S. F. ELKINS.

SHADE FOR INVERTED INCANDESCENT GAS LAMPS.

APPLICATION FILED AUG. 12, 1912.

1,065,598.

Patented June 24, 1913.

FIG. 1.

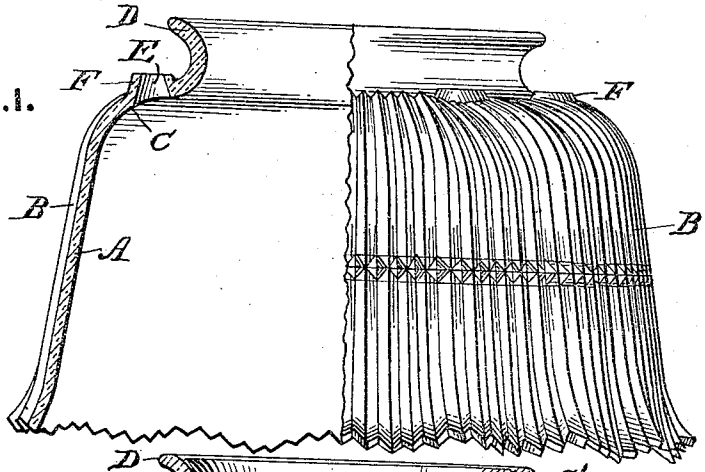


FIG. 2.

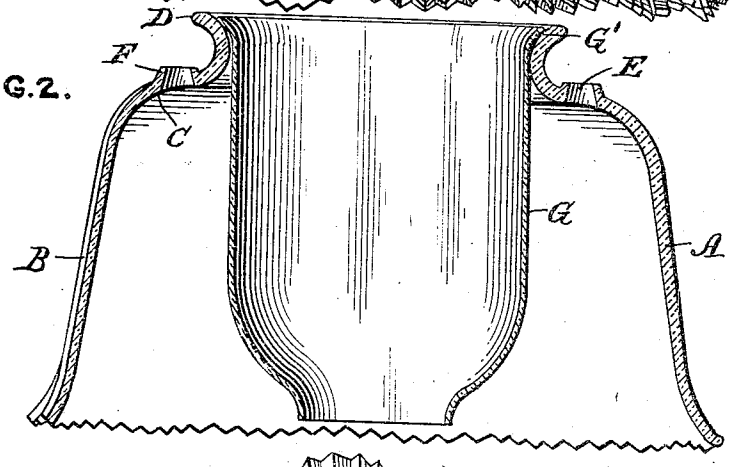
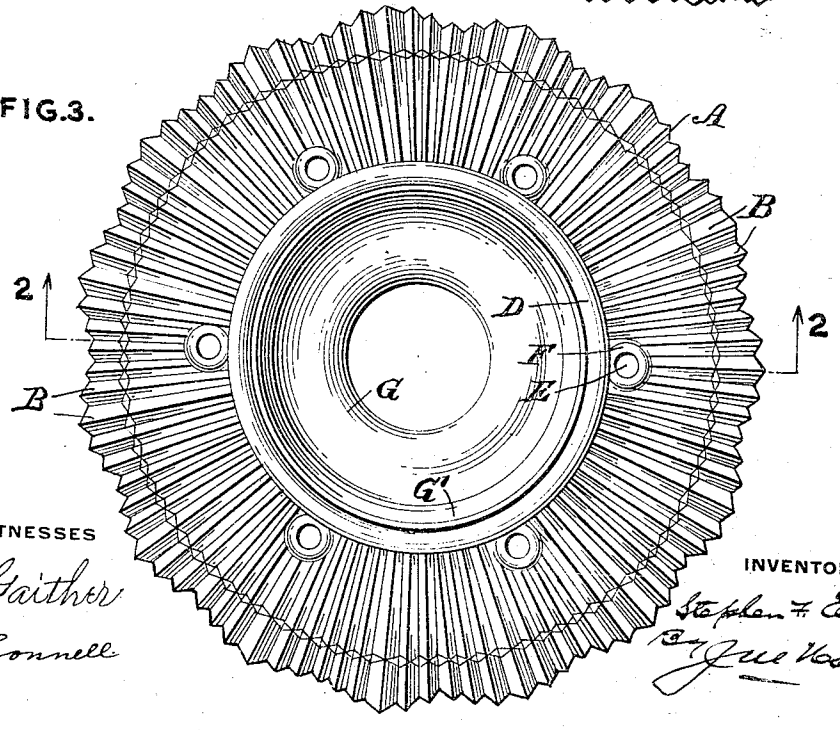


FIG. 3.



WITNESSES

F. E. Gaither

Ellen M. Connell

INVENTOR

Stephen F. Elkins

By Jesse Yoder

Atty

UNITED STATES PATENT OFFICE.

STEPHEN F. ELKINS, OF PITTSBURGH, PENNSYLVANIA, ASSIGNOR TO ELKINS GLASS COMPANY, LIMITED, OF PITTSBURGH, PENNSYLVANIA.

SHADE FOR INVERTED INCANDESCENT GAS-LAMPS.

1,065,598. Specification of Letters Patent. Patented June 24, 1913.

Application filed August 12, 1912. Serial No. 714,631.

To all whom it may concern:

Be it known that I, STEPHEN F. ELKINS, a resident of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Shades for Inverted Incandescent Gas-Lamps, of which the following is a specification.

Much of the breakage of glass shades for inverted incandescent gas burners results from the use of so-called inner chimneys or cylinders which are commonly seated in and depend from the neck of the shade, thereby cutting off upward ventilation for the space between the chimney and the shade body.

In Patent No. 960,630, granted to me June 7, 1910, I overcome this difficulty by providing a composite shade consisting of a glass body and metal support and forming the latter with openings for ventilating the space between the chimney and shade body. I believe the main cause of breakage is the pocketing of heated air in the upper portion of the shade, and I have found it desirable to provide for ventilation at the exterior of the supporting neck rather than upwardly therethrough and through the burner, as this practically eliminates the breaking factor and permits of the use of shades of conventional form, *i. e.*, with glass supporting necks, and shades of this form are more sightly and may be manufactured at less cost than composite shades.

In the accompanying drawings, Figure 1 is a view partly in elevation and partly in section of a glass neck shade constructed in accordance with the invention, and Fig. 2 is a vertical section of the same with the inner chimney or cylinder seated therein in accordance with common practice. Fig. 3 is a top plan of the shade with the inner chimney in position therein as in Fig. 2.

While the shade body A, *i. e.*, the depending or skirt portion of the shade, may be of any desired form, I have shown it of relatively heavy or thick glass and provided on its exterior surface with reflecting prisms B. The upper portion of body A is drawn inward to form a substantially flat horizontal shoulder or surface C and projecting upwardly from this shoulder is the integral exteriorly grooved glass neck D which is adapted to be entered and secured within the frame of an inverted gas burner in usual manner. Formed through shoulder or surface C are the air circulating or ventilating openings E which are preferably disposed vertically therethrough, and in the process of manufacture the glass is thickened to form a rim F around the openings.

An inner chimney or cylinder G is usually employed in connection with inverted incandescent gas burners for inclosing the mantle, and it is common practice to seat the chimney or cylinder in the neck or shade, the upper extremity of the cylinder being flared outwardly at G′ to seat in the shade neck, as shown in Figs. 2 and 3. While expedients have been proposed for leaving an air ventilating space upwardly through the shade neck at the exterior of the inner chimney or cylinder, none of them are universally used, and often fall into disuse after being used for a time. The inner chimneys or cylinders are manufactured in two sizes, and for some reason those of smaller size are more costly than the larger chimneys and the chimneys of smaller size are the ones employed with the ventilating expedients referred to. These ventilating expedients and the more expensive smaller chimneys increase the cost as compared with the use of a larger chimney seated immediately in the neck of a shade as in Fig. 2, and the result is that the larger chimneys are more generally used notwithstanding the increased breaking tendency of the outer shade. This difficulty is effectively overcome by the present invention as the ventilating openings E prevent hot air from accumulating in the pocket space in the upper portion of a shade body outside the neck-closing inner chimney, so that constant circulation is maintained and much of the breakage of glass neck shades, particularly when used with the larger inner chimneys, is prevented.

I claim:—

1. In a shade for inverted incandescent gas lamps, a glass shade body having an integral upwardly projecting supporting neck adapted to be secured to an inverted gas burner, the upper portion of the glass body outward from its integral neck formed with air passages.

2. In a shade for inverted incandescent gas lamps, a glass shade body having an integral upwardly projecting supporting neck adapted to be secured to an inverted

gas burner, the glass body formed with a substantially horizontal shoulder extending outwardly from the base of the neck and uniting the latter with the depending portion of the body, said shoulder being formed with air passages.

3. In a shade for inverted incandescent gas lamps, the combination of a glass shade body and a glass supporting neck integral with and projecting upwardly from the body and adapted to be secured to an inverted gas burner, an inner chimney for the burner seated in and depending from the neck and closing the neck passage at the exterior of the chimney, the upper portion of the shade body below the neck formed with air passages.

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

STEPHEN F. ELKINS.

Witnesses:
J. M. NESBIT,
F. E. GAITHER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."