H. C. WIRT.

RECEPTACLE FOR INCANDESCENT LAMPS.

APPLICATION FILED FEB. 27, 1906.

917,229. Patented Apr. 6, 1909.

Fig. 1.

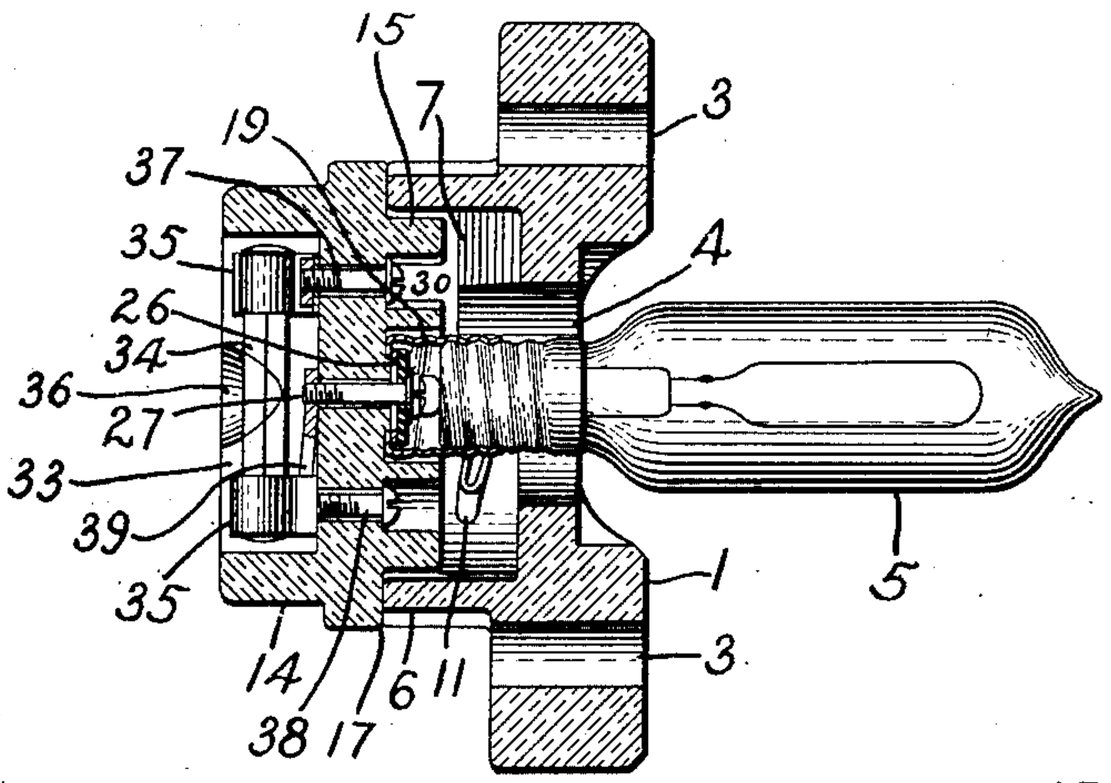


Fig. 2.

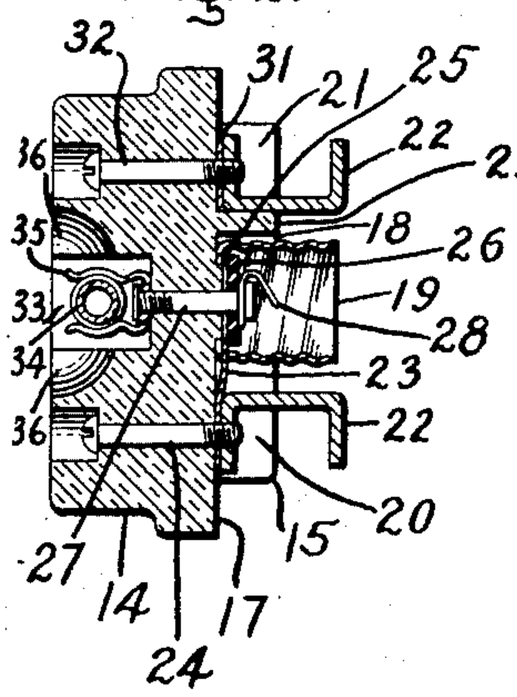


Fig. 3.

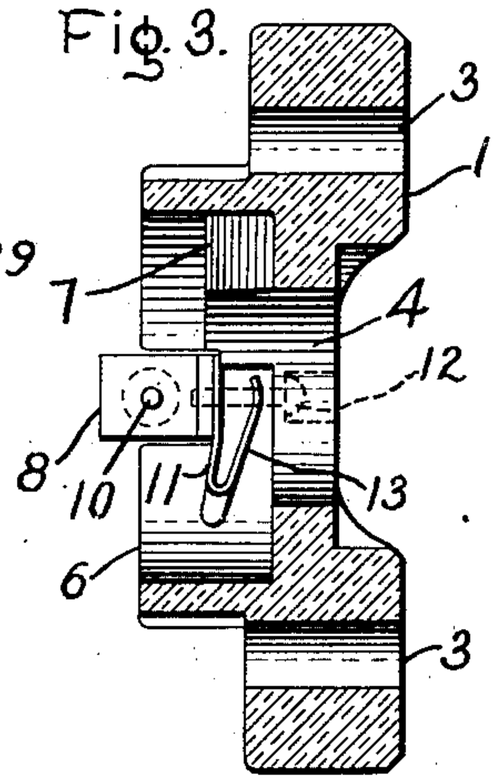


Fig. 4.

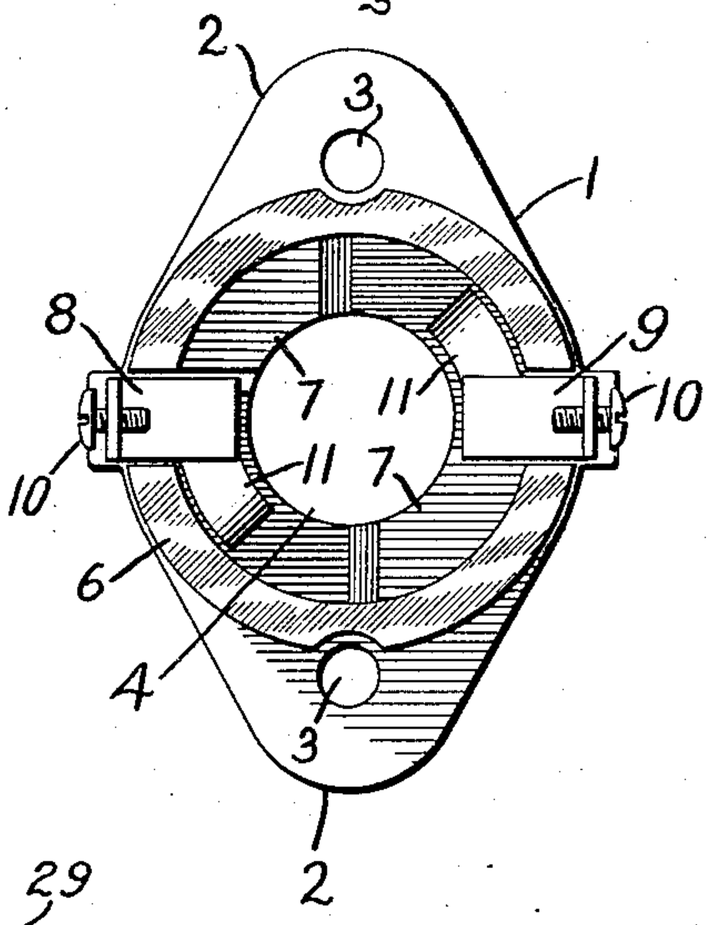
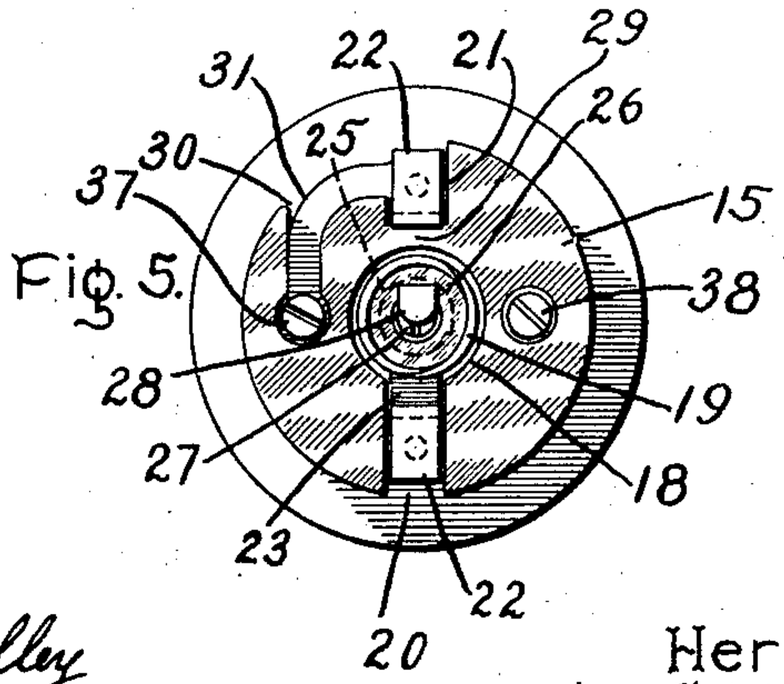


Fig. 5.



Witnesses:
Burchard V. Kelley
Helen Alford

Inventor:
Herbert C. Wirt.
by Albert G. Davis
Atty.

UNITED STATES PATENT OFFICE.

HERBERT C. WIRT, OF SCHENECTADY, NEW YORK, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

RECEPTACLE FOR INCANDESCENT LAMPS.

No. 917,229. Specification of Letters Patent. Patented April 6, 1909.

Application filed February 27, 1906. Serial No. 303,269.

To all whom it may concern:

Be it known that I, HERBERT C. WIRT, a citizen of the United States, residing at Schenectady, in the county of Schenectady, State of New York, have invented certain new and useful Improvements in Receptacles for Incandescent Lamps, of which the following is a specification.

This invention relates to sockets or receptacles for incandescent electric lamps, and more especially those used for indicating the presence or absence of current in apparatus connected to switchboards and the like devices.

The object of the invention its o provide a thoroughly protected device of this character which is adapted for a ready renewal of lamps and also of compact design so that it will not encroach upon the space occupied by other devices supported by the switchboard.

In carrying out my invention, I provide a stationary insulating part adapted to be permanently attached to a panel board or other support and having suitable contact means for connecting with line conductors, and a removable insulating part provided with rigid contacts for detachably engaging the contacts on the stationary member and also operating to hold the two members in engagement, and lamp receiving contacts mounted between the rigid contacts and connected respectively therewith, the connection to the center lamp contact being provided with means for detachably receiving an inclosed fuse whereby the filament of the lamp is protected against abnormal currents.

In the accompanying drawing, which forms a part of this specification, I have shown the preferred form of my invention, Figure 1 being a vertical axial section of the receptacle with an incandescent lamp attached thereto; Fig. 2 is an axial section of the movable part taken at right angles to that shown in Fig. 1; Fig. 3 is a vertical axial section of the stationary member; Fig. 4 is a plan view of the same; and Fig. 5 is a plan view of the movable member.

The stationary insulating member 1 has end extensions 2 in which are holes 3 for the screws for attaching the receptacle to the panel board or other support. At the center is a cylindrical aperture 4 through which the lamp 5 is free to pass in connecting and disconnecting the movable member. The left-hand side of the stationary member is provided with a crown projection 6, and within its inner surface are two ledges 7 against which the contacts of the movable part abut when in operative position. At diametrically opposite points the crown projection 6 is cut away for the reception of the stationary contacts 8, 9. These contacts each comprise a metallic angle piece with a binding screw 10 in one leg and the other leg overlying one end of a phosphor-bronze spring 11 which it holds in place against the body of the insulating member by means of a screw 12 extending therethrough and threaded into the said leg of the angle piece. The springs 11 are bent under so that their free ends form inclines 13 which operate upon the contacts of the movable member to securely bind the latter in place when rotated through a slight angle.

The movable insulating member 14 is in the form of a circular block, and has on its right-hand side a cylindrical projection 15 of a size to enter freely within the crown projection 6 of the stationary member and forming a shoulder 17 on the block which normally engages the outer edge of said projection. At the center of the cylindrical projection 15 is a circular cavity 18 for the reception of a flanged screw-shell contact terminal 19 and on opposite sides thereof are formed recesses 20, 21, for the reception of the rigid contacts 22. Recess 20 extends into the central cavity 18 and a metallic conductor 23 which is clamped between the contact 22 and the bottom of the recess by a screw 24 extends therethrough and through a hole in the side of the screw-shell contact 19, and has at its inner end a ring-shaped head 25 which seats upon the flange of the shell and is clamped thereto by an insulating disk 26 and a screw 27 which holds the central contact terminal 28 in place. The recess 21 is separated from the central cavity 18 by a barrier 29 and has a bent channel 30 leading from one side thereof in which is located a metallic conductor 31 which is bound in place against the bottom of the recess by a screw 32 extending through the insulating member and engaging a threaded hole in the contact 22.

The left-hand side of the movable insulating-member has a transverse channel 33 formed therein for the reception of a fuse 34

and its contact clips 35. The sides of the channel have central recesses 36 to permit the thumb and finger to be inserted for the purpose of removing the fuse. One of the clip contacts 35 is connected to the bent conductor 31 by a screw 37, and the other clip contact is held in place by a screw 38 and connected to the second screw 27 by a metallic conductor 39.

When it is desired to renew a lamp 5, the movable member 14 is rotated through an angle of about 45° backwardly to disengage rigid contacts 22 thereon from the contact springs 11 on the stationary member, and thereafter drawing the movable member axially away from the stationary member, the lamp passing freely through central aperture 4, a new lamp may be substituted for the one removed in the usual manner and the parts replaced in their operative positions by a reversal of the operations of removing.

I do not desire to restrict myself to the particular form or arrangment of parts herein described and shown, since it is apparent that they may be changed and modified without departing from my invention.

What I claim as new and desire to secure by Letters Patent of the United States, is:

1. In a lamp receptacle, the combination with stationary contacts, of an insulating block having on one face lamp engaging terminals and contacts for engaging the stationary contacts and respectively connected to said lamp terminals, and a fuse arranged in one of the connections between terminals and contacts on said block.

2. In a lamp receptacle, the combination with stationary contacts, of an insulating block having on one face lamp engaging terminals and two contacts for engaging the stationary contacts, a fuse mounted on the opposite face of said block, connections extending therefrom to a lamp terminal and a contact, and a connection from the other contact to the second lamp terminal.

3. In a lamp receptacle, the combination with stationary contacts, of an insulating block having on one face a central recess in which are secured lamp holding terminals and two side recesses in which are secured contacts adapted to engage the stationary contacts and in the opposite face of which is formed a channel in which are secured two fuse clips one of which is connected to a lamp terminal and the other to a contact thereon, and a metallic conductor connecting the other contact with the second lamp terminal.

4. In a wall socket, the combination of terminals for making an electric connection with the device inserted in said socket, spring clips in series therewith, and an inclosed fuse adapted to be inserted into and removed from said spring clips by a movement at right angles to the axis of said fuse.

5. In a wall socket, the combination of a base having a portion to be secured to the wall and another portion at an angle thereto, a recess formed in said last named portion, a pair of spring clips being located in said recess, and an inclosed fuse engaged by said spring clips, one clip being adapted to be secured to a line terminal and the other clip being secured to a socket terminal.

In witness whereof, I have hereunto set my hand this 26th day of February, 1906.

HERBERT C. WIRT.

Witnesses:

BENJAMIN B. HULL,

HELEN ORFORD.