

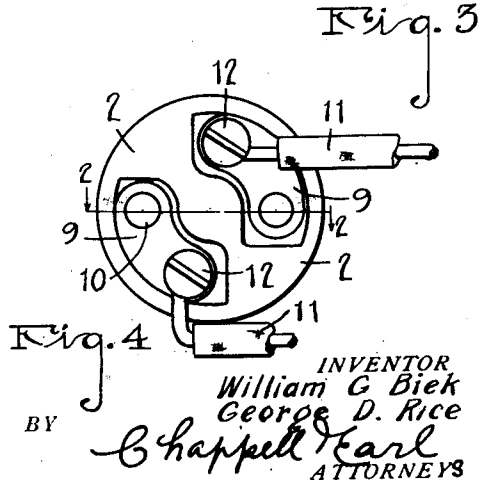
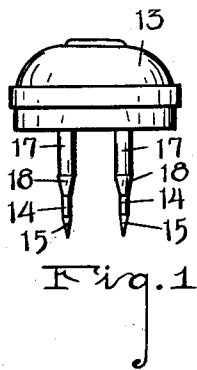
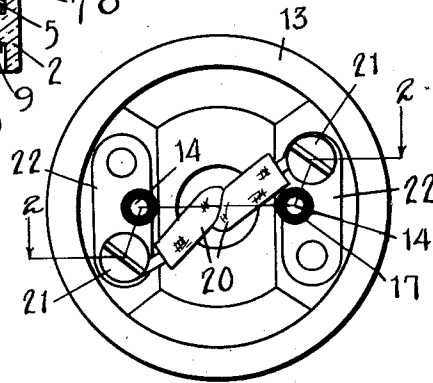
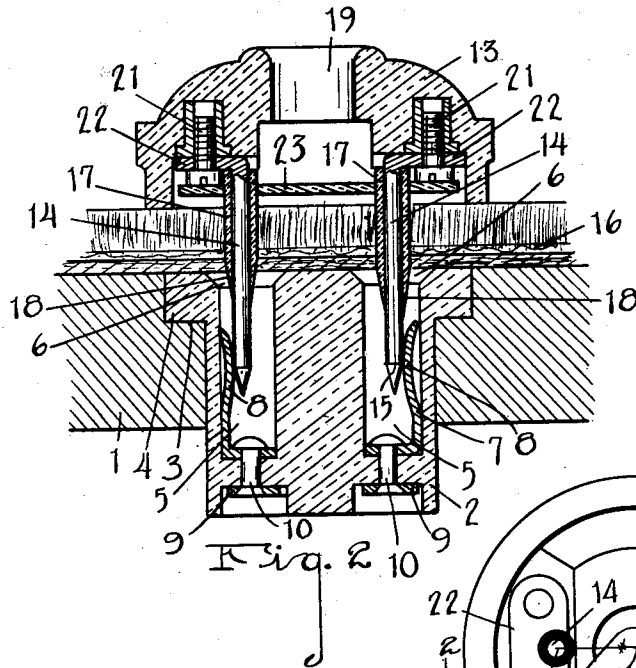
April 17, 1928.

1,666,729

W. G. BIEK ET AL

ELECTRIC FIXTURE

Filed July 20, 1927



INVENTOR
William G. Biek
George D. Rice
BY *Chappell & Earl*
ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM G. BIEK AND GEORGE D. RICE, OF DOWAGIAC, MICHIGAN.

ELECTRIC FIXTURE.

Application filed July 20, 1927. Serial No. 207,097.

The main object of this invention is to provide a floor plug which is adapted to be used in floors covered with rugs, the connection being made through the rug without serious injury thereto.

A further object is to provide a fixture having these advantages in which the connection can be readily effected through a rug.

Objects pertaining to details and economies of our invention will appear from the description to follow. The invention is defined in the claims.

A structure embodying the features of our improvements is clearly illustrated in the accompanying drawing, in which:

Fig. 1 is a sectional view of our improved plug.

Fig. 2 is a detail vertical section on line corresponding to line 2—2 of Fig. 1 showing the manner of inserting the plug through a floor covering.

Fig. 3 is an inverted view of our improved plug.

Fig. 4 is an inverted view of the socket.

Referring to the drawing, 1 represents a section of floor and 2 the socket which is seated in a shouldered recess 3 in the floor, the socket member having a flange 4 at its upper end. The electric connections are made below the floor.

The socket member 2 is preferably of insulated material and has vertical bores 5 therein, the upper ends of these bores being beveled or countersunk at 6. The contacts 7 are seated within the bores and provided with curved spring contact fingers 8. These contacts are connected to the terminals 9 by means of the rivets 10. The circuit wires 11 are connected to the terminals 9 by means of the binding post 12. The plug member 13 is also illustrated as being made of insulated material and is provided with prong-like contact members 14 having sharp points 15 adapted to pierce a rug shown at 16. These contact members have insulation 17 extending a substantial distance from their bases, the outer ends of the insulation being chamfered or tapered at 18 so that they readily pierce through the rug, the threads of which have been separated by the sharp points 15. This insulation 17 protects the rug and also prevents short-circuiting such as might occur, for instance in the event of moisture in the rug.

The plug 13 has an opening 19 through

the top thereof to receive the wires 20 which are connected to the terminals 22 by suitable binding posts 21 on the terminals 22 to which the contact members 14 are secured. An insulating disk or cover 23 is arranged on the terminals to protect the user.

With the parts thus arranged the prong-like contact members can be readily inserted through a rug and into the recesses of the socket member, the upper ends of which are preferably beveled, as stated, to facilitate engagement. However, it is quite easy to locate the socket member through the rug and insert the plug.

This avoids the necessity of cutting openings in rugs which injures their appearance and also permits the rugs or carpets being shifted about as occasion may require. Also, the appearance of the rug is not materially injured, even by repeated insertions of the prong-like contacts of the plug.

We have illustrated an embodiment which we consider very practical. We have not attempted to illustrate or describe certain modifications or adaptations which we contemplate as we believe the disclosure here made will enable those skilled in the art to embody or adapt the same as may be desired.

Having thus described our invention what we claim as new and desire to secure by Letters Patent is:

1. An electric fixture comprising a socket member of insulating material having a pair of bore-like recesses therein, the edges of said recesses being beveled, contacts supported in said recesses and having curved spring fingers, and a plug member provided with a pair of prong-like contacts having sharp points adapted to pierce a rug or the like, said plug contact members being insulated for a substantial distance from the bases thereof, the outer ends of the insulation being chamfered to a thin edge, the end portions of said plug contact members projecting from the insulation to engage with the contacts of said socket.

2. An electric fixture comprising a socket member of insulating material having a pair of bore-like recesses therein, the edges of said recesses being beveled, contacts supported in said recesses and having curved spring fingers, and a plug member provided with a pair of prong-like contacts having sharp points adapted to pierce a rug or the like, said plug contact members being insulated

for a substantial distance from the bases thereof.

3. An electric fixture comprising a socket member having a pair of recesses therein, 5 contacts supported in said recesses, and a plug member provided with a pair of prong-like contacts having sharp points adapted to pierce a rug or the like, said plug contact members being insulated for a substantial 10 distance from the bases thereof, the outer ends of the insulation being chamfered to a thin edge, the end portions of said plug contact members projecting from the insulation to engage with the contacts of said socket.

4. An electric fixture comprising a socket member having a pair of recesses therein, 15 contacts supported in said recesses, and a plug member provided with a pair of prong-like contacts having sharp points adapted to pierce a rug or the like, said plug contact members being insulated for a substantial 20 distance from the bases thereof.

5. An electric fixture comprising a socket

member provided with a pair of contacts, 25 and a plug member provided with a pair of prong-like contacts having sharp points adapted to pierce a rug or the like, said plug contact members being insulated for a substantial distance from the bases thereof, the 30 outer ends of the insulation being chamfered to a thin edge, the end portions of said plug contact members projecting from the insulation to engage with the contacts of said socket.

6. An electric fixture comprising a socket 35 member provided with a pair of contacts, and a plug member provided with a pair of prong-like contacts having sharp points adapted to pierce a rug or the like, said plug contact members being insulated for a sub- 40 stantial distance from the bases thereof.

In witness whereof we have hereunto set our hands.

WILLIAM G. BIEK.
GEORGE D. RICE.