

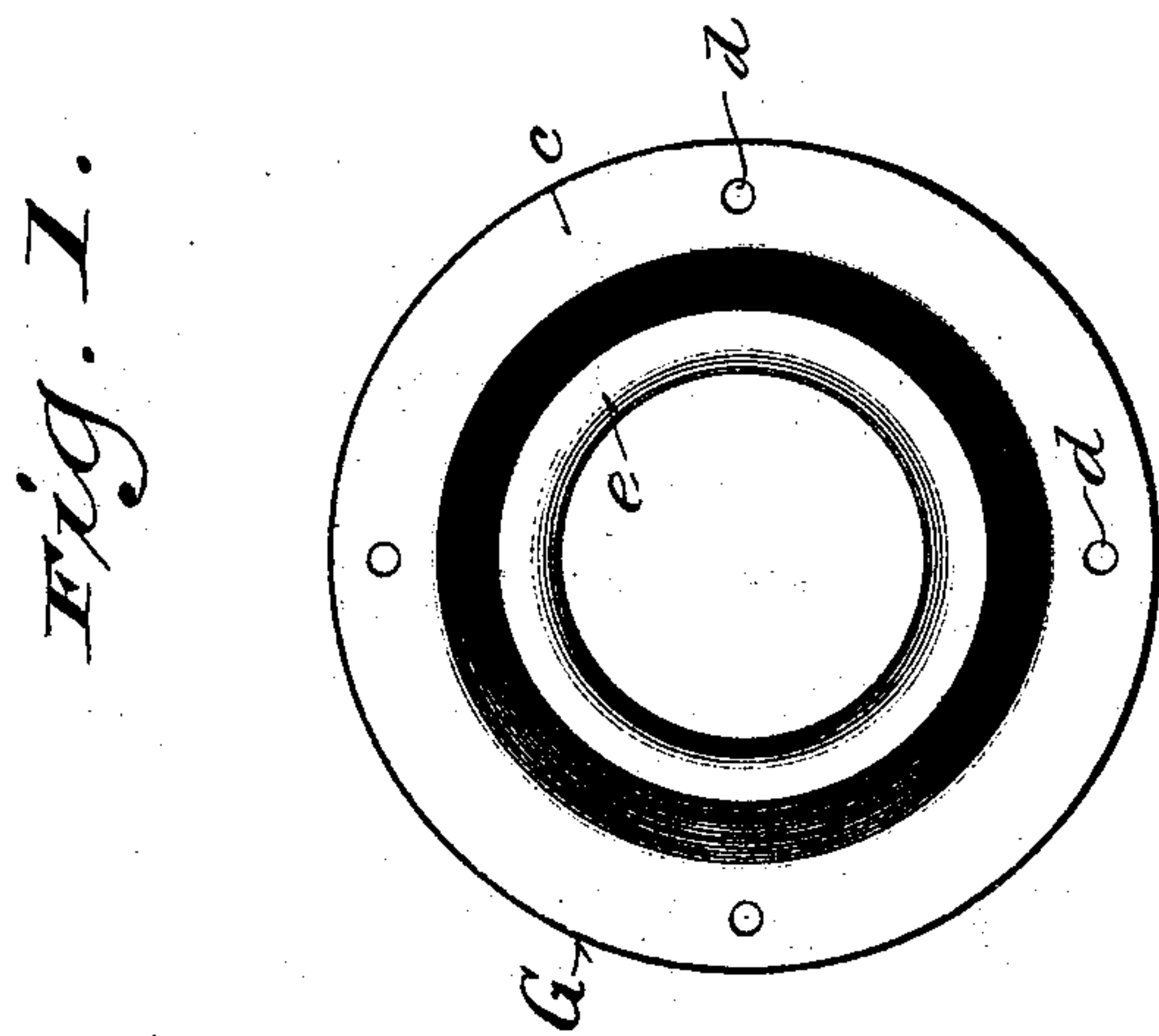
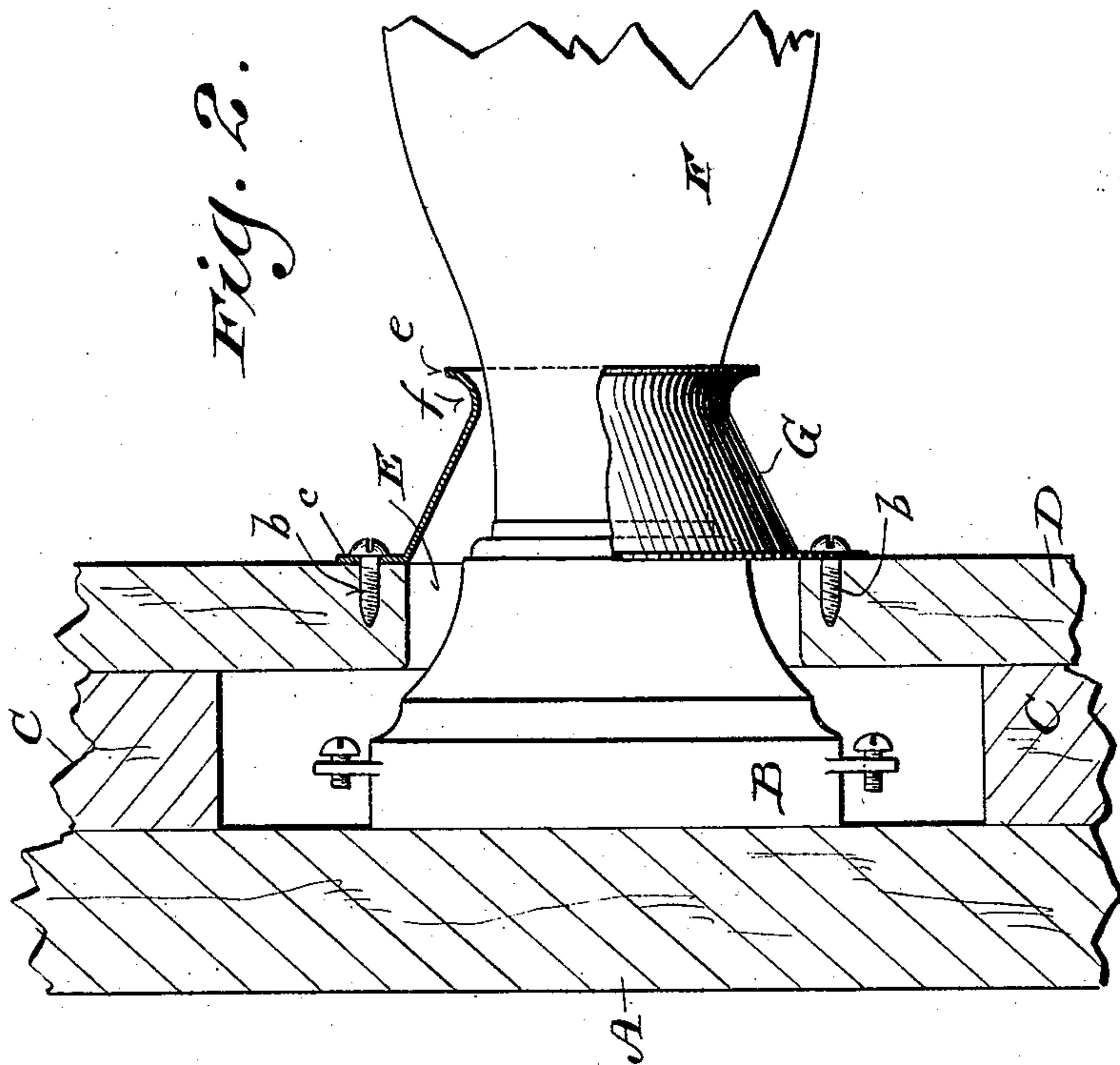
No. 668,630.

Patented Feb. 26, 1901.

E. ECKL.
ELECTRIC LAMP PROTECTOR.

(Application filed Mar. 31, 1900.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

EDWARD ECKL, OF MILWAUKEE, WISCONSIN.

ELECTRIC-LAMP PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 668,630, dated February 26, 1901.

Application filed March 31, 1900. Serial No. 10,874. (No model.)

To all whom it may concern:

Be it known that I, EDWARD ECKL, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Electric-Lamp Protectors; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has especial reference to protectors for incandescent electric lamps when used in signs and other displays in the open air; and it consists in means for protecting the point of union between the lamp and its socket, as will be more fully set forth herein-after and subsequently claimed.

In the drawings, Figure 1 is a plan view of one of my protecting-mantles; and Fig. 2 is a view, partly in elevation and partly in section, illustrating the operation of my invention, the mantle being herein shown as partly broken away to disclose the joint of the lamp and socket.

Heretofore incandescent electric lamps have been employed in signs and other out-of-doors displays, being grouped or arranged so as to form the letters or figures of the signs and various ornamental objects; but it has been found that the consequent exposure to rain, snow, and the like has often resulted in the early injury or destruction of the sign or display, this injury being most frequently caused by water entering at the joint of the lamp and socket, and to obviate this is the principal object of my present invention.

Referring to the drawings, A represents a back-board forming the foundation of the sign or other display.

B represents an ordinary incandescent electric-lamp socket securely attached to the back-board A and projecting therefrom. C C represent strips or blocks secured to the said back-board A, and D represents a face-plate secured to said strips or blocks C C and formed with openings, as indicated at E, through which the outer end of the socket B projects, but without contact therewith.

F represents an ordinary incandescent electric lamp screwed into the socket B in the usual manner, and G is my protecting-mantle, which is secured to the face-plate D, as by nails or screws *b b*, before the lamp F is

screwed to its socket. In its preferred form this mantle G (which may be made of metal, glass, porcelain, or any other suitable substance) consists of an annular cap having a base-flange *c*, formed with holes *d d* to admit the passage of the nails or screws *b b* there-through, while the main body of the annular wall of the mantle converges conically as it approaches its outward end and then diverges or spreads outwardly on a continuous annular rounded line, so as to form the rounded flaring annular top flange *e* and back of the same the rounded annular exterior channel *f*.

The operation of my device will be readily understood from the foregoing description of its construction, taken in connection with the accompanying drawings. The mantles G are applied to the face-plate D, so as to entirely surround the described openings E in said face-plate, through which the outer ends of the sockets B project, and the size of the openings in the outer or top end of the said mantles being only just sufficient to permit the small ends of the lamps F to extend there-through and be screwed to the sockets without any contact between the mantles and lamps. If desired in any instance, the mantles G may be attached directly to the back-board A, in which case the annular walls of the mantles would be of sufficient length to surround and protect the sockets B and still extend as far outwardly around the lamps F as in the illustration given in Fig. 2; but in any event there should be no contact between the mantles and the lamps or their sockets. I have not deemed it necessary to illustrate the circuit-wiring of the sockets or the nails, screws, or other fastening devices which secure the sockets to the back-board A or which serve to hold the latter and the strips or blocks C C and face-plate D all together, as the same may be of any ordinary and usual construction, having nothing to do with my present invention.

By the use of my invention the joints or unions between the lamps and their sockets are fully protected from the weather, and any rain, hail, snow, or the like which falls upon the mantles will readily drop therefrom, being guided and guttered by the described annular channels *f* in the said mantles.

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

1. A protective device for incandescent electric lamps and their sockets, comprising a recessed back-board for the reception of the socket, a socket and lamp secured thereto, and an annular open mantle surrounding the point of union between the lamp and socket, but free from contact with either.

2. A protective device for incandescent electric lamps and their sockets, comprising a recessed back-board for the reception of the socket, a socket and lamp secured thereto, and an annular open mantle, surrounding the point of union between the lamp and socket, but free from contact with either, and with the annular wall of said mantle converging toward its outer end and thence flared outwardly, whereby an annular exterior chan-

nel or gutter is formed just back of said outer end.

3. A protective mantle for incandescent electric lamps and their sockets, comprising a recessed back-board for the reception of the lamp-socket, an annular open cap having a base-flange abutting against and attached to the rim of said recess, an annular wall converging as it approaches its outer end, and an outwardly-flaring outer end with an annular exterior channel or gutter just back of said outer end.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

EDWARD ECKL.

Witnesses:

H. G. UNDERWOOD,
B. C. ROLOFF.