May 19, 1925. 1,538,157

R. B. BENJAMIN

TABLE SWITCH RECEPTACLE

Filed April 21, 1924

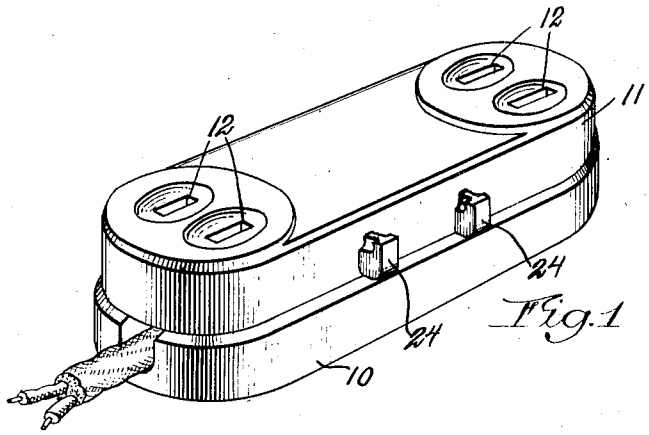


Fig. 1

Fig. 2

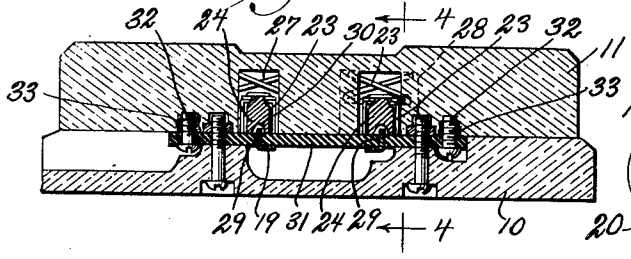
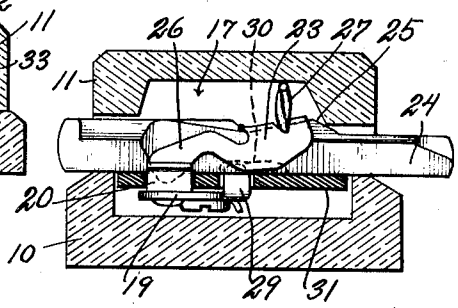


Fig. 4.



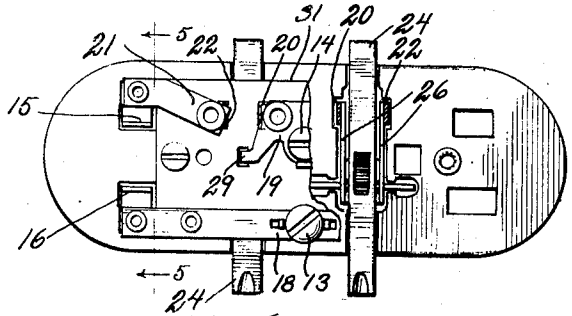
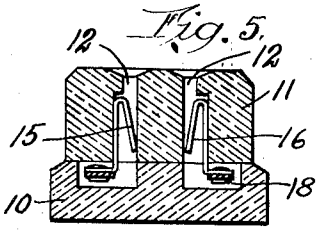


Fig. 3.

Fig. 5.



Witness:
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UNITED STATES PATENT OFFICE.

REUBEN B. BENJAMIN, OF CHICAGO, ILLINOIS, ASSIGNOR TO BENJAMIN ELECTRIC MFG. COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

TABLE-SWITCH RECEPTACLE.

Application filed April 21, 1924. Serial No. 707,848.

To all whom it may concern:

Be it known that I, REUBEN B. BENJAMIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Table-Switch Receptacles, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to table switch receptacles.

One of the objects of my invention is to provide an improved table switch receptacle in which the switch mechanism is arranged so as to be convenient for operation.

A further object of my invention is to provide an improved table switch receptacle which will be durable and efficient in use and cheap to manufacture.

Further objects will appear from the description and claims.

In the drawings, in which one form of my invention is shown.

Figure 1 is a perspective view of a table switch receptacle;

Fig. 2 is a longitudinal vertical section of the switch receptacle;

Fig. 3 is a bottom plan view, parts being removed and broken away to show the interior construction;

Fig. 4 is a section on the line 4—4 of Fig. 2; and

Fig. 5 is a section on the line 5—5 of Fig. 3.

The construction shown comprises in a general way an insulating pedestal 10 having a flat portion for resting on the table, an insulating cover 11 having two pairs of entrance openings 12 therein, one pair at each end, and wiring terminals 13 and 14, blade engaging contacts 15, 16 and switch mechanism 17 housed by and between the insulating pedestal and the insulating cover.

For distributing the current, a number of flat distributing plates or bus bars are arranged substantially in a plane between the insulating pedestal and the insulating cover. There are four of these distributing plates. One of these distributing plates 18 extends substantially from one end to the other from the pedestal and has mounted thereon one of the wiring terminals 13 and two receptacle portions. Another of said plates 19 has mounted thereon the other binding terminal 14 and two switch contacts 20, one for each of the switch mechanisms. A third plate 21 has mounted thereon one switch contact 22 and one receptacle contact 15. The fourth plate has mounted thereon the remaining switch contact 22 and the remaining receptacle contact. The switch mechanism for controlling the circuit between the switch contacts 20 and 22 comprises a metal bridge member 23 oscillatable in a vertical transverse plane and an insulating push bar 24 underneath and extending transversely of the insulating cover 11 and projecting therebeyond on both sides.

The oscillatable bridge member straddles the push bar and rides on the cam portion 25 thereof, which causes the blades 26 of the oscillatable member to move up and down as the push bar is shifted back and forth. The oscillatable member is held in engagement with the cam portion of the push bar by means of a bent wire spring 27 held in the guide-slots 28 in the insulating cover and bearing downwardly on the oscillatable member.

In one position the arms 26 of the oscillatable member engage the two switch contacts 20 and 22 and establish the circuit therebetween and in the other position the arms are moved out of engagement with these contacts to cause the circuit to be broken at two points. The movement of the push bar 24 is limited by a lug 29 formed integral with the conducting plate 19 and extending into a slot 30 in the lower edge of the push bar. The construction of the other switch mechanism is similar in all respects to that just described.

The fourth conducting plate may be mounted on an insulating fiber plate 31 by means of eyelets. This insulating plate may be secured to the insulating cover by means of screws 32 threaded into bushings 33 imbedded in the insulating cover.

Having thus described my invention, what I desire to obtain by Letters Patent of the United States is:

1. A table switch receptacle construction comprising an insulating pedestal having a flat portion for resting on the table, a pair of receptacle contacts for engaging a pair of cooperating contact blades, a pair of binding terminals, switch mechanism for controlling the circuit between said bind-

ing terminals and receptacle contacts, and a flat insulating cover for said receptacle contacts above said pedestal having a pair of entrance openings therein affording access to said contacts, said switch mechanism comprising a horizontally slidable manually operable push bar underneath and extending transversely of said cover and projecting therebeyond on both sides.

2. A table switch receptacle construction comprising an insulating pedestal having a flat portion for resting on the table, a pair of receptacle contacts for engaging a pair of cooperating contact blades, a pair of binding terminals, switch mechanism for controlling the circuit between said binding terminals and receptacle contacts, and a flat insulating cover for said receptacle contacts above said pedestal having a pair of entrance openings therein affording access to said contacts, said switch mechanism comprising a horizontally slidable manually operable push bar underneath and extending transversely of said cover and projecting therebeyond on both sides, and a switch blade operated by said push bar and oscillatable back and forth in a vertical transverse plane.

3. A duplex table switch receptacle comprising an elongated insulating pedestal having a flat portion for resting on the table, two pairs of receptacle contacts for engaging the contact blades, said pairs being located adjacent opposite ends of said pedestal, respectively, a flat insulating cover above said pedestal having two pairs of entrance openings therein affording access to said contacts, and two switch mechanisms mounted intermediate said pairs of contact devices for controlling the circuit to said pairs respectively, each switch mechanism comprising a horizontally slidable manually operable push bar underneath and extending transversely to said cover and projecting therebeyond on both sides.

4. A duplex table switch receptacle comprising an elongated insulating pedestal having a flat portion for resting on the table, two pairs of receptacle contacts for engaging the contact blades, said pairs being located adjacent opposite ends of said pedestal, respectively, a flat insulating cover above said pedestal having two pairs of entrance openings therein affording access to said contacts, and two switch mechanisms mounted intermediate said pairs of contact devices for controlling the circuit to said pairs respectively, each switch mechanism comprising a horizontally slidable manually operable push bar underneath and extending transversely to said cover and projecting therebeyond on both sides, and a pair of switch contacts, a pair of binding terminals, and four current carrying plates lying substantially in a plane intermediate said pedestal and cover, one blade extending substantially from end to end of said pedestal and having mounted thereon one of said binding terminals and two receptacle contacts, one for each pair, the second of said plates having mounted thereon the other binding terminal and two switch contacts, one for each switch mechanism, the third plate having mounted thereon one switch contact and one receptacle contact, and the fourth plate having mounted thereon the remaining switch contact and the remaining receptacle contact.

REUBEN B. BENJAMIN.