Oct. 5, 1926. 1,602,370

C. E. AVERY

ELECTRICAL RECEPTACLE

Filed Dec. 6, 1922

Fig. 2.

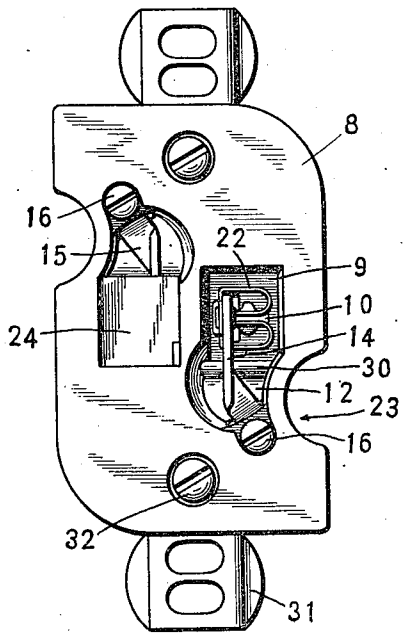


Fig. 1.

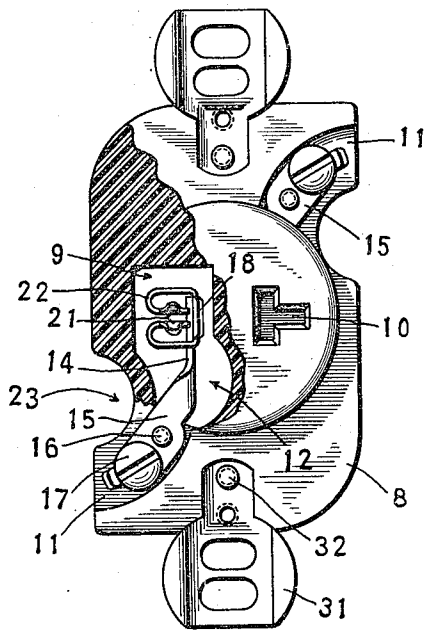


Fig. 3.

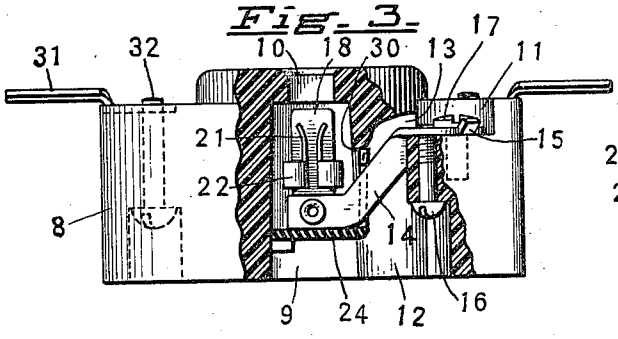


Fig. 4.

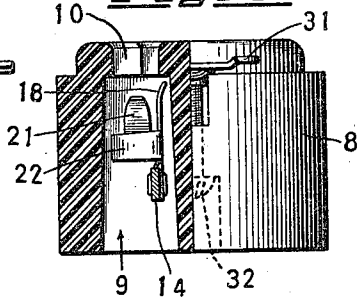


Fig. 5.

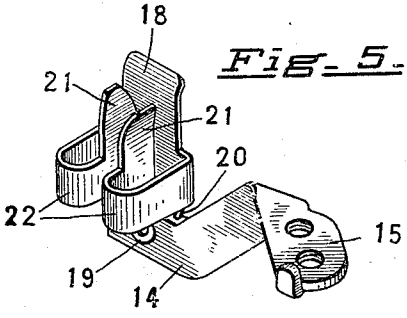
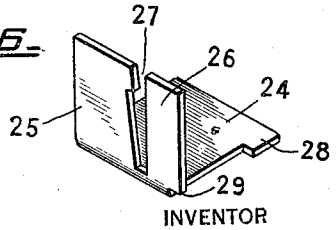


Fig. 6.



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UNITED STATES PATENT OFFICE.

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ELECTRICAL RECEPTACLE.

Application filed December 6, 1922. Serial No. 605,206.

My invention relates particularly to a receptacle for attachment plugs of the spaced blade type.

The main object is to provide a simple, compact, and reliable construction which can be made economically. Another object is to construct a device of this character in such a way that the parts may be readily assembled. Another object is to construct each contact of a single piece of metal formed so that the two contacts when mounted in a receptacle body will accommodate standard parallel or tandem bladed plugs.

In the preferred form a receptacle has a body formed of insulating material in one piece with recesses open at the back and having T-shaped entrance slots in the front. A one piece contact member is mounted in each recess and provided with a terminal arm which extends out through one side of the body alongside of a wire groove and is held in place by a single screw. An especially formed insulating cover is mounted in each recess to prevent the sealing wax from running into the contact.

Figure 1 is a front view and partial section of the device embodying the preferred form of my invention.

Fig. 2 is a rear view of the same, one of the contact members being shown exposed.

Fig. 3 is a side view and partial longitudinal section.

Fig. 4 is an end and partial transverse sectional view.

Fig. 5 is a perspective view of one of the contact and terminal members.

Fig. 6 is a perspective view of one of the insulating cover members or filler pieces.

The body 8 may be formed of any suitable insulating material such as porcelain or molded composition and provided with recesses 9 open at the back and with T-shaped entrance slots 10 at the front. At each side of the front near each end is a shallow recess 11 which is connected with an extension 12 of the rear recess by a passage 13, these recesses and passages being so shaped and proportioned as to accommodate the contact and terminal members and to facilitate their assembly.

The arm 14 terminates at one end in a terminal plate portion 15 which is turned at an angle so as to lie flat in the bottom of the recess 11. This terminal portion is secured in place by means of a screw 16 insertable from the rear. A binding screw 17 screws into the plate portion 15 and has its head arranged adjacent a side wall of the recess 11. The other end of the arm 14 is secured to the base of the main blade 18 of the contact by means of a rivet 19. The sides of the contact may be drawn inward at 20 above the edge of the arm to assist in definitely positioning the contact on the end of the arm. The smaller blades 21—21 are carried on the ends of spring arms 22 and arranged with a passage between them at right angles to the blade 18 and with a space between the blade 18 and the adjacent edges of the blades 21—21 so that the contact can accommodate a plug blade (not shown) in either of two positions at right angles to each other.

The side of the body 8 is grooved at 23 to accommodate a conductor wire adjacent each terminal plate and binding screw 17.

In manufacturing the device, the contacts and terminal arms are assembled in any suitable manner, and after they have been assembled an arm and contact is inserted into the recess 9 and its extension 12 and the end of the terminal plate portion of the arm is inserted through the passage 13, the recess being so proportioned and shaped as to permit this insertion and twisting into position. After the terminal plate portion is in position it is fastened by means of the screw 16.

The filler piece or cover plate shown in Figure 6 is preferably formed of fibre or hard paper stock with a base portion 24 and two extensions 25 and 26 leaving a slot 27 between them to accommodate the arm 14. The filler piece may have bendable extensions 28 and 29 to increase the gripping effect when the piece is inserted into the recess 9. When the extensions 25 and 26 are pushed down in place they are pushed together at the tips so as to closely embrace the sides of the arm 14. The interior of the body is also preferably provided with a transverse ledge 30 which serves as an abutment for the tips 26 and 27. When the filler piece or cover have been inserted the recess 9 and the extension 12 are filled with suit-

able wax so as to cover the head of the screw 16 and prevent access to the conducting parts from the rear.

Supporting lugs 31 as is customary may be secured by means of screws 32 at opposite ends.

It will be seen that the device consists of a minimum number of parts which are readily manufactured and readily assembled, and which do not require the use of expensive tools or jigs. The contacts are of such nature as to afford effective gripping action without stressing the metal to the breaking point, and they are of such nature that only a single screw is required to hold a contact and its supporting arm and contact plate in position.

I claim:

1. In an electrical receptacle, an insulating body having a rear recess with a front entrance slot and an interior transverse ledge, an arm secured in said rear recess, a contact carried by said arm and in line with said entrance slot and a filler piece filling the rear of said entrance in line with said contact and having an angular extension alongside of said arm and abutting against said ledge.

2. In an electrical receptacle, an anchorage arm, a one-piece combination plug contact having a shank riveted thereto with portions drawn over the edge of said arm to prevent rotation and having a central contact blade with spring arms integrally connected with the sides and terminating in reversely bent spring blades at right angles to the central blade.

3. In an electrical receptacle, a filler piece of insulating material, comprising a base portion having angularly extending portions spaced apart from each other and adapted to grip between them a supporting arm for a contact blade.

4. In an electrical receptacle, an insulating filler piece having a base with laterally projecting shoulders and extensions from one end with a space between the extensions to receive the supporting arm of a contact.

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