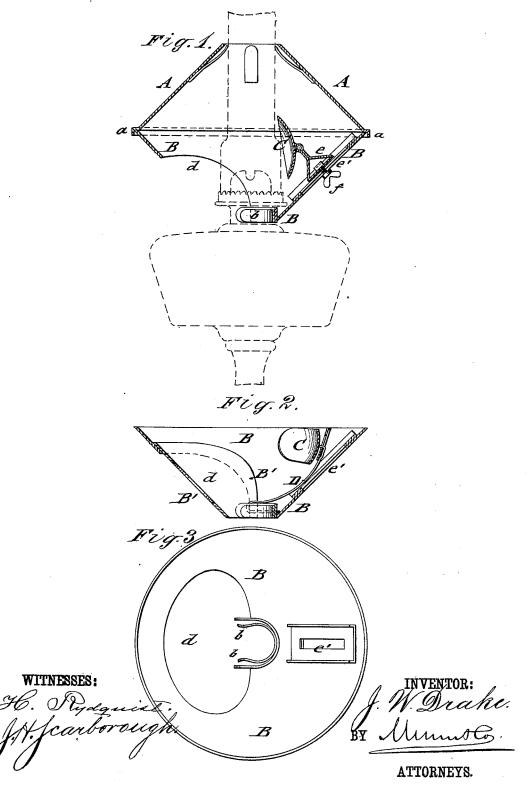
## J. W. DRAKE. Combined Lamp-Shade and Reflector.

No. 197,020.

Patented Nov. 13, 1877.



## UNITED STATES PATENT OFFICE.

JOHN W. DRAKE, OF TOLONO, ILLINOIS.

## IMPROVEMENT IN COMBINED LAMP-SHADE AND REFLECTOR.

Specification forming part of Letters Patent No. 197,020, dated November 13, 1877; application filed October 13, 1877.

To all whom it may concern:

Be it known that I, JOHN W. DRAKE, of Tolono, in the county of Champaign and State of Illinois, have invented a new and Improved Lamp-Shade and Reflector, of which the fol-

lowing is a specification:

In the accompanying drawings, Figure 1 represents a vertical central section of my improved lamp-shade and reflector, shown as applied to a lamp. Fig. 2 is a vertical central section of bottom or supporting section of shade, with reflector; and Fig. 3 is a top view of the bottom part of shade.

Similar letters of reference indicate corre-

sponding parts.

This invention has reference to an improved lamp-shade and reflector that is to be attached to ordinary lamps, and used in the trades, and for all purposes in which a strong light is required on any point, as for reading, sewing, &c. The shade and reflector are readily adjusted for the different purposes, and the light concentrated to a greater or less degree.

The invention consists of a lamp-shade with a conical top section and a lower supportingsection of inverted conical shape. The lower section has at one side a large opening for the exit of the light, which opening may be enlarged or diminished by ring-shaped sections. At the opposite side of the lower section is arranged an adjustable and detachable reflector, for throwing the light through the open-

ing of the shade.

In the drawings, A represents the upper or top part of the shade, which rests, by a circumferential flange, a, on a bottom section, B, of inverted conical shape. The top section A is made of any suitable material, and provided with metal springs, riveted to the inside, for being conveniently used on the chimney without the bottom section. The bottom section of shade fits on the lamp just under burner, being retained firmly thereon by a double spring, b, so as to be attached to any ordinary lamp. The bottom section B has at one side a large opening, d, for the escape of the light, which opening may be varied in size, according to the body of light that is desired on the work. This is accomplished by means of de- for the purpose set forth.

tachable ring-shaped sections B', or by a piece with a round hole, closed by a glass of suitable color, or by a lens, in the nature of a dark-lantern or locomotive head-light.

At a point of bottom section B diametrically opposite to opening a is attached a reflector, C, that can be moved up or down by its sliding and guided base e in a slot; e', and fastened by a clamp-screw, f, to suit burner. The reflector is hinged to base, to be turned up or down, in order to adjust the reflector to the opening of the shade and throw the light through the center of the opening to a point nearer to or farther from the lamp, as required. The reflector may be detached by turning the clamp-screw into the direction of the slot, and the shade used without the same. If it is desired to use the reflector without the bottom section of shade, the reflector may be applied to the upper end of a wire support, D, as shown in Fig. 2, that is bent at the lower end, so as to form spring-clamps for fastening to the lamp in the same way as bottom section B. The reflector may thus be used with or without either part of shade, being, by the wire support, more conveniently used with different kinds of chimneys.

The shade may be made of tin, zinc, pasteboard, or other material, the pasteboard shade being preferably provided with a metallic bottom rim for fastening to lamp. The reflector may be of round or oval shape, and either of some bright metal or of silvered glass, as desired, but being made somewhat smaller than

the common reflector in use.

The shade and reflector are readily adjusted to the different purposes for which the lamp is needed, so as to adapt the same to common family as well as business use, in simple and convenient manner.

Having thus described my invention, I claim as new and desire to secure by Letters Patent-

1. A lamp-shade consisting of a top section and a supporting bottom section, the bottom section being of inverted conical shape, and having an opening for the light, in combination with an interior adjustable reflector that throws the light through the opening, substantially as and 2. A lamp-shade composed of a top section and a supporting bottom section, of which the latter has a side opening for the exit of light, with an adjustable and detachable reflector arranged at the inside of the shade, at a point diametrically opposite the light-opening, substantially as set forth.

3. The combination of the supporting bottom section of the lamp-shade, having side

opening for the exit of the light, with one or more detachable ring-sections, for enlarging or diminishing the light-opening, substantially as shown and specified.

JOHN W. DRAKE.

Witnesses:

ROBERT A. BOWER, THOS. M. SALISBURY.