A. TAPLIN.

Lamp Burner.

No. 111,274. Patented Jan. 24, 1871.

Fig. 2.

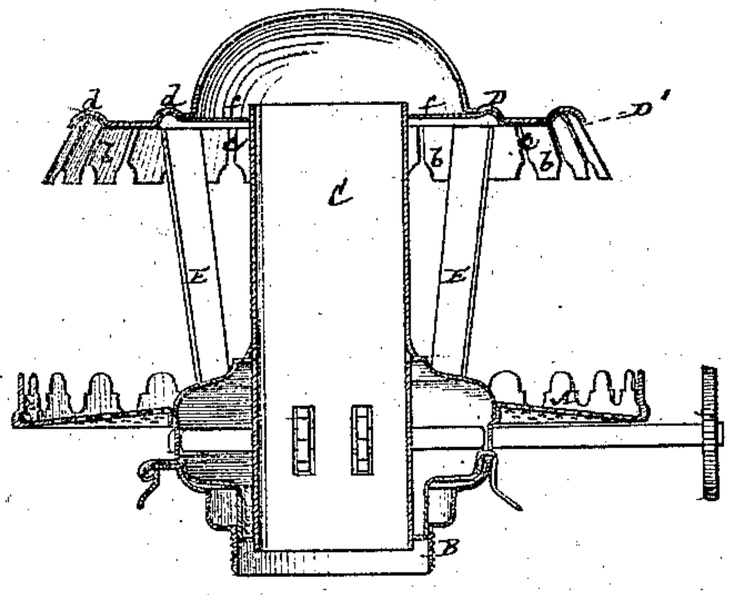


Fig. 3.

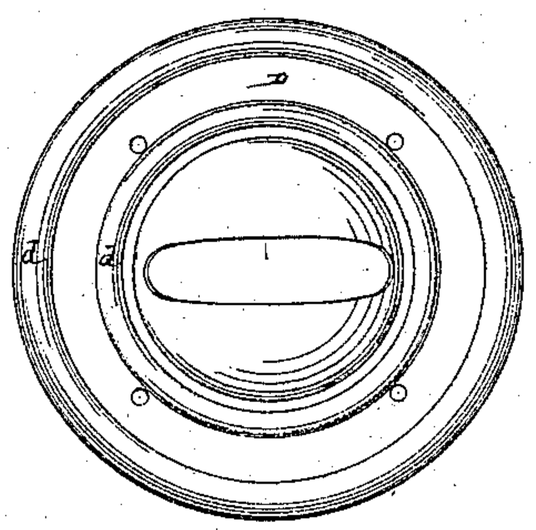


Fig. 1.

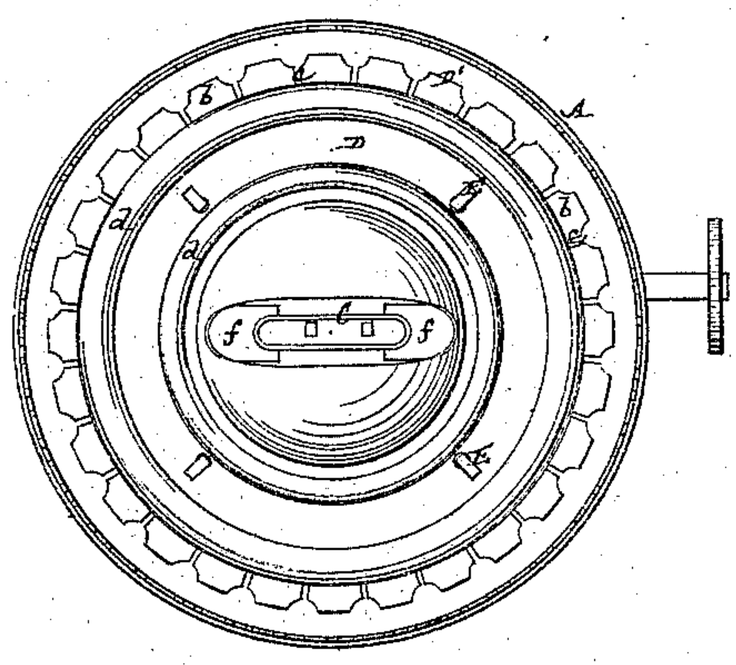
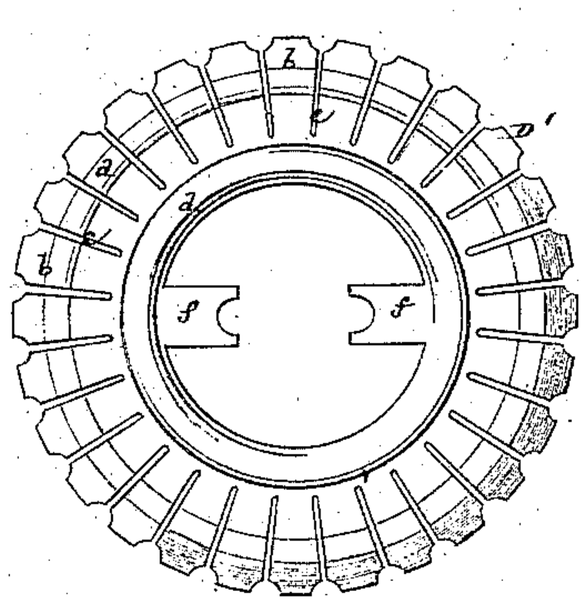


Fig. 4.



Witnesses:

Fred. Haynes

Geo. Breck

Alvin Taplin

per Munn, Goodwin & Co

Attorneys

United States Patent Office.

ALVIN TAPLIN, OF FORESTVILLE, ASSIGNOR TO THE BRISTOL BRASS AND CLOCK COMPANY, OF BRISTOL, CONNECTICUT.

Letters Patent No. 111,274, dated January 24, 1871.

IMPROVEMENT IN LAMP-BURNERS.

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

To all whom it may concern:

Be it known that I, ALVIN TAPLIN, of Forestville, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Lamp-Burners; of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a plan; and

Figure 2, a vertical section of a lamp-burner constructed in accordance with my improvement.

Figure 3 is a plan of the cap plate or body and cone of the deflector detached; and

Figure 4, a plan of an independent slitted and elastic under plate, for use in combination with said upper or body and cone plate.

Similar letters of reference indicate corresponding parts.

My invention, which is here shown as applied to a sun-burner, consists in the construction of the deflector in two parts or pieces, that is to say, of an upper or body and cone plate that may made of any desired strength or stiffness without regard to the fit of the chimney, and of an independent and elastic under plate fringed or slit at its edges which project beyond the edges of the upper plate to provide for its expansion and contraction and fit of different sized chimneys over it.

By this construction the body and cone of the deflector may be of a given and tolerably stout thickness of metal, while its circumferential portion may be of thinner metal and so have the necessary elasticity to provide for its contact with the chimney, and the radial slits made in it are arranged under cover, for the interior portions of their length, by the upper plate or body of the deflector, which admits of a very open construction of the slitted portion without allowing of a too free supply of air through the slits. Additional strength is also obtained; and

The invention further consists in a peculiar construction of the under or elastic plate of the deflector, which is made to clip the wick-tube on opposite sides and whereby the deflector is stayed laterally and the strength of the burner generally increased.

Referring to the accompanying drawing—

A represents the base of the burner;

B, the screw-bottom; and

C, its wick-tube.

The deflector is composed of two distinct plates or pieces, namely, an upper or body and cone-plate, D, and an under plate or ring, D′.

These plates are, preferably, made of different thicknesses; thus the upper plate D, which is of less diameter than the whole deflector and is free from contact with the chimney, consequently is not required to be elastic, may be of a thickness which will conduce to the strength and durability of the structure, while the under plate or ring D′ which is of larger diameter, so as to extend beyond the upper plate and establish contact with the chimney as the latter is fitted over it, may be of thinner metal to obtain for it or its wings *b*, as formed by radial slits *c* in it, that desirable elasticity which will provide in a soft and easy manner for the fit of the chimney over the deflector, and for its accomodating itself to different-sized chimneys.

Said slits *c*, which also serve to allow of air passing through them to the improvement of the light, when such supply is not too copious, may be made free or large, thereby adding to the elasticity of the wings and preventing their contact without giving a too free supply of air by reason of the inner portions of said slits being under cover of the upper plate D.

The under plate D′ also serves to stiffen the body and cone plate D, and may be united therewith by grooving, as at *d d*, and by the rails or posts E, which connect the base A with the deflector, and tie the structure in a vertical direction, as it were.

To tie or bind it laterally as well, I form the under deflector-plate D′ with oppositely-arranged interior clips or slotted projections *f f*, which fit on or over the opposite edges of the wick-tube C, thus uniting the deflector with the wick-tube near its top and staying both.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The deflector, composed of two plates, the upper one, D, of which forms its body and the cone, while the under and elastic plate, D′, of larger diameter, is slitted to form wings *b* at its periphery, with the rear portions of the slits under cover of the upper plate, substantially as specified.

2. The slotted and elastic deflector-plate D′, constructed with clips or slotted projections *f f*, arranged to fit opposite edges of the wick-tube, essentially as and for the purpose or purposes herein set forth.

ALVIN TAPLIN.

Witnesses:

DAN. A. MILLER,

CHAUNCY GOODRICH.