DIMOND & DOOLITTLE.

Lamp Shade.

No. 86,825. Patented Feb. 9, 1869.

Fig. 1.

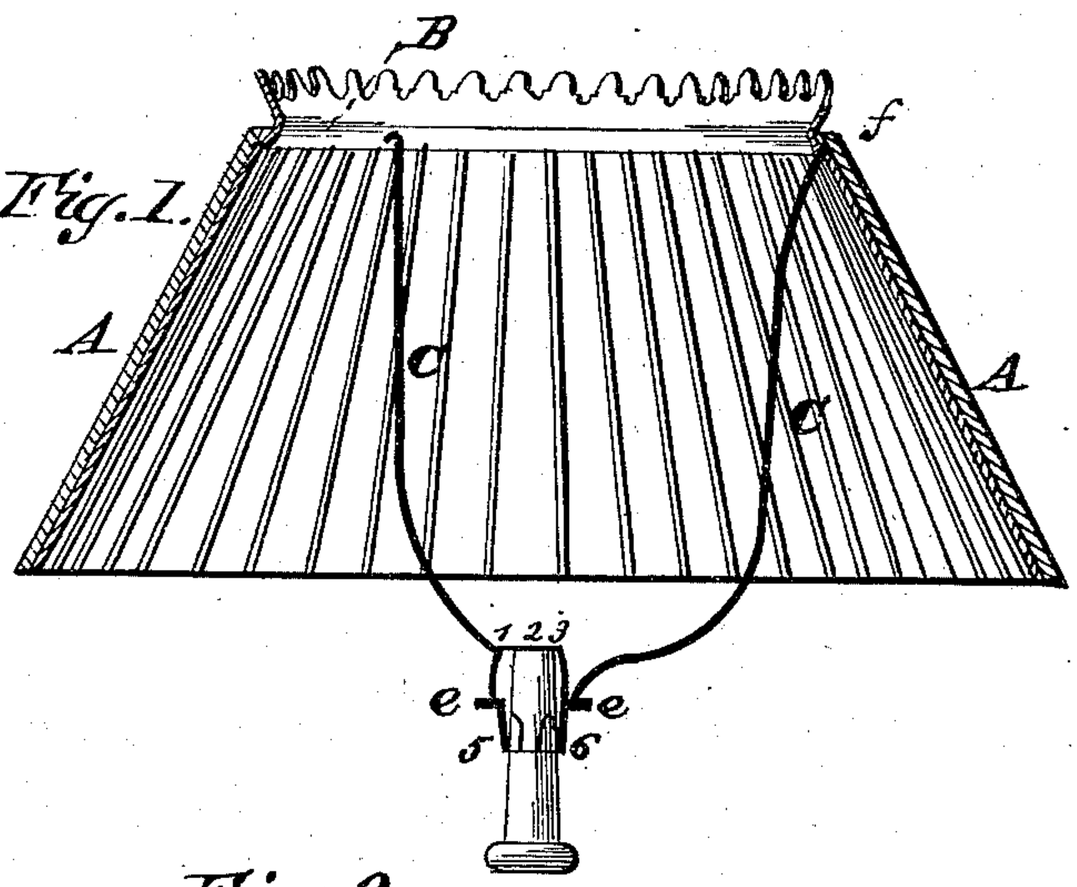


Fig. 2.

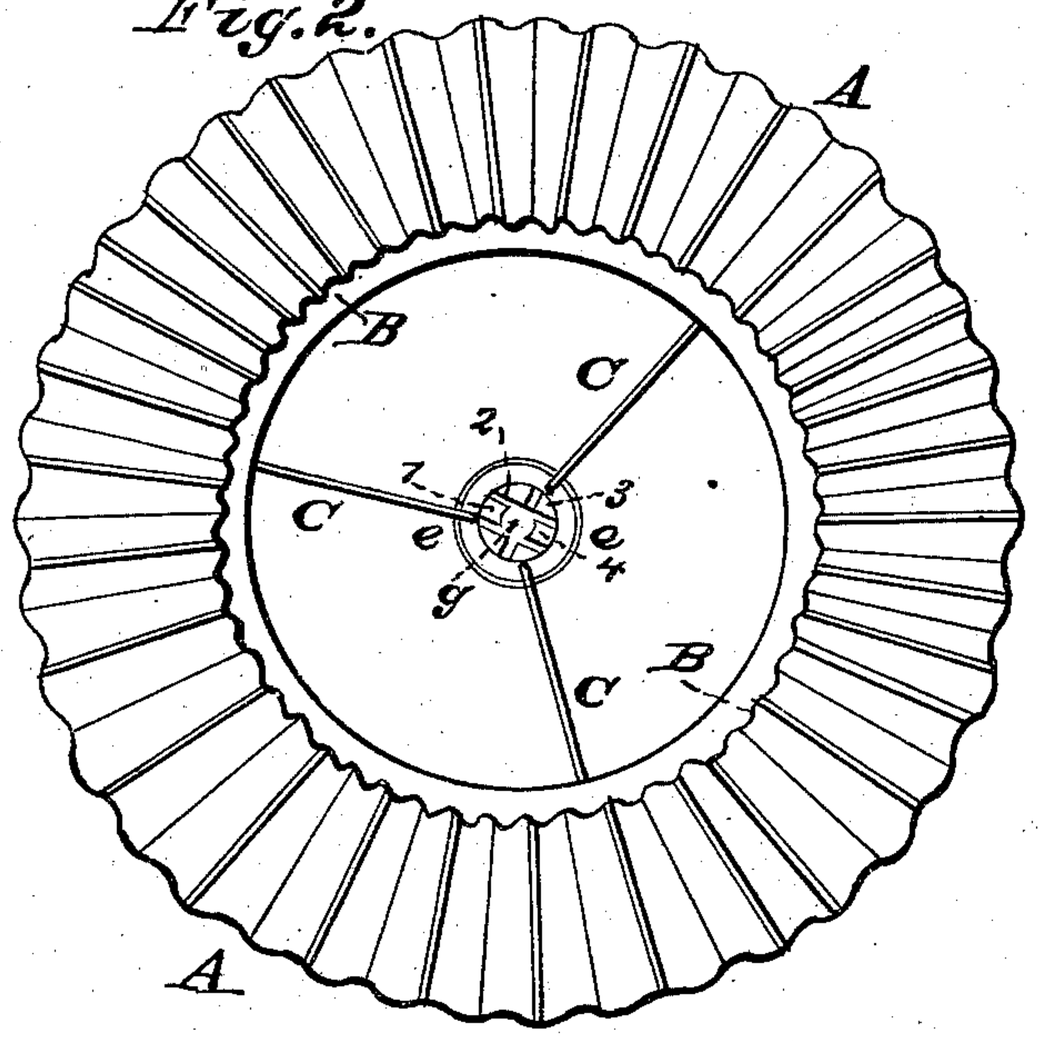
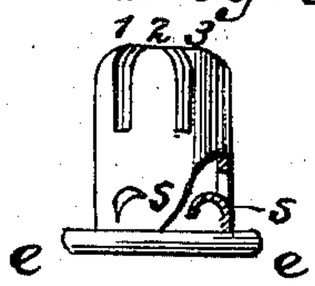


Fig. 3.



Witnesses:
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GEORGE H. DIMOND AND GEORGE DOOLITTLE, OF BRIDGEPORT, CONNECTICUT.

Letters Patent No. 86,825, *dated February* 9, 1869.

IMPROVEMENT IN LAMP-SHADES.

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 and GEORGE DOOLITTLE, of Bridgeport, Fairfield county, in the State of Connecticut, have invented certain new and useful Improvements in "Lamp-Shades;" 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.

Our invention relates more particularly to that kind of shade which is formed of thin corrugated metal, such as shown and described in Letters Patent, granted to J. B. Doolittle, on the 10th day of March, 1868, though some of the features of our invention are applicable to other kinds of shades.

A shade made of very thin corrugated or crimped sheet-metal, such as shown in the Doolittle patent, in order to be utilized for the purposes of a gas-shade, or to be supported otherwise than by resting on a lamp-chimney, as shown in the said patent, requires to be made stiffer or more rigid at either the top or bottom edge, as the arms or supporting-wires are attached to either of said edges; and inasmuch as it is decidedly better to attach the said arms to the top edge of the shade, and leave the lower portion and whole radiating or reflecting-surface unobstructed, we have devised a means for effecting this desirable end in an efficient and economic manner.

And this feature of our invention consists in the employment, in connection with the top edge of a shade, made of thin corrugated metal, of an annular metallic collar, of a proper shape, in cross-section, to present sufficient rigidity, and having the supporting-arms or wires attached to it, in the manner hereinafter more fully explained.

Previous to our invention it had been customary to make paper and other shades, adapted to be used on gas-fixtures, with a metallic holder or thimble, generally of cast brass, to which the supporting-wire has been fastened, radiating from it, and which holder has been designed to fit on to or around the ordinary gas-burner; but it has been found, by experience, that as gas-burners are of various sizes and shapes, a person having purchased a shade, would, as likely as not, find that the holder did not fit the burner on which it has to be used, and that consequently the shade would not rest centrally over the burner, and the holder not fitting or clasping the burner closely enough, the shade would be in constant danger of being overturned by the slightest touch; and shades being most frequently used on drop-lights and table-lights, have been subject always to being knocked or touched. This has proven a great inconvenience in the use of and objection to the use of shades, as heretofore manufactured, particularly with paper shades, which, if displaced, would catch on fire.

To overcome these difficulties and objections, and provide a means by which the holder, or thimble of any shade may be securely and conveniently clasped on to any burner, are the objects of the second part of our invention, which consists in a variable holder, or thimble, so made, of sheet-metal, that it can be fitted and adapted to any-size burner, as will be hereinafter more fully described.

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 drawings, in which—

Figure 1 is a sectional elevation of a corrugated or crimped metallic shade, with our invention applied to it.

Figure 2 is a top view of the same.

Figure 3, a detail view of a modification of our improved holder detached.

In figs. 1 and 2, A is the shade, which is made of very thin sheet-metal, crimped or corrugated, after the fashion shown in the Doolittle patent, before referred to. Into the top of this shade, or reflector, A, we spring an annular collar, B, of metal, made as shown, so as to be rigid or stiff, diametrically, and at the same time very light and economical.

This collar may be struck or spun up, and may have its top edge made with points, or in any tasty shape. It is perforated at equal distances with holes, or eyes, through which are passed the upper ends of the supporting-wires, or arms, C.

These wire ends are bent over, so as to confine the lower edge of the rim, or collar, B, as seen at *f*, fig. 1, and be securely coupled thereto without any soldering, and they are connected at their lower ends to the collar *e*, of the holder *g*, by passing them through holes in said collar, having their extremities slightly upset or riveted, as seen at fig. 1.

The holder or thimble *g* is made of sheet-metal, and is formed with lips 1, 2, 3, &c., at the upper portion, above collar *e*, and with leaves, 5, 6, &c., below, and is adapted to slip on to a gas-burner, as shown by red lines at fig. 1.

By having the holder *g* thus made, the lips at top, and the leaves at the bottom, the two portions which are designed to clasp or surround, and hold on to the burner, may be bent inward or outward, to vary the size, and adapt the holder to fit tight on any size and shape of burner.

At fig. 3 we have shown a modification of this part of our invention, the holder *g*, in this case, having its collar, *e*, at the extreme bottom, and being formed with turned-in portions, or lips, *s*, in lieu of the bottom leaves, seen at fig. 1, which may be bent in or out more or less, and which are adapted to rest against the outer portion of the burner, in a manner similar to the leaves 5, 6, &c.

It will be obvious to the mechanic and manufacturer, that the details or methods of carrying out the several features of our invention may be varied from

what we have shown, without departing from the spirit of our invention.

Having explained the several features of our improvements in lamp and gas-burner shades,

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

1. A lamp-shade, composed of a flexible metallic portion, A, rigid annular top rim B, and supporting-wires C, when the wires are interlocked with the rim B, in the peculiar manner shown, and the portion A sprung over their protruding ends, substantially as hereinbefore described.

2. The variable thimble, or holder, constructed essentially as described, and adapted to be set or bent to any desired size and shape, as and for the purposes set forth.

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

G. H. DIMOND. [L. S.]
GEO. DOOLITTLE. [L. S.]

Witnesses:

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