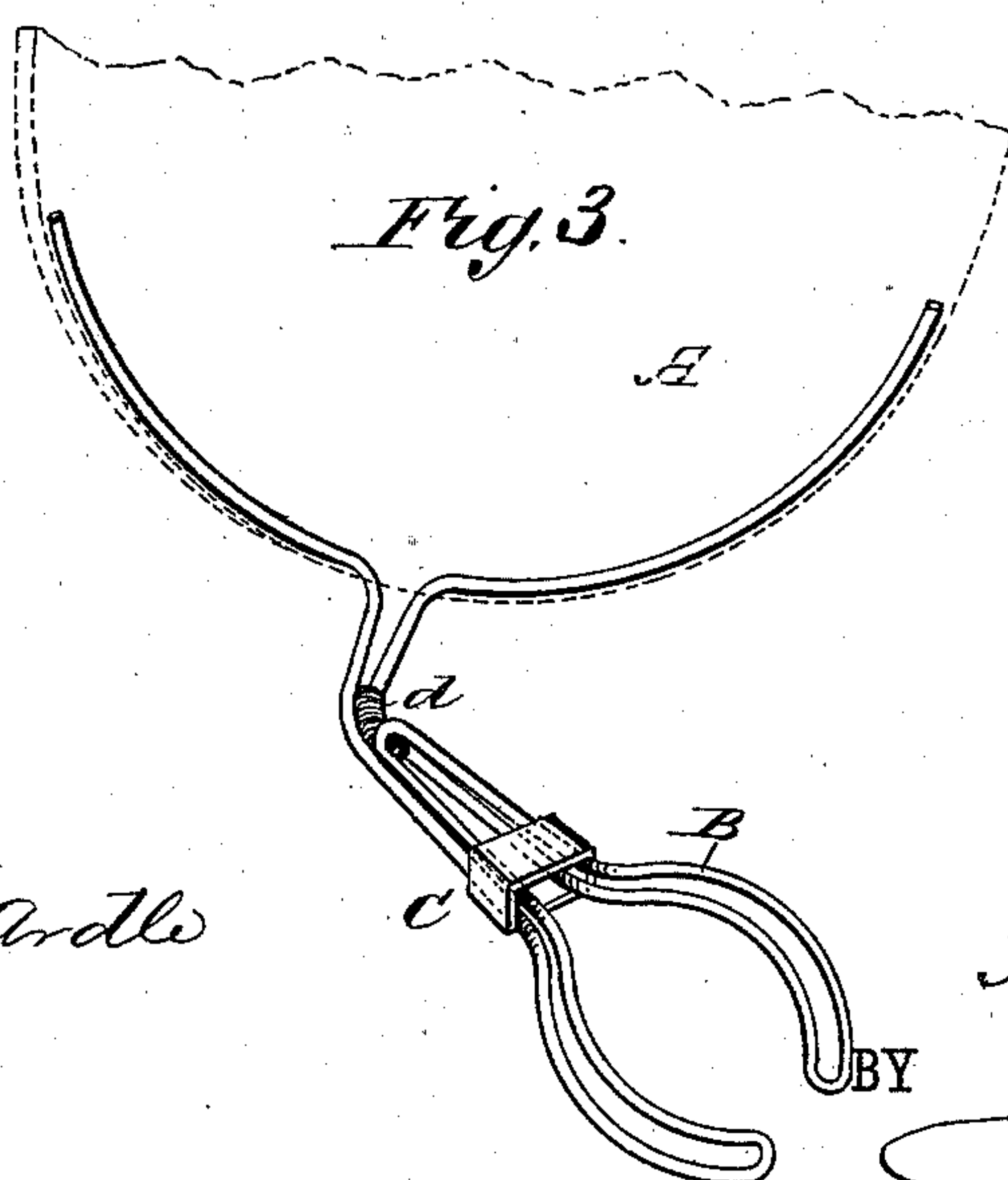
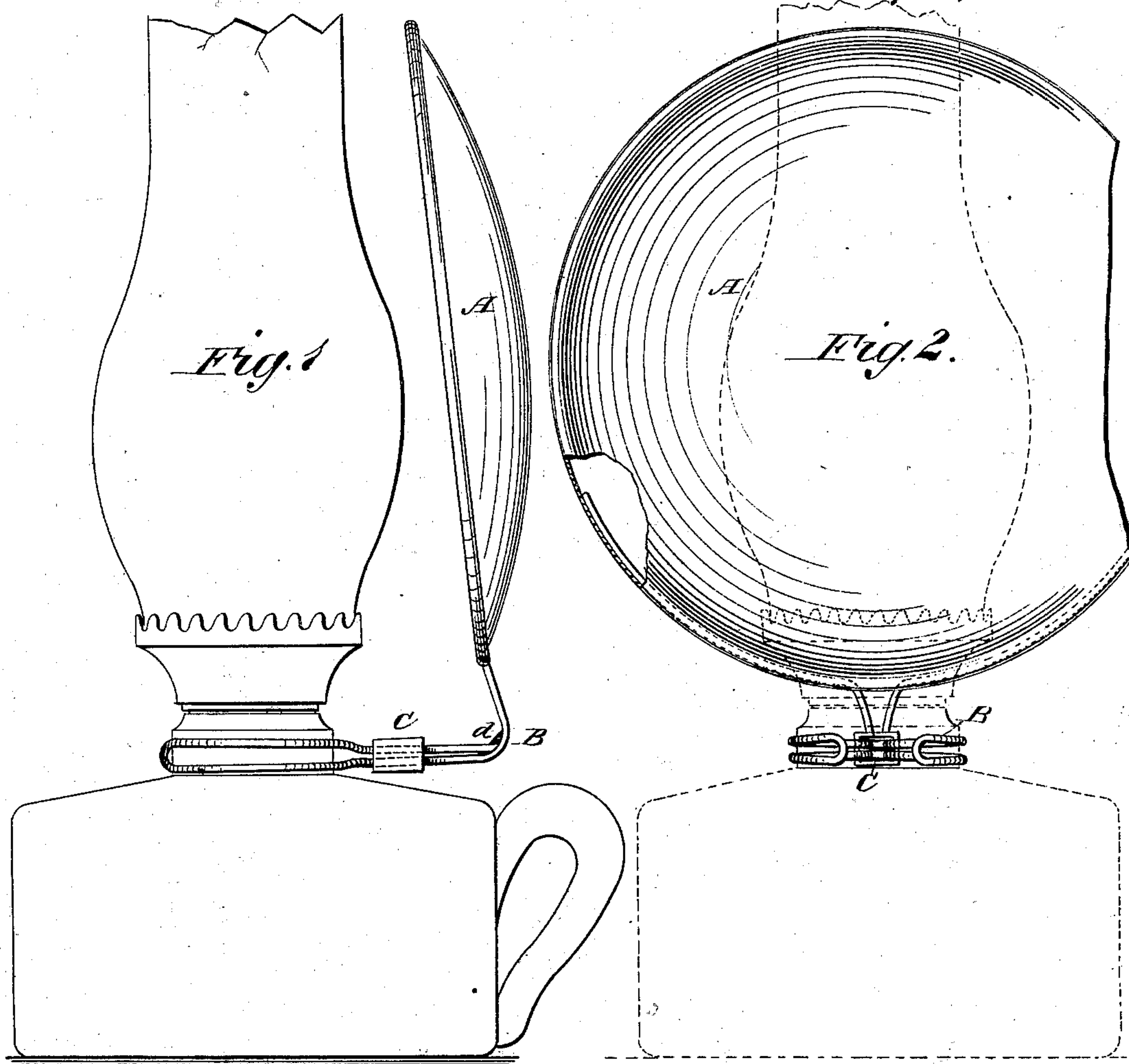


(Model.)

H. E. HALEY.
Lamp Reflector.

No. 241,649.

Patented May 17, 1881.



WITNESSES:

Francis M. Ardle
C. Seaguirch

INVENTOR:

H. E. Haley
Munn & Co.

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY E. HALEY, OF MONROE, MAINE, ASSIGNOR TO HIMSELF AND BEVERLY S. STAPLES, OF SAME PLACE.

LAMP-REFLECTOR.

SPECIFICATION forming part of Letters Patent No. 241,649, dated May 17, 1881.

Application filed March 3, 1881. (Model.)

To all whom it may concern:

Be it known that I, HENRY E. HALEY, of Monroe, in the county of Waldo and State of Maine, have invented certain new and useful
5 Improvements in Lamp - Reflectors, of which the following is a specification.

My invention aims to provide a simple, inexpensive, and efficient reflector which may be readily applied to ordinary lamps or lanterns
10 and as readily detached when not desired.

My invention consists in the special manner of forming the clasp-arm of bent wire, as hereinafter fully set forth.

In the accompanying drawings, Figure 1 presents a side elevation of my improved reflector applied to an ordinary hand-lamp. Fig. 2 is a front elevation thereof, with the lamp partly indicated by dotted lines. Fig. 3 is a perspective plan view of the wire clasp-arm
15 detached from the reflector, which, however, is indicated by dotted lines.

Similar letters of reference indicate corresponding parts.

In Figs. 1 and 2, A indicates the reflecting plate or disk, which is preferably circular and concave on its reflecting-face; but it may be of other shapes or flat on its reflecting-face, if desired.
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I prefer to form this reflector of common tin-plate, stamped into shape, made bright on its reflecting-surface, and painted on its back; but other constructions may be used, as circumstances require.
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From the lower edge of the reflector a supporting-arm, B, extends downward and thence projects horizontally at right angles, or nearly so, to the face of the reflector. This arm is forked to straddle or embrace the collar of the lamp, and its forked branches are elastic, yielding, or springy, to clasp the collar with an elastic pressure. The outer ends of the branches are curved to approximately correspond to the curve of the collar, and the inner ends of the branches are straight but slightly divergent,
35 40 45 50 and are encircled by a sliding sleeve, C, which may be adjusted back and forth thereon to contract or expand the spread of the branches or jaws more or less, and thus adjust their grasp to collars of varying size or to tighten the grasp in a positive manner when applied to the collar. This adjustable clasp-arm is

made from one piece of wire bent into form, as shown in the drawings, more especially Fig. 3. Thus the two extremities of the piece of wire are spread out and soldered to the back of the reflector around the lower edge, as indicated in dotted lines in Fig. 2, thus making the attachment of the arm to the mirror very secure. The two branches of wire are then bent in parallel loops, placed in vertical plane, to form the clasp-arm, as already described, and the upper limbs of these loops return on the lower limbs toward the root of the arm, where the central bend in the wire is soldered to the two branching ends thereof, which connect to the reflector, as shown at *d*, thus rendering the construction very simple, strong, and light. Furthermore, by thus making the clasp of wire in loops each limb of the loops bears on the lamp-collar, thus providing more numerous points of contact and rendering the grasp more secure than would be the case with a flat sheet-metal clasp.
55 60 65 70

It may be observed that the curve on the ends of the forked clasp-arm includes a little more than a half-circle, so that when pressed against the collar of the lamp the jaws will spring open to admit the collar and then automatically contract therein and grasp the collar with an elastic pressure, thus sustaining the reflector in an upright position behind the light, as shown in Fig. 1. It will thus be seen that the reflector is not only very readily applied to the lamp in this way and securely held when so attached, but it may be as readily detached by the action of the hand when its use is not desired. Furthermore, by adjusting the sliding sleeve C forward the clasp-arm may be forcibly contracted to embrace the collar with a positive grasp, rendering the attachment more secure, and will also serve to adjust the grasp to collars of various sizes; and it will be readily understood that by sliding the sleeve in the opposite direction the grasp will be relaxed to allow the removal of the device.
75 80 85 90 95

By means of this device it is believed that I fulfill a practical want in connection with ordinary lamps or lanterns of a simple and efficient readily attachable and removable reflector; for while simple attachable and detachable lamp-shades have been provided in various forms, I am not aware that any re-
100

flector such as mine has been hitherto presented.

Now, for a great many purposes shades are not desirable, as they diffuse little light in the room, but concentrate it in one spot directly below and around the lamp, whereas for many purposes it is desired to throw the light strongly to a distance in one direction and to shade the light in another direction. Thus for hand-lamps my reflector is particularly desirable, as it will throw all the light in advance of the person and at the same time shade his eyes from the flame, preventing the dazzling of the eyes and brightly illuminating the way.

If the lamp be a table-lamp the reflector may be readily applied to it when used as a hand-lamp and as readily detached, if required, when placed on the table.

In lamps in sick-rooms the device will also be found of great advantage, as it may be so applied to the lamp as to shade the room effectually in the direction of the sick person and throw all the light in one direction only, where it may be required by the nurse.

Finally, the simple character of the reflector and its readily attachable and detachable character renders it adapted for general use and convenient for attachment to lamps of any kind and in any position, whether on chandelier or bracket or for mantel, table, or hall lamps, whereby the light may be thrown in any desired direction and more effective illumination thus secured with less consumption of oil.

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

A supporting-arm for reflectors for lamps or their equivalent formed of one piece of wire bent into the form of a forked clasp, with the bends returning on each other and the end of the wire secured to the reflector, substantially as herein shown and described.

HENRY E. HALEY.

Witnesses:

R. A. RICH,

JOHN T. ANIRELL.