No. 670,536. Patented Mar. 26, 1901.

T. E. CLARK & R. ERNST.

SHIELD AND REFLECTOR FOR ELECTRIC LIGHTS.

(Application filed June 23, 1900.)

(No Model.)

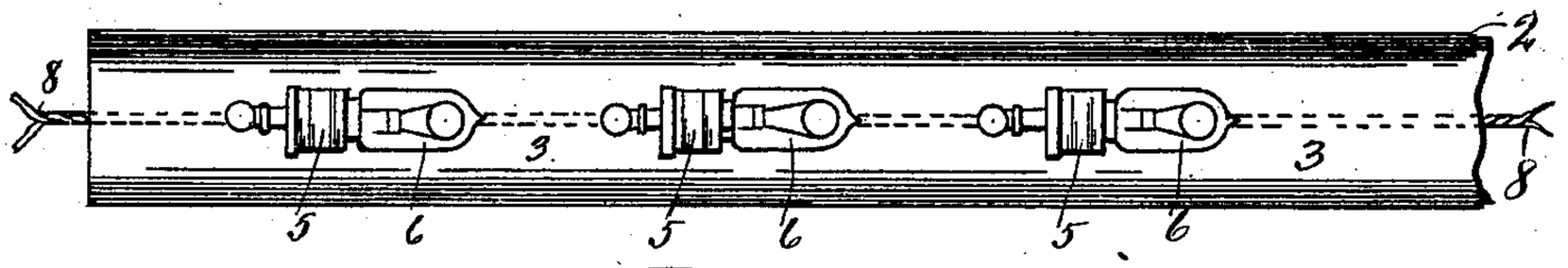


Fig. 1.

Fig. 2.

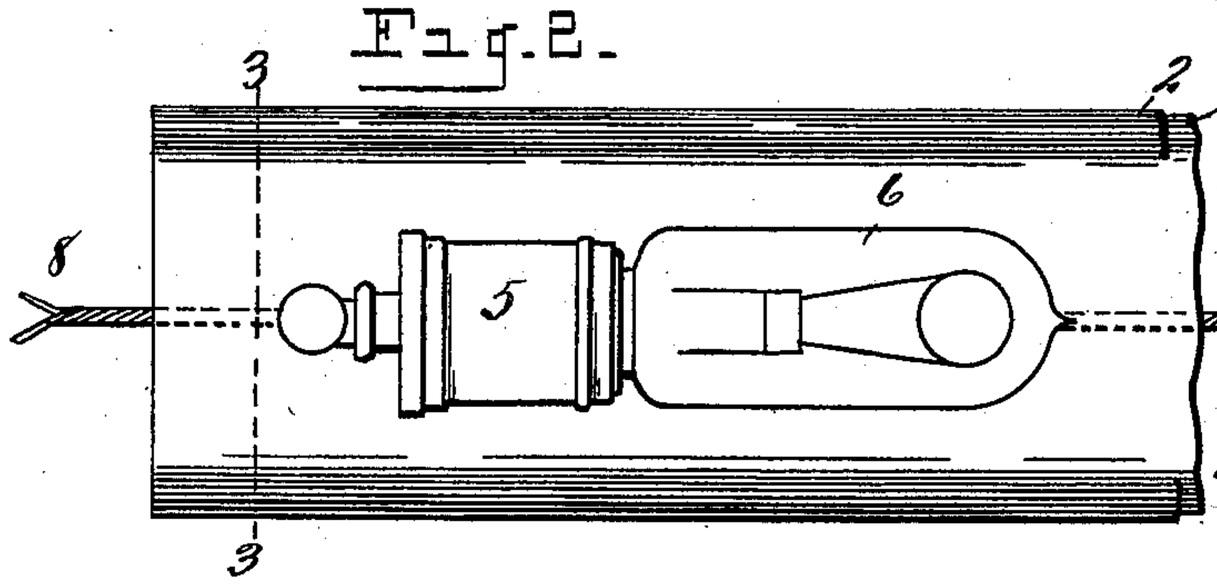
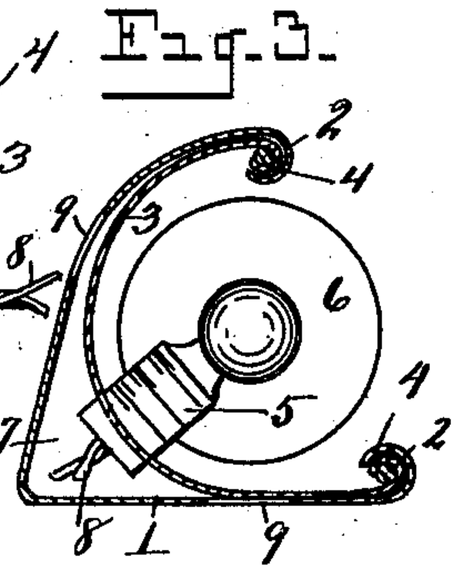
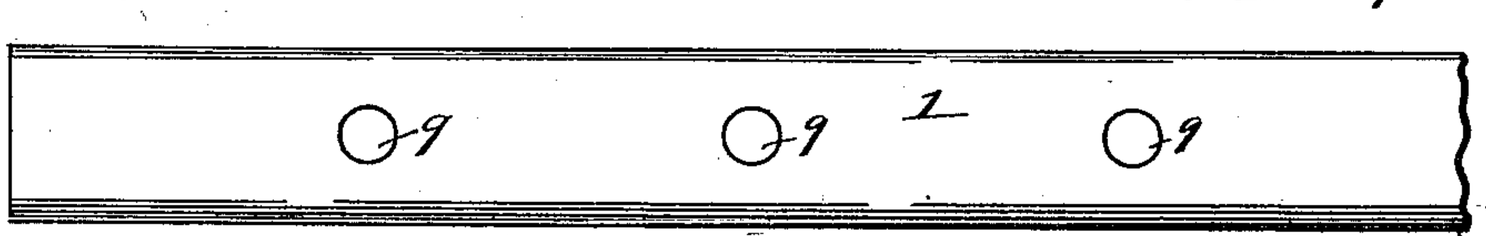


Fig. 3.





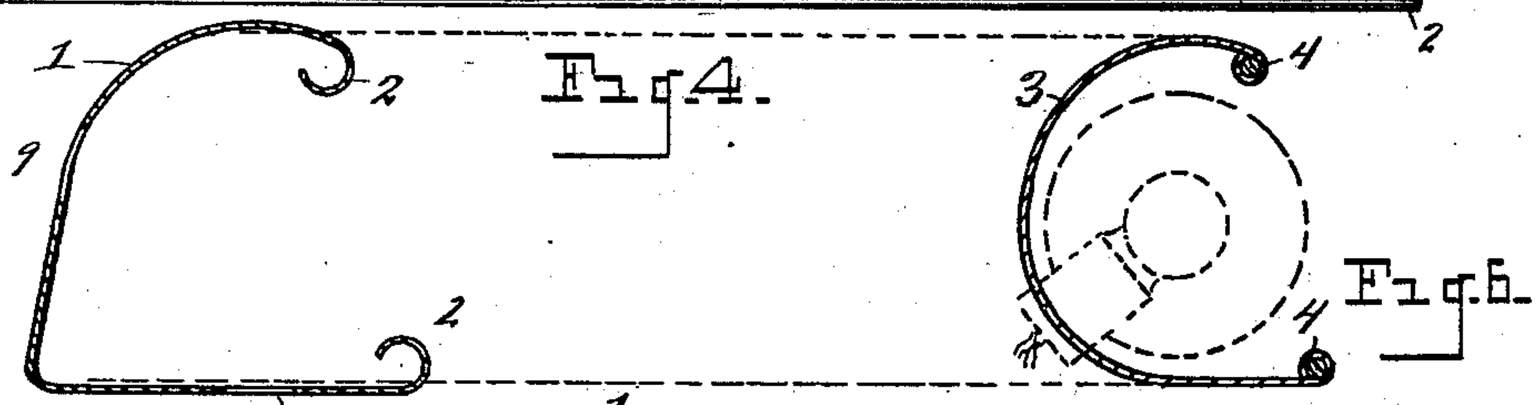


Fig. 4.

Fig. 5.

Fig. 6.

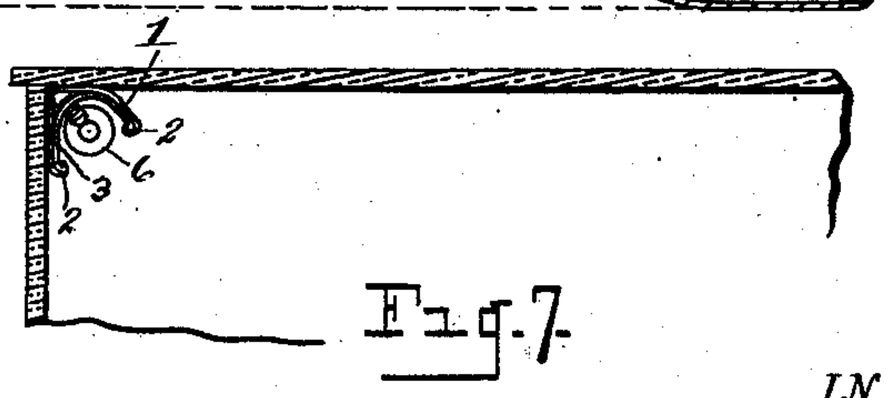


Fig. 7.

WITNESSES.

O. B. Barzyger.

L. Edna Graham

INVENTORS

Thomas E. Clark

Richard Ernst

By R. B. Wheeler & Co.

Attorneys.

UNITED STATES PATENT OFFICE.

THOMAS E. CLARK AND RICHARD ERNST, OF DETROIT, MICHIGAN; SAID ERNST ASSIGNOR TO SAID CLARK.

SHIELD AND REFLECTOR FOR ELECTRIC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 670,536, dated March 26, 1901.

Application filed June 23, 1900. Serial No. 21,253. (No model.)

To all whom it may concern:

Be it known that we, THOMAS E. CLARK and RICHARD ERNST, citizens of the United States, residing at Detroit, in the county of Wayne, State of Michigan, have invented certain new and useful Improvements in Shields and Reflectors for Electric Lights; and we do 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 figures of reference marked thereon, which form a part of this specification.

This invention relates to a shield and reflector for electric lights, especially designed for illuminating show-windows and show-cases; and it consists in the construction and arrangement of parts hereinafter fully set forth, and pointed out in the claims.

The object of the invention is to provide a portable or detachable reflector for electric lamps to occupy the margin of show-windows and show-cases in which the arrangement is such as to protect the eye from the direct rays of light and at the same time throw a flood of light upon the objects displayed. A further arrangement provides a conduit for the conductor-wires leading to the lamps, so as to conceal and protect said wires and prevent the possibility of fire therefrom.

The above object is attained by the arrangement illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of a portion of a reflector-strip embodying our invention. Fig. 2 is a like view, enlarged, showing a small section of the reflector-strip with a lamp seated therein. Fig. 3 is a transverse section as on line 3 3 of Fig. 2. Fig. 4 is an elevation of the outer casing which receives and supports the reflector proper. Fig. 5 is a transverse section through said casing. Fig. 6 is a like section through the reflector-strip removed from the casing. Fig. 7 is a detail in section showing the application of the reflector to the corner of a show-case or display-window.

Referring to the characters of reference, 1 designates a metallic casing of angular formation and of such length as to correspond with the length of the reflector it is desired to use. Said casing is formed, preferably, of sheet metal whose marginal edges stand approximately parallel and are bent to form receiving-channels or oblong eyes 2. The reflector 3 is also formed of sheet metal and describes the arc of a circle, its length being equal to the length of the exterior casing. The margins of the reflector are rolled onto a strand, as shown at 4, so as to form rounded terminals adapted to lie in the channels 2 in the outer casing in a manner to secure said parts together when the reflector is placed within the casing, as shown in Fig. 3. The surface of the reflector is polished or coated to give it proper refractory qualities.

In the reflector 3 are mounted at intervals the sockets 5, which receive the electric-light bulbs 6 in a manner well understood in the art.

When the reflector is placed within the casing, a channel or conduit 7 is formed between the casing and reflector, along which pass the conductor-wires 8, leading to the light-bulbs, whereby said wires are perfectly concealed and protected within a metallic conduit, obviating the liability of fire through contact of said wires with any combustible material. To provide for a radiation of heat generated by the lights, the outer casing 1 is apertured, as shown at 9, opposite the light-bulbs, whereby an accumulation of excessive heat adjacent the lights is prevented.

In placing this reflector in position for use the outer casing is first secured in position, when the reflector-strip, with its accompanying lights, is shoved longitudinally into the outer casing, whereby said reflector is firmly supported, but in such manner as to enable it to be readily removed when desired.

The shape of the casing and reflector is such as to conceal the light-bulbs from opposite sides and yet throw a strong flood of light onto the objects displayed, so that while the light is brilliant it is uniform and the eye is protected from the sharp direct rays of the light-bulbs.

The manner of mounting the reflector enables a strip of lights to be moved from place to place by simply withdrawing the reflector

from the casing and moving said casing to any desired point, when the reflector may be again placed therein.

This reflector is especially adapted for illuminated decorating, as it can readily be secured in place and in any desired position, at the same time concealing and protecting the conductor-wires, so that the appearance is finished and ornate. Where the outer casing is exposed to view, it may be finished in any suitable way to render it ornamental. This reflector may also be used as foot-lights and ceiling-lights for stage effects, as well as for show-window purposes.

Having thus fully set forth our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the outer angular casing having ways in its marginal edges, the reflector carrying the light-bulbs having a rolled margin adapted to engage in said ways, when said parts are placed together, whereby the reflector carrying the lights is detachably retained in position.

2. The combination of the metallic casing shaped to fit into a corner and having an engaging member along its margins, a curved reflector adapted to slide within the casing and have its margins engaged by the margins of said casing, light-bulbs mounted upon said reflector, the conductor-wires from said bulbs lying in a way between the casing and reflector, said casing having ventilating-openings therethrough opposite said light-bulbs.

3. The combination of the metallic casing shaped to fit into a corner and having an engaging member at or adjacent its margins, a curved reflector adapted to lie within the casing having its margins engaged by said engaging members, light-bulbs mounted upon said reflector, the conductor-wires from said bulbs lying in a way formed between the reflector and casing.

In testimony whereof we sign this specification in the presence of two witnesses.

THOMAS E. CLARK.
RICHARD ERNST.

Witnesses:
E. S. WHEELER,
C. EDNA JOSLIN.