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COMBINED REFLECTOR AND GUARD FOR ELECTRIC LAMPS.

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UNITED STATES PATENT OFFICE.

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COMBINED REFLECTOR AND GUARD FOR ELECTRIC LAMPS.

No. 835,475.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed March 21, 1904. Serial No. 199,110.

To all whom it may concern:

Be it known that I, George A. Russell, a citizen of the United States, residing at Worcester, in the county of Worcester and 5 State of Massachusetts, have invented a new and useful Combined Reflector and Guard for Electric Lamps, of which the following is a specification.

This invention relates to an attachment 10 for use in connection with incandescent elec-

tric lamps.

The especial object of this invention is to combine a reflector with the protector or

guard for an electric-lamp globe.

To this end this invention consists of the attachment as an article of manufacture and of the combinations of parts therein, as hereinafter described, and more particularly pointed out in the claims at the end of this 20 specification.

In the accompanying drawings, Figure 1 is a side view of an attachment constructed according to this invention; and Fig. 2 is a perspective view of the reflector, the position of 25 an electric-lamp globe with relation thereto

being indicated by dotted lines.

The lamp guard or protector herein illustrated is one of that class of lamp-guards which are fastened upon and supported by 30 the electric-light globe itself.

The especial object of this invention is to combine an electric-lamp guard of this class with a reflector, the guard forming the sup-

port of the reflector.

Referring to the accompanying drawings and in detail, the lamp-protector herein illustrated comprises the end ring 10, an end washer 11, and the frame-wires 12. The frame-wires 12 are held in place by the

40 spreading-rings 13.

Extending in from the open end of the protector-frame are spring-wires 14, which engage the electric-lamp globe. The wires 14 are secured in place and form a means for centering the framework of the guard upon an electric lamp, substantially as described in my previous application, filed November 9, 1903, Serial No. 180,294, and it is to be understood that in this application for pat-50 ent I do not wish to claim the special construction of lamp-guard herein illustrated. Hinged onto the end ring 10 is a catch or

swinging section 15, which carries the coiled spring 16.

The reflector which I have herein illus- 55 trated comprises a body portion B with the rounded end section R, these two parts being connected together by the ordinary tinners' hem.

The reflector is intended to fit up close to 60 the side of an electric-lamp globe and to concentrate or reflect the light to one side.

In the construction herein illustrated the reflector fits inside of the framework of the lamp-guard, and it is held in place between 65 the frame-wires and the spring-fingers of the guard without requiring special fastenings to

hold the same in place.

When a complete attachment constructed according to this invention is applied to an 70 electric lamp, it forms a convenient and efficient means for concentrating and reflecting the light, so that it is especially adapted for use in workshops or desk-lamps or similar locations.

One particular advantage in the use of an attachment as thus constructed is due to the fact that the lamp-guard can be turned or rotated so that the reflector may be rotated to any desired position.

I am aware that changes may be made in the construction of attachments for electric lamps by skilled mechanics without departing from the scope of my invention as expressed in the claims. I do not wish, there- 85 fore, to be limited to the construction I have herein shown and described; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. As an article of manufacture, a com- 90 bined lamp protector and reflector comprising a protector-frame, means for fastening the protector-frame upon the neck of the bulb of an electric lamp, spring centeringfingers extending from the base-ring of the 95 protector-frame to engage near the other end of the electric-lamp bulb, and a reflector mounted inside the protector-frame and held in place by the centering-fingers.

2. In a construction of the class described, 100 the combination of an electric-lamp bulb, a protecting-frame inclosing the lamp-bulb and rotatably mounted with respect thereto, and comprising a protector-frame, a hinged part

adapted to engage the neck of the lamp-bulb, centering-fingers extending from the base-ring of the protector-frame to engage near the other end of the lamp-bulb, and a reflector mounted inside the protector-frame and held in place by the centering-fingers.

In testimony whereof I have hereunto set

adapted to engage the neck of the lamp-bulb, | my hand in the presence of two subscribing centering-fingers extending from the base- | witnesses.

GEORGE A. RUSSELL.

Witnesses:

PHILIP W. SOUTHGATE, Louis W. Southgate.