Sept. 24, 1940. L. H. PECK 2,215,715

LAMP RECEPTACLE FIXTURE

Filed Jan. 23, 1939

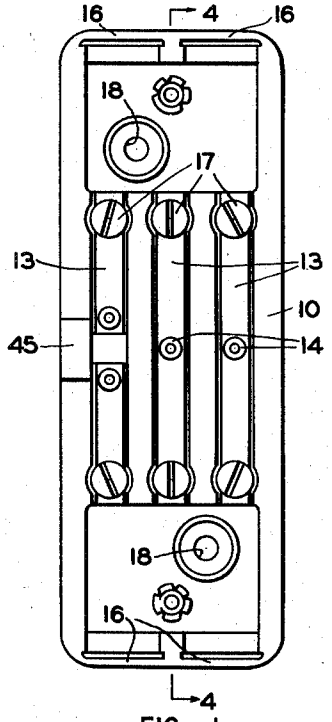


FIG.-1

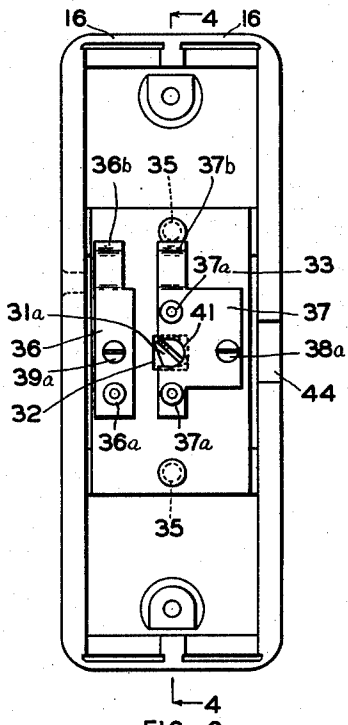


FIG.-2

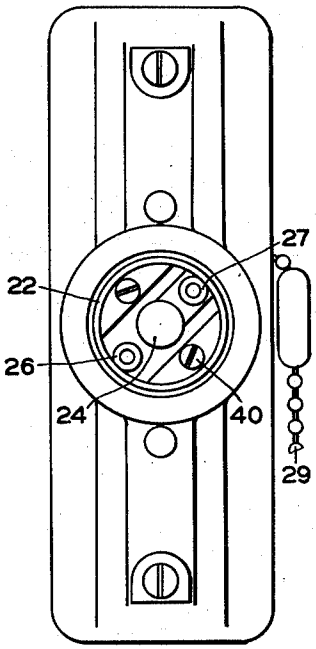


FIG.-3

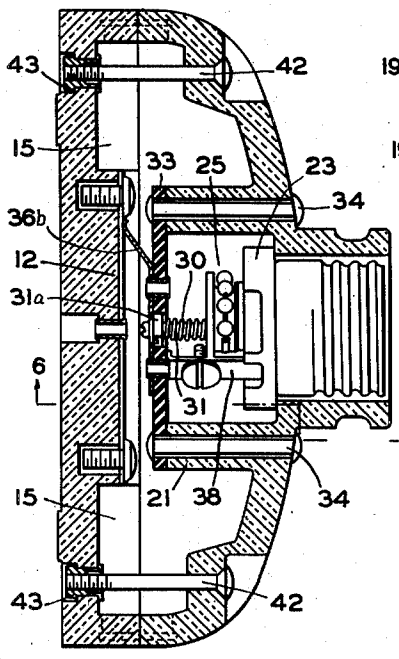


FIG.-4

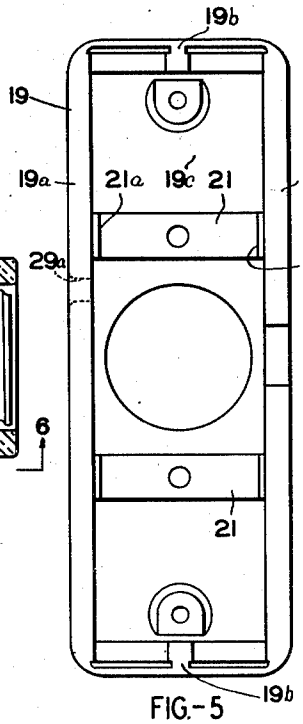


FIG.-5

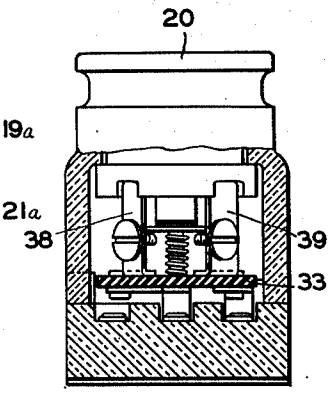


FIG.-6

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LAMP RECEPTACLE FIXTURE

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Application January 23, 1939, Serial No. 252,283

1 Claim. (Cl. 173—354)

This invention relates to improvements in lamp receptacle fixtures with special application to chain pull lamp receptacles.

An object of the present invention is to provide a novel combination between a base member carrying electrical conductors and a cover member secured to the base member and carrying a lamp receptacle. One of the novel features of the invention is the means for mounting the receptacle in the cover member with dielectric material between the receptacle and the conductors in the base member with contact strips carried by this dielectric material and adapted to carry electricity from the conductors in the base member to the receptacle in the cover member.

Other novel features of the invention are found in the combination of the lamp receptacle in the cover member and the sheet of dielectric material secured to the cover member and housing the lamp receptacle parts, while at the same time serving as a means for carrying the connecting devices for passing electricity from conductors in the base member to the lamp receptacle in the cover member.

Other novel features reside in the arrangement of the parts with a hollow cover member reinforced by walls of dielectric material which in turn support a portion of the device, also the arrangement of an adjusting screw for the make and break structure of the chain pull receptacle, and other novel features which will be apparent from the accompanying drawing and description and the essential features of which will be summarized in the claim.

In the drawing, Fig. 1 is a top plan view of the base member of my device; Fig. 2 is a bottom plan view of the cover member; Fig. 3 is a top plan view of the cover member; Fig. 4 is a central longitudinal section of the device assembled with the cover member secured to the base member—this section is taken along the lines 4—4 of Figs. 1 and 2; Fig. 5 is a bottom plan view of the cover member of Fig. 2 with certain of the parts removed to show the formation of the dielectric block; while Fig. 6 is a transverse sectional view taken along the line 6—6 of Fig. 4.

The base member 10 consists of a single block of dielectric material such as porcelain having a raised central portion 12 in which are mounted a plurality of electrical conductors 13 of flat metal strip form permanently secured to the base member as by the grommets 14 and separated by dielectric material so that each conductor is insulated from the others. At the ends of the base member are the depressed portions 15 into which the wires of an electric circuit are led through the knockout portions 16 which are formed partly in the base member and partly in the cover member. These wires are connected to certain of the conductors 13 at the binding posts 17. Openings 18 are provided in the base member by which it may be secured to the supporting surface. The base member here shown is long and narrow in form so as to be readily secured to a 2 x 4 wooden frame member in connection with open wiring. It will be understood however that my invention may be modified to adapt it to concealed wiring.

The cover member comprises a single block 19 of dielectric material generally hollow in form having side walls 19a, end walls 19b and a top wall 19c. A circular opening through the top wall leads to an upstanding ring 20 of the same dielectric material as the cover and integral therewith. This ring houses the thimble of the lamp receptacle. Walls 21 of dielectric material integral with the cover member are spaced inside thereof and on each side of the central opening. These walls extend from side wall to side wall and form reinforcing members for the cover and also serve for support of other parts as will later appear.

A lamp receptacle is carried by the cover member. The one here shown is of the chain pull type which is well known. It comprises a thimble 22 housed in the porcelain ring 20 and mounted on a dielectric base 23. This base also carries the usual central contact 24. Beneath the base 23 is a step by step make and break structure of well known form indicated generally at 25. This is of the type in which a rotatable contact member serves in one position to connect the terminals 26 and 27 and in another position breaks such connection. This make and break device is operated by the usual chain pull 29 which passes out through the opening 29a in one of the side walls 19a of the cover member. For biasing the make and break contact member in one direction a helical spring 30 is provided and mounted on a stud 31. This stud has a non-circular head 31a which carries one end of the spring 30, the other end being carried by the make and break contact so that the coil of spring 30 serves to return the make and break contact always in one direction. The head 31a is carried in a square opening 32 in the dielectric sheet 33 which in turn is secured to the cover member by rivets 34 which pass through suitable openings in the reinforcing walls 21 and through registering openings 35 in the dielectric

sheet. The shoulders 21*a* on the reinforcing walls help to position the sheet. Mounted on the lower face of the sheet 33 are contact strips 36 and 37 of suitable conducting metal such as copper. These strips are secured to the sheet by rivets 36*a* and 37*a*. The strips have resilient contact portions 36*b* and 37*b* which extend away from the lower face of the dielectric sheet and into engagement with selected conductors in the base member as best seen in Fig. 4. Current is carried to the lamp receptacle by posts 38 and 39. Post 38 is connected at one end through sheet 33 to strip 37 by means of the screw 38*a*. At its other end it is connected to the terminal 26. Post 39 is secured at one end through the sheet 33 by means of screw 39*a* to the strip 36. At its other end it is connected to the terminal 40 in the receptacle thimble.

It will be understood that in this type of device the stud 31 is mounted for axial movement and the tendency of spring 30 is to urge the stud away from the lamp receptacle. Referring to Fig. 2 it will be noted that a portion of strip 37 overlies the head 31*a* of the stud so as to retain it in the opening 32. It will be noted also that a portion of the strip is cut away as indicated at 41 to permit the insertion of a screw driver in the slotted head 31*a* so that the stud may be forced inwardly until the head clears the opening 32 whereupon the stud may be turned to increase or relieve tension of the spring 30, after which the head of the stud is permitted to again enter the opening 32. This is a very cheap construction because it merely requires the punching of a square opening 32 through the dielectric sheet 33 and the tension of spring 30 is very readily adjusted.

It will be noted that the dielectric sheet 33 and the partition walls 21 completely house the make and break contacts in dielectric material as the sheet 33 is substantially imperforate. The side and end walls of the base member and the side and end walls of the cover member meet in a common plane so that when these parts are secured together the base conductors and all of the parts are housed completely in dielectric material. The cover member is secured to the base member by the bolts 42 which enter threaded grommets 43 in the base member. When so assembled the contact portions 36*b* and 37*b* are held resiliently in engagement with the right-hand and center conductors 13, respectively, as viewed in Fig. 1. It will be understood that the cover member of Fig. 2 is turned over upon the base member of Fig. 1 when the parts are assembled. A notch 44 in one side of the cover member receives a projection 45 on the base member so as to insure that the parts are always assembled in a predetermined relation.

What I claim is:

In combination, a base member, electrical conductors carried thereby, a cover member secured to said base member, a chain-pull lamp device mounted in said cover member and including a thimble and a central contact insulated from each other, said device including an oscillatable step-by-step make and break switch structure, said cover member being a single block of dielectric having on one outer face an upstanding integral ring of dielectric material housing said thimble, said cover member being otherwise generally hollow, said thimble housing providing a cavity opening toward the base side sufficiently to permit the introduction therein of said thimble into said cavity, there being a wall of said dielectric material inside said cover member on each side of said ring and extending from side to side of said cover member forming reinforcing walls across said cover member, said make and break switch structure being housed in said cover member between said walls, a sheet of dielectric material secured to said walls and supporting said lamp device and switch structure, two electrical conductor means, each extending on one side of said sheet to said receptacle and there connected respectively with said thimble and said central contact, one of said conductor means having an electrical connection through said switch structure and each conductor means extending from the other side of said sheet and engaging each a different one of said base member conductors.

LEE H. PECK.