(No Model.)

A. STEWART.

LAMP.

No. 346,829. Patented Aug. 3, 1886.

Fig. 1.

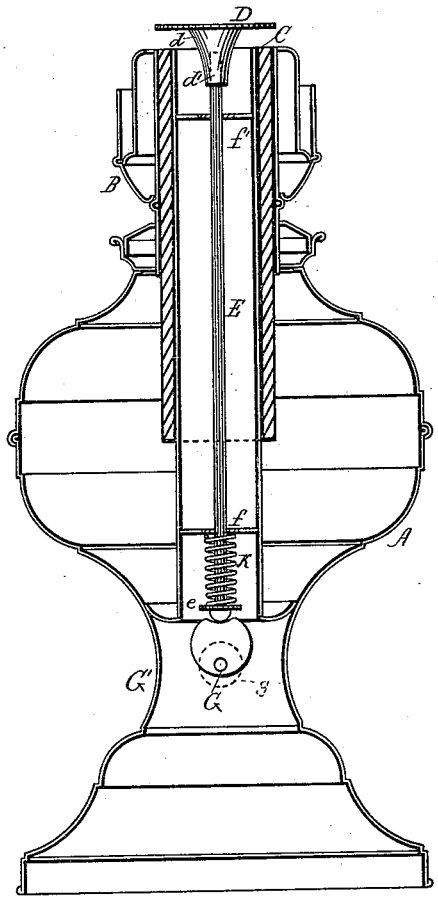

Fig. 2.

WITNESSES

Will H. Powell.

A. A. Connolly

INVENTOR

Alexander Stewart,

By Connolly Bros.,

Attorneys.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

ALEXANDER STEWART, OF PHILADELPHIA, PENNSYLVANIA.

LAMP.

SPECIFICATION forming part of Letters Patent No. 346,829, dated August 3, 1886.

Application filed March 29, 1886. Serial No. 196,959. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER STEWART, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Lamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a vertical section of a lamp with my improvements applied thereto. Fig. 2 is a transverse section of lamp-support.

My invention has relation to that class of lamp-burners known as "central-draft" burners, in which a circular wick is employed, and in which there is provided a device known as a "deflector" or "spreader," the purpose of which is to deflect a current of hot air ascending from the middle of the tube over the wick and to spread the flame.

My improvements have for their object to provide a construction in which the deflector or spreader shall be capable of use as an extinguisher.

My invention consists in the peculiar construction and combination of parts hereinafter fully described.

Referring to the accompanying drawings, A designates the lamp, provided with an annular burner, B, which has a circular wick, C. Said wick may be a flat wick bent or curved into annular form.

D represents the deflector or spreader, which is an annular plate having a supporting-standard, E, which is fitted in bearings or supports *f f'* in the central tube, A', of the lamp. The plate D is made integral with a conical stem, *d*, which is formed with a socket, *d'*, which receives the upper end of the standard E, so that the deflector or spreader may be lifted off said standard. The standard E has liberty of vertical movement in its bearings or supports *f f'*, and it may be moved upwardly until the button or collar *e* on its lower end meets the lower bearing or support, *f*. When the standard is at its uppermost limit of movement, the spreader is in the position which it ought to have when the lamp is burning. When the standard is lowered, the spreader is depressed or let down so that it will come in contact with the wick or upper part of the burner and extinguish the flame.

To produce an elevation of the spreader and standard, there is provided a transverse shaft, G, which has its bearings in the sides of the support or column G' of the lamp, and furnished with an external button or thumb-piece, *g*, by which it may be rotated. On this shaft there is rigidly fastened an eccentric or cam, I, which is directly below the standard, so that when the shaft G is rotated the cam will produce an elevation of said standard and raise the spreader to its normal position. When the shaft is rotated so as to bring the smaller diameter of the cam uppermost, the standard may descend, and it will do so by gravity, and allow the deflector or spreader to fall upon the wick or burner and extinguish the flame. The cam is formed with a notch or recess, *i*, in its large side, which affords a bearing or support for the end of the standard and prevents the latter from losing its position in case the lamp is shaken while being carried, or if the support of the lamp is taken hold of by the hand and the shaft G accidentally rotated or moved.

To insure stability in the position of the standard, or to cause it to lock on the cam when elevated, a spiral spring, K, may be placed on the standard, encircling the latter between the button or collar *e* on its lower end and the lower support or bearing, *f*; but this spring is not a necessity, and may be dispensed with, if desired, although I prefer to use it. In its normal position the spreader is at sufficient elevation above the upper edge of the burner to permit the flame to burn at its maximum, the standard then resting upon the cam. When it is desired to extinguish the flame, the shaft G is given a half-turn by means of the button or thumb-piece *g* on its outer or exposed end, bringing the small diameter of the cam uppermost. The standard and the spreader then descend, the latter extinguishing the flame of the lamp. To relight the lamp, the spreader must be again elevated, and this is accomplished by a reverse half-turn of the shaft G, bringing the large side of the cam uppermost, as before. It will be noted that when the de-

flector or spreader descends it remains down until again elevated by a positive motion, so that the extinguishment of the flame is assured, and the danger or possibility of the flame springing up again, owing to the sudden ascent of the spreader after it has been lowered, is avoided.

What I claim as my invention is—

1. The combination, with an Argand burner, of a spreader or deflector, a vertically-movable standard, and an eccentric or cam mounted on a shaft located directly below said standard, and operating to produce an elevation of the deflector or spreader and to support the standard, substantially as shown and described.

2. The combination, with an Argand lamp or burner having a central-draft tube, of a vertically-movable deflector or spreader, a standard on which said deflector is mounted, an eccentric or cam which supports said standard, said cam being supported on a shaft and having a notch in its edge, and a spiral spring encircling said standard and operating to hold the latter against the eccentric or cam, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 22d day of March, 1886.

ALEX. STEWART.

Witnesses:
WILL H. POWELL,
R. DALE SPARHAWK.