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G. B. BENANDER ET AL

2,162,545

ELECTRIC FIXTURE

Filed Jan. 14, 1936

Fig. 6.

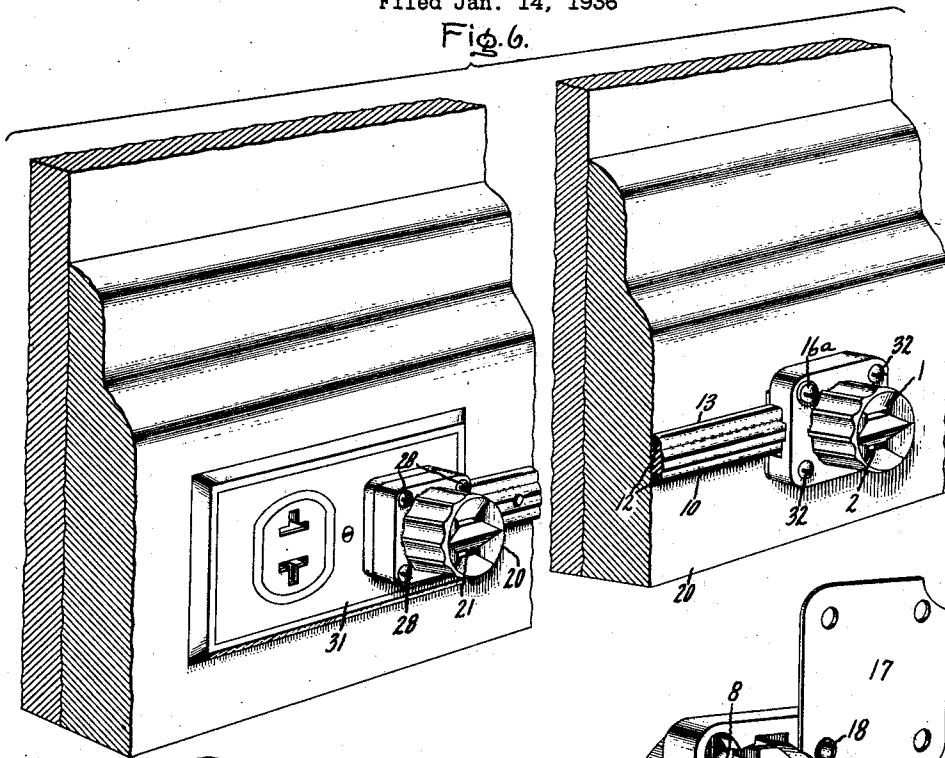


Fig. 4.

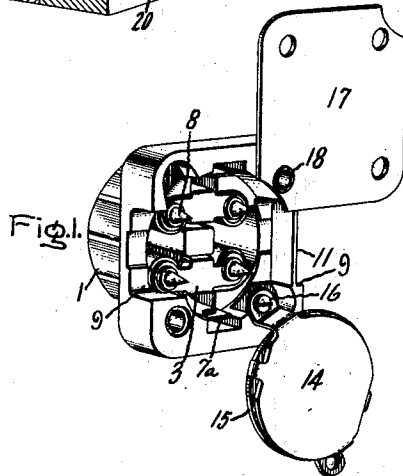


Fig. 1.

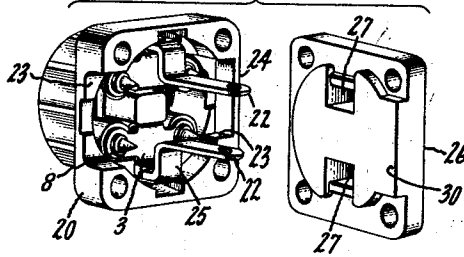


Fig. 2.

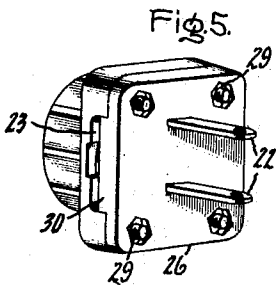


Fig. 5.

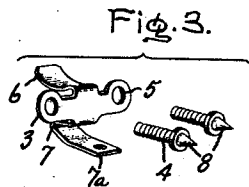
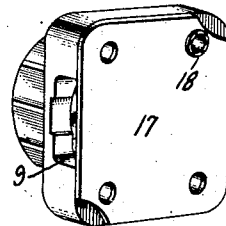


Fig. 3.



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ELECTRIC FIXTURE

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3 Claims. (Cl. 173-340)

The present invention relates to electric fixtures for use with cable of the type having a pair of longitudinal conductors arranged side by side and held in spaced relation.

5 The object of our invention is to provide an improved construction and arrangement in fixtures of this type, and for a consideration of what we believe to be novel and our invention attention is directed to the following description and the claims appended thereto.

10 In the accompanying drawing, Fig. 1 is a perspective view of a receptacle embodying our invention, the receptacle being shown in the open position ready for the insertion of a cable; Fig. 2 is a perspective view of the receptacle showing the parts in the closed position; Fig. 3 is an exploded view of the contacts used in the receptacle and the screws for securing the contacts therein; Fig. 4 is an exploded view of a receptacle embodying our invention which is adapted to be plugged into an outlet; Fig. 5 is a perspective view of the receptacle shown in Fig. 4, the parts being in the assembled position; and Fig. 6 is a perspective view of an installation using the fixtures illustrated.

25 Referring to the drawing, the receptacle illustrated in Figs. 1 to 3 inclusive, comprises a base 1 of molded insulating material provided with blade receiving openings 2 in its top and being open at its bottom. In line with the blade receiving openings 2 are contacts 3 which are secured to the base by means of drive screws 4 which extend through openings 5 in the contacts. The blade contacting portions of the terminals comprise a resilient arm 6 and a V-shaped arm 7. The shape of the base below the openings 2 is such that the arms 6 and 7 are pressed together so that good contact is made with the blade inserted through the openings. The drive screws 4 are provided with pointed heads 8. In opposite side walls of the base are notches 9 which are of substantially the same configuration as the cable 10 which is to be connected to the receptacle. One of the notches 9 is closed by a frangible wall 11 which may be broken if the cable is to extend through the receptacle. The cable 10 comprises two longitudinal conductors 12 which are embedded in a flat strip 13 of insulating material such as rubber. The spacing of the conductors 12 is such that when the cable is inserted in the notches 9, the pointed heads 8 of the screws connected to each of the contacts 3 rest directly above one of the conductors 12 of the cable. The points 8 are forced through the rubber strip 13 into the conductors by a plate 14 which carries

a disk 15 of insulating material on the side facing the points 8. The plate 14 is threaded to a screw 16, the projecting end of which is peened over so that the plate cannot be removed. With this arrangement, the plate can be pivoted about the screw 16 to the position shown in Fig. 1 so that the cable can be inserted into the notches 9. After the cable is inserted, the plate 14 is swung over the cable and the screw 16 and another screw 16a in the diagonally opposite corner of the base are threaded into the plate, thereby clamping the plate to the base and forcing the points 8 into the conductors 12 of the cable. Each of the contacts is provided with two fastening screws 4 so that when the plate is clamped in place, the connection is made between each of the contacts 3 and one of the conductors 12 of the cable through two of the pointed heads 8. The bottom of the receptacle is closed by a metal plate 17 which is pivotally fastened to the base by means of an eyelet 18. The receptacle is mounted, for example, on a baseboard by means of screws 32 passing through the eyelet 18 and through the diagonally opposite corner of the base.

30 Figs. 4 and 5 show a receptacle which is adapted to be plugged into an outlet. This receptacle comprises a base 20 having blade receiving openings 21 in the top thereof beneath which are mounted contacts 3 for engaging the inserted blades of a plug connector. These contacts are secured in place by drive screws 4 in the same manner as the contacts 3. The arms 1a of the contacts are connected to blades 22 which are adapted to be plugged into an outlet. Opposite side walls of the base 20 are provided with notches 23 of substantially the same configuration as the cable 10 which is to be connected to the receptacle. One of these notches is closed by a frangible wall 24 which may be broken if the cable is to extend through the base of the receptacle. When the cable is laid in the notches 23 it extends under the bent portions 25 of the blades 22 and each of the conductors 12 is above the pointed heads connected to one of the contacts 3. It will be noted that the bent portions 25 extend over the face of the cable opposite the face presented to the pointed heads 8 so that the cable is held therebetween. The lower end of the receptacle is closed by a plate 26 of molded insulating material which is provided with openings 27 through which the blades 22 project and which is clamped to the base by means of screws 28 which are threaded into the nuts 29. The plate 26 is provided with a raised boss 30 which projects into one of the notches 23 and securely clamps the cable to the

base. The boss 30 forces the cable against the pointed heads 8 forcing the points into contact with the conductors 12 of the cable. The above described constructions are typical of electrical fixtures embodying our invention.

Fig. 6 shows an installation of the fixtures illustrated in Figs. 1 to 5 inclusive. In this installation, the cable is connected at one end to the receptacle shown in Figs. 4 and 5 which is plugged into an outlet 31. The cable is nailed at suitable points to a baseboard and at the other end is connected to the receptacle shown in Figs. 1 to 3 inclusive, which is fixed to the baseboard by means of screws 32.

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

1. A receptacle for use with a cable comprising a flat strip having a pair of longitudinal insulated conductors arranged side by side and held in spaced relation, comprising a base having blade receiving openings in its top and contacts arranged in line with said openings, blades connected to said contacts having bent portions spaced from the base and providing a space for receiving the cable whereby the cable is held between said portions and the base, said blades projecting from the bottom of the base and being adapted to be plugged into an outlet, a plate having openings through which the blades project, and means including said plate for effecting electrical connection between the conductors of the cable and said contacts.

2. In an electrical fixture for use with a cable

comprising a flat strip having a pair of longitudinal insulated conductors arranged side by side and held in spaced relation, a base, contacts carried by the base having pointed portions extending therefrom presented to one face of the cable, blades connected to said contacts, means including bent portions on said blades overlapping the opposite face of the cable for holding the cable between said bent portions and the base with its conductors in alignment with said pointed portions, and means for clamping the cable to the base whereby the pointed portions of the contacts are forced into contact with said conductors.

3. In an electrical fixture for use with a cable comprising a flat strip having a pair of longitudinal insulated conductors arranged side by side and held in spaced relation, a base, contacts carried by said base having pointed portions extending therefrom, blades connected to said contacts, means including bent portions on said blades overlapping the cable for holding the cable between said bent portions and the base with its conductors in alignment with said pointed portions, said blades projecting from the base, a plate having openings through which the blades project, and means including said plate for clamping the conductor to the base whereby the pointed portions of the contacts are forced into contact with said conductors.

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