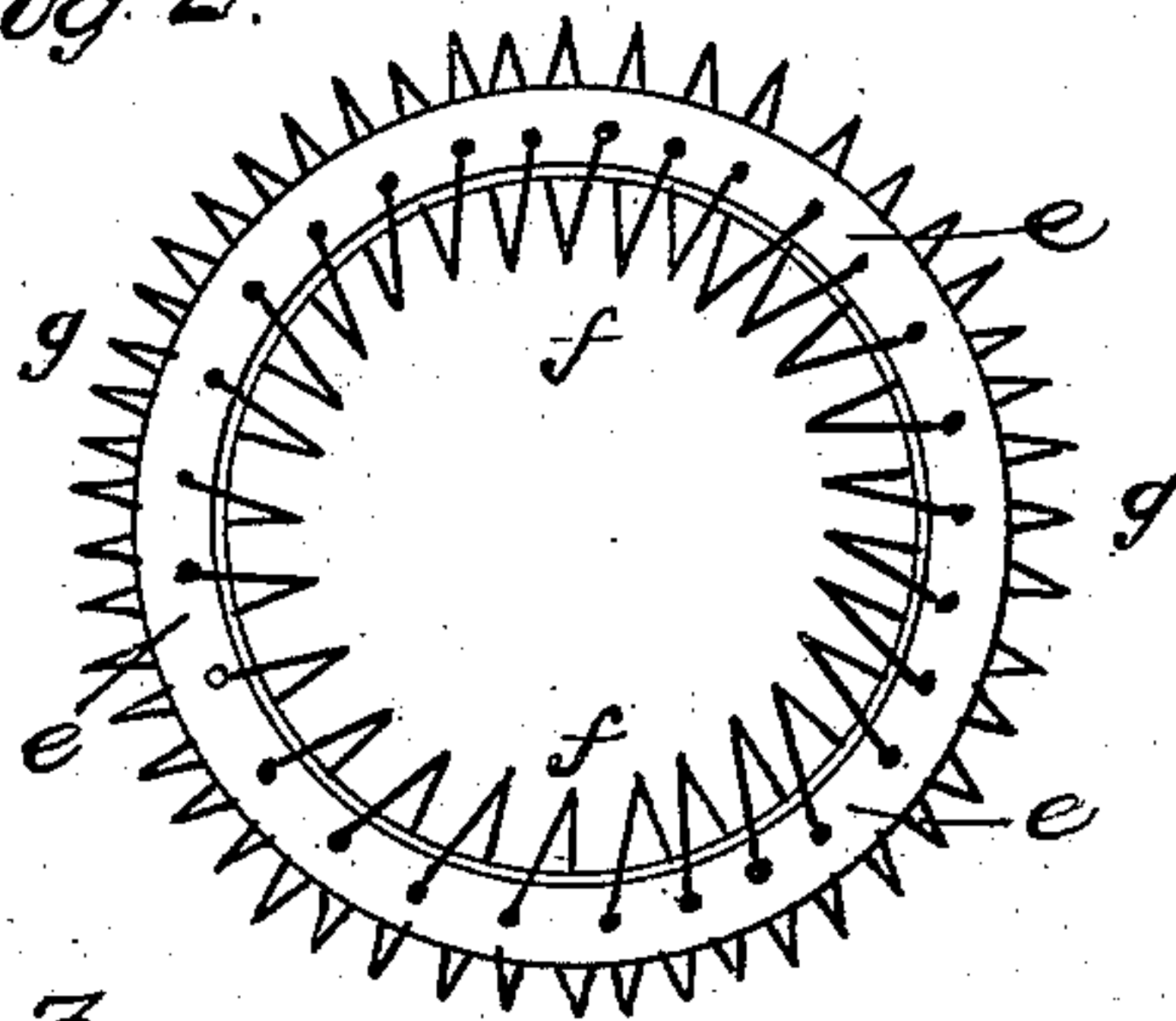
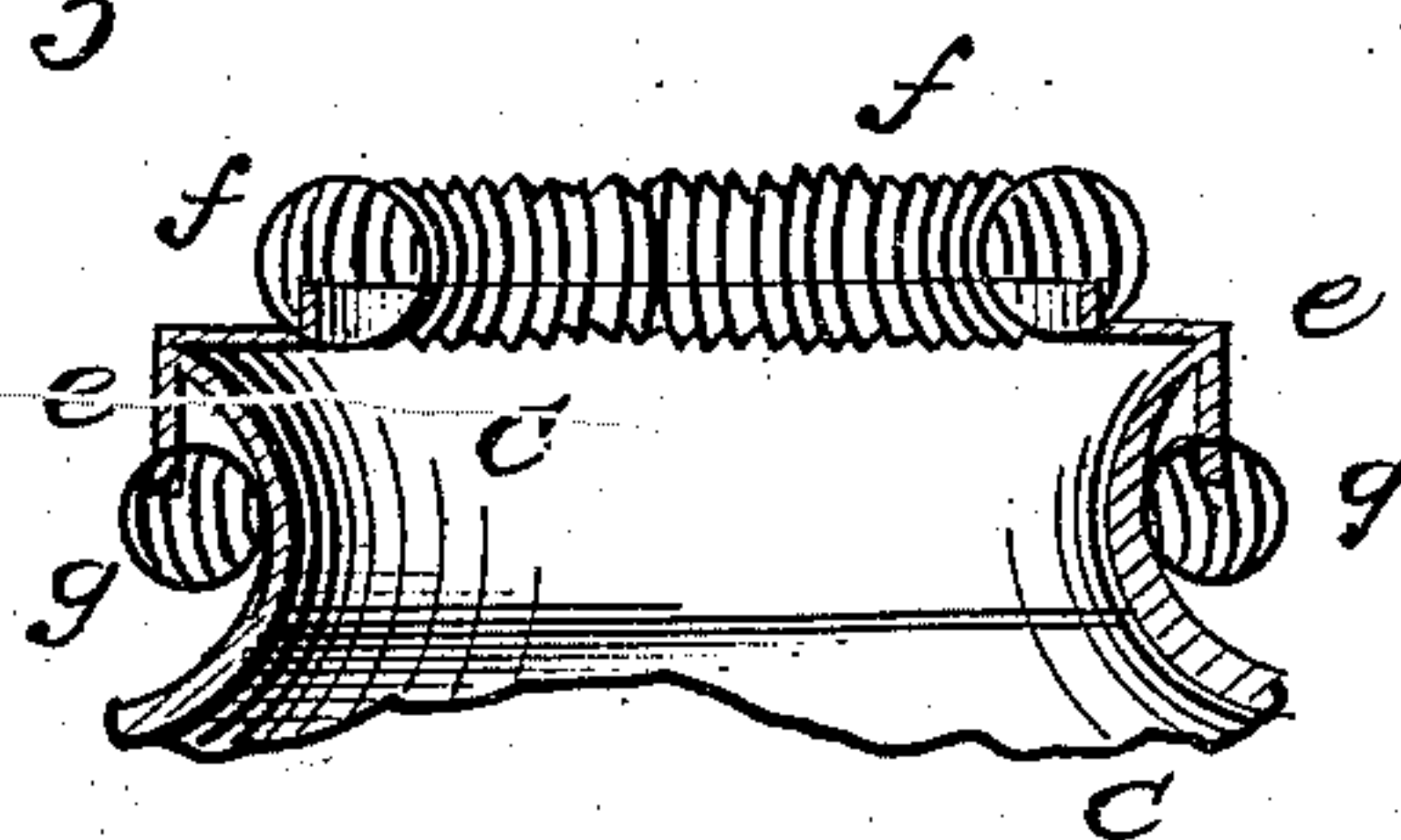


Fig. 3.



Witnesses

Jedediah Lazenby
Chas A Scott

Inventor

Geo H Dimond
Geo Doolittle and
T B Doolittle
By atty J. M. Lutz

United States Patent Office.

GEORGE H. DIMOND, GEORGE DOOLITTLE, AND THOMAS B. DOOLITTLE, OF BRIDGEPORT, CONNECTICUT, ASSIGNORS TO GEORGE H. DIMOND, GEORGE DOOLITTLE, AND THOMAS WALLACE, JR.

Letters Patent No. 86,824, dated February 9, 1869.

IMPROVEMENT IN SHADE-HOLDERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, GEORGE H. DIMOND, GEORGE DOOLITTLE, and THOMAS B. DOOLITTLE, of Bridgeport, Fairfield county, in the State of Connecticut, have invented a certain new and useful "Improved Shade-Holder;" and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this application.

Previous to our invention, it had been customary, in the use of porcelain and glass (or other analogous material) shades for lamps and gas-fixtures, to support the shade upon bearings at the lower edge or base of the shade.

There are objections to thus holding the shade, among which may be mentioned, the obstruction by the supporting-arms of the light, the necessary weight to the lamp or fixture of such arms, and their cost; and lighter shades, of paper, &c., have been made, with spring-devices at their tops, to clasp to the chimney, and thus avoid the objections to the base-supports and their necessary appendages; but, previous to our invention, no means had been devised or suggested for connecting heavier shades, such as porcelain and glass, to the chimney of the lamp or argand gas-burner.

Our invention has for its objects to provide a simple, economic, and efficient means (which may be applied to all ordinary porcelain and glass shades now manufactured) of supporting such shades, from the top edge, on the chimney of a lamp or gas-fixture; and to this end,

Our invention consists in a metallic annular clasp, adapted to be sprung or clasped on to the top edge or flanch of a shade, and provided with a suitable spring, or other means, for clamping it to the chimney of a lamp or gas-fixture, as will be hereinafter more fully explained.

To enable those skilled in the art to make and use our invention, we will proceed to describe it more particularly, referring by letters to the accompanying drawing, in which—

Figure 1 is an elevation of a gas-fixture, chimney, and ordinary glass shade, with our invention attached.

Figure 2 is a top view of the holder, (or device for supporting or holding the shade on the chimney.)

Figure 3 is a partial vertical section through the holder and shade, at *x x*, fig. 1.

In the different figures the same parts are designated by the same letters of reference.

A illustrates a gas-fixture, provided with an argand burner, having the usual cylindrical chimney, B, on which is supported, by means of our invention, a glass or porcelain shade, C, of the usual shape.

e is an annular metallic collar, of the shape, in cross-section, seen at fig. 3, which is adapted to fit loosely over the top edge, or flanch, of the shade C, as seen at

figs. 1 and 3, and which is perforated with numerous small holes, in which are interwoven or laced the wires of two spiral springs, *f* and *g*, one of which, *f*, is arranged, as shown, to roll over the upper inner edge, and the other, *g*, over the lower outer edge of said annular collar *e*.

Each of these coils or spring-rolls, *f*, *g*, may be distended, and has a tendency, when enlarged in diameter, to collapse or spring back to its normal condition and natural diameter.

When the device, (seen at fig. 2,) thus composed of the ring *e* and springs *f*, *g*, is placed or forced over the flanch, or top edge of a shade, C, the spring *g* fits into the concavity, near or under the flanch, or top lid of the shade, as shown at figs. 1 and 3, and securely clasps itself to said shade, and the shade, with this device applied to it, may then be applied to the chimney, B, of a lamp or gas-fixture, as seen at fig. 1, by distending or stretching over said chimney the spring-roll *f*.

It will be understood that the spring *f* will yield and adapt itself to any imperfection in the contour of the chimney, and to diametrical differences in different chimneys of nearly the same size.

And the same characteristic feature, it will be observed, exists in the means of attaching the device to the shade, so that the spring-clamp and holder, *e f g*, may be readily, and with sufficient security, attached to different shades of nearly (though not exactly) the same size, and of imperfect shapes at the top edge.

It will be seen that, although the holder-device is attached with a sufficient degree of permanency, for all practical purposes, to the shade, the top of the latter is free to expand and contract within the coil-spring *g*, surrounding its top edge. Of course, by means of our improved spring-shade holder, the advantage is gained of the capacity to adjust the rigid shade to different heights on the chimney, as circumstances require.

The springs *f* and *g* might either or both be made in sections, in lieu of continuous, without departing from the spirit of our invention, but we have shown the apparatus or holder made as we have successfully used it, and as we deem it best to be made.

Instead of the angular (in cross-section) collar *e*, a metallic band of different shape might be employed, or the springs *f* and *g* might have interposed some other medium of connection, which would still permit each to perform its function, (one, that of clasping the top of the shade, and the other, that of clamping on to the chimney,) as described, and, in lieu of using the spring *f*, as shown, some other means of securing the collar *e* at the desired place around the chimney might be devised.

We do not wish to be understood as limiting our claim of invention to the employment together of all the devices shown and described; but having fully de-

scribed our invention, so that those skilled in the art can make and use it.

What we claim as new, and desire to secure by Letters Patent, is—

A metallic, or other annular collar, provided with a suitable spring, and adapted to be sprung or clasped on to the flanch, or top edge of glass or porcelain shades, substantially as and for the purposes described.

Also, a shade-holder, composed of a collar, a chimney-clasping spring, and a shade-clasping spring, substantially as hereinbefore described.

Also, the employment, in combination with a glass

or porcelain shade, of a holder, composed of a collar, *e*, provided with a spring, *g*, and a suitable means for clamping the collar around a chimney.

In testimony whereof, we have hereunto set our hands and seals, this 29th day of December, 1868.

GEORGE H. DIMOND. [L. S.]

GEO. DOOLITTLE. [L. S.]

THOS. B. DOOLITTLE. [L. S.]

Witnesses:

EDWIN G. PALMER,

SAM B. SUMNER.