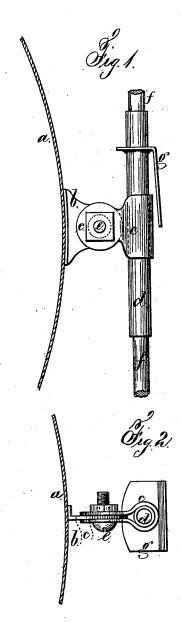
## J. H. WHITE. Reflector for Lamps.

No. 209,636.

Patented Nov. 5, 1878.



Invintor

Witnesses

James H. White.

for Lemnel W. Gerrell,

aug.

## UNITED STATES PATENT OFFICE.

JAMES H. WHITE, OF NEW YORK, N. Y., ASSIGNOR TO MANHATTAN BRASS COMPANY, OF SAME PLACE.

## IMPROVEMENT IN REFLECTORS FOR LAMPS.

Specification forming part of Letters Patent No. 209,636, dated November 5, 1878; application filed September 23, 1878.

To all whom it may concern:

Be it known that I, JAMES H. WHITE, of the city and State of New York, have invented an Improvement in Reflectors, of which the

following is a specification:

Lamp and lantern reflectors have heretofore been made with a short piece of bent metal of circular form, soldered at the back and fitting over a supporting-arm, or with a metal clip soldered at the back and fitting into a pocket in the back of the lantern. These means of holding are not adjustable.

My improvement is simplifying the construction of the adjustable support for the reflector; and the same consists in a tube adapted to slide vertically on a rod, in combination with a sheet-metal clip encircling the tube, and forming, with a piece of metal upon the reflector, a rule-joint that is tightened by a screw-pivot, and allows the angle of the reflector to be

In the drawing, Figure 1 is a side elevation of my improved reflector, and Fig. 2 is an in-

verted plan of the same.

The reflector a may be made of any desired material, preferably brass, and nickel-plated, and having an L-shaped piece of metal, b, soldered on the back, with a hole through it for the reception of a set-screw, e.

The metal clip c is preferably made of one piece, and bent circular at the back to fit around the sliding hollow tube d, and parallel

on the ends, to fit one on each side of the piece b on the back of the reflector. These ends are made with holes through them, and the setscrew e is put through the holes in c and b, and serves to clamp the parts together, and to hold upon sliding tube d more or less firmly, thereby allowing it to be moved up or down or held firmly in any position.

The rod f, passing into or through the tube d, and fastened to the lantern-case, serves to support the reflector and its parts; or the clip g, attached at the top of d, may be placed in a pocket in the back of the lantern-case, and it serves to hold the reflector. The reflector a can be inclined more or less on the pivot or set-screw e, so as to throw the rays of light up

or down.

I claim as my invention-

1. The combination, with the reflector, of the tubular slide d, clip c, plate b, and screw e, the clip c surrounding the tube d, substantially as and for the purposes set forth.

2. The sheet-metal clip g, attached to the tube d, in combination with the clip c, plate b, screw e, and reflector a, substantially as set

Signed by me this 17th day of September, A. D. 1878.

JAMES H. WHITE.

Witnesses:

HAROLD SERRELL, WILLIAM G. MOTT.