

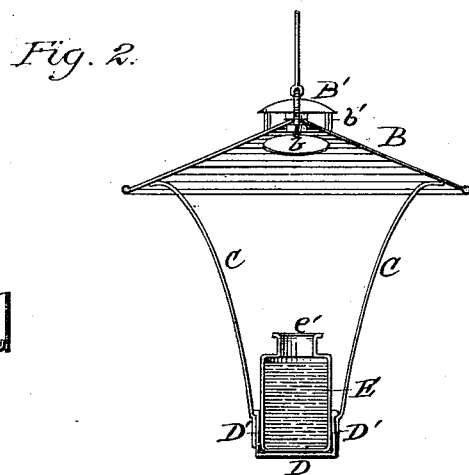
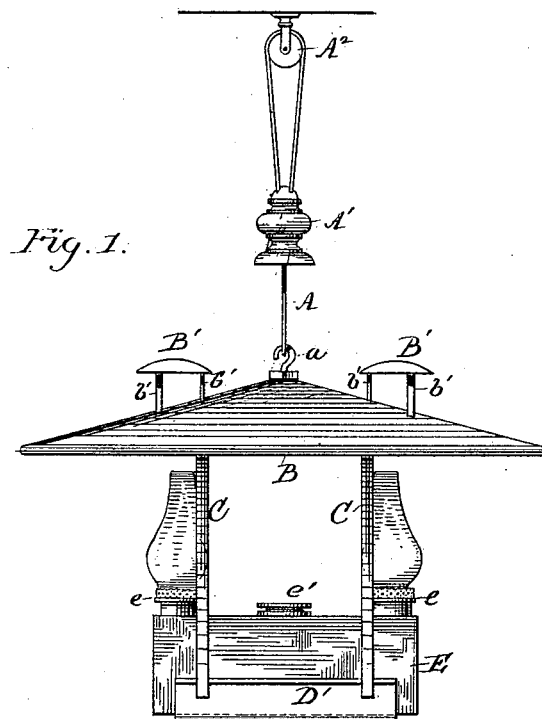
(No Model.)

A. NELSON.

LAMP.

No. 266,637.

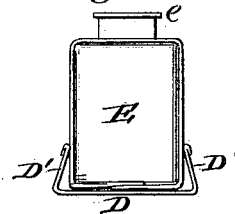
Patented Oct. 31, 1882.



*Fig. 3.*



*Fig. 4.*



Witnesses:  
R. C. Fraub  
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Inventor:  
Andrew Nelson  
By Harry J. M. Kaly

# UNITED STATES PATENT OFFICE.

ANDREW NELSON, OF RUSHFORD, MINNESOTA.

## LAMP.

SPECIFICATION forming part of Letters Patent No. 266,637, dated October 31, 1882.

Application filed April 6, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, ANDREW NELSON, a citizen of the United States, residing at Rushford, in the county of Fillmore and State of Minnesota, 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, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to an improved hanging lamp in which the body or oil-containing reservoir is movable, and is provided with two or more burners, above which is mounted a reflector provided with smokeways and caps to allow the gases and smoke to escape upward without defacing the reflector or the ceiling above. The oil-reservoir is preferably rectangular in cross-section and elongated, and is held in a clamping-seat which fits snugly to the bottom of the reservoir, and has sufficient elasticity, which is exerted inward at the top against the sides of the reservoir to hold said reservoir securely in place, but which yields enough on occasion to allow the reservoir to be withdrawn endwise, or even lifted up if sufficient force is applied. The clamping-seat is united with the reflector-top by metallic rigid straps. The whole device is suspended from the ceiling by a chain which is attached to the reflector by a hook, and is passed over a pulley secured to the ceiling. At the other end of the chain a balance-weight is secured.

The accompanying drawings form a part of this specification and illustrate the invention.

Figure 1 is a side elevation of the device. Fig. 2 is a transverse central section. Fig. 3 is a section showing how the end of the lamp-reservoir is held. Fig. 4 is an end elevation of the reservoir and seat, showing the inward tension of the sides of the seat.

Similar letters of reference indicate corresponding parts in all the figures.

A is the suspending chain or cord. It is attached to the reflector B at the lower end, and passes through an opening in the weight A' and over a pulley, A<sup>2</sup>, at the upper end, and then down, and is fastened to the weight. The

pulley A<sup>2</sup> is secured to the ceiling. The weight A' about balances the weight of the suspended lamp, so that by pulling the lamp down or pressing it up the weight will move one way or another and hold the lamp at rest at any height.

The reflector B is shown rectangular in shape, concave below, with crimps or angles extending from each corner to the center. The form of the reflector may be varied. It may be oval. Its under surface may be concave without the angles, and corrugated, if desired. It may be surfaced with any burnished or reflective material. Smokeways *b* are provided at suitable points in the reflector above the burners in the lamp, and are covered with caps B', which are mounted on short legs *b'* above the ways. These smokeways allow the gases and smoke to pass through them, instead of lodging upon and destroying the reflective quality and brilliancy of the reflector. The caps above the ways intercept the discharge of smoke and gases and prevent their rising and lodging upon the ceiling above. Straps C, attached to the reflector, reach down and have secured to their lower ends the clamping-seat D. These straps C are inflexible and rigid. They may be attached either removably or securely by solder to the reflector and clamping-seat. Their length in great measure determines the distance which the lamp will sit from the reflector. This distance is sufficient to accommodate the chimneys of the lamp, and may be varied according to the requirements of the case.

The clamping-seat D has sides D', which have a springiness or elasticity exerted inward against the body of the contained reservoir. This seat is shown as made of sheet metal, and is preferably constructed of this material; but it may be made of wire or strap metal suitably united to form a secure bottom and elastic sides. The elasticity of these sides D' is supplemented by the action of the straps C, which are rigid and properly attached to press the sides inward. The seat is open-ended and receives the reservoir E between its sides. The reservoir E is rectangular in section, and is provided with two or more burners, *e*. An opening, *e'*, provided with a screw-stopper, allows filling without disturbing the burners or

removing the reservoir. The reservoir is made as narrow as practicable, and the seat is proportionately constructed, so that a very narrow shadow would be cast under any circumstances. The shadow, however, is almost or quite dispelled by the diffusion of light from the reflector above, so that a mellow, even light is thrown over all beneath it.

This lamp is particularly designed for use in billiard-rooms over the tables, and the effectual reflection and thorough distribution of the rays, coupled with the very meager chance for shadows, make it peculiarly useful in this situation. The lamp, as is clearly apparent, is admirably adapted for use in any situation where a hanging lamp or drop-light can be used.

As stated, the form of the reflector may be varied within wide limits without departing from the spirit of the invention, and the suspending-rod may be variously formed and attached to the reflector. As shown, the way of attachment is very simple. A hook, *a*, is provided on the top of the reflector, and the cord or chain *A* is hooked or looped therein. The weight *A'* moves easily over the suspending means *A*, and a very efficient elevating or lowering means is provided.

It is practicable to attach ways on the side of the reservoir for the clamping-edges of the sides of the seat to spring into, and thus secure a firmer hold, although the pressure of the elastic sides upon a plane surface is usually

sufficient to hold the reservoir under any circumstances accidentally occurring.

The body of the receptacle is formed of a single piece of metal bent over and lapped on the bottom. The ends are drawn and inserted into this rectangular body and soldered or otherwise secured.

Having thus described my invention, what I desire to claim and secure by Letters Patent is—

1. In a hanging lamp, the combination of the rectangular-shaped reservoir *E*, slid into the seat, with the suspended lamp-seat *D*, having the inwardly-sloping elastic sides *D'* pressing against the sides of the reservoir *E*, as set forth.

2. In a hanging lamp, the combination of the reservoir *E* and clamping-seat *D D'* with the rigid straps *C*, secured to the reflector above and adding to the inward spring of the sides *D'* below, as set forth.

3. In a hanging lamp, the clamping-seat *D D'*, formed in one piece of metal, the sides *D'* being bent up and inward to press against the contained reservoir when in place.

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

ANDREW NELSON.

Witnesses:

M. J. DESMOND,  
OLE O. BORLONG.