Dec. 31, 1929. D. M. LE FEVER 1,741,723

SIGN RECEPTACLE

Filed Dec. 30, 1926

FIG. 1.

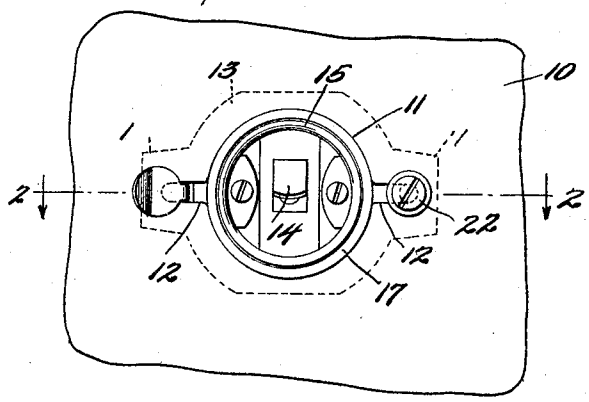


FIG. 2.

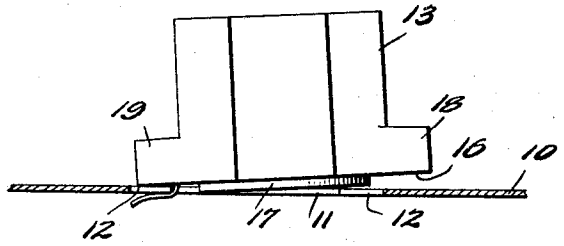


FIG. 3.

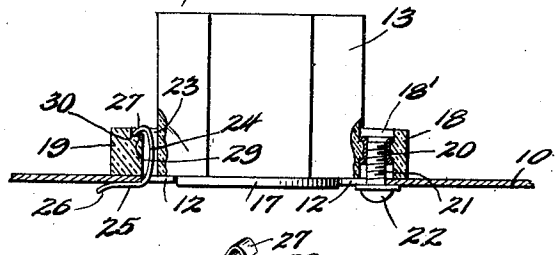
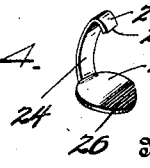


FIG. 4.



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UNITED STATES PATENT OFFICE

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SIGN RECEPTACLE

Application filed December 30, 1926. Serial No. 158,040.

This invention relates to electric lamp receptacles and more particularly to what are known as sign receptacles.

It is a general object of the present invention to provide a novel and improved sign receptacle.

The main feature of this invention consists in the provision of a simplified means for attaching the receptacle to a sign plate whereby but a single workman is needed, even on large signs.

A further feature consists in providing, on the insulating base of the receptacle, a one piece resilient member having a head adapted to engage over the front face of a sign plate and having a shank engaged in the insulating body whereby the socket may be applied from the rear face of the sign plate and adequately retained in position during the wiring operation until the single workman can apply a further fastening means from the front of the plate.

Other and further objects of the invention will be more apparent to those skilled in the art by a consideration of the accompanying drawing and following specification, wherein is disclosed a single exemplary embodiment of the invention, it being understood however that various changes might be made therein such as fall within the scope of the appended claims without departing from the spirit of the invention.

In said drawing:

Figure 1 is a front elevation of a sign plate having a socket, constructed according to the present invention, applied thereto;

Figure 2 is a plan view of the receptacle partially fitted to the sign plate, which is shown in section on line 2—2 of Figure 1;

Figure 3 is a view similar to Figure 2 but showing the receptacle completely positioned and fastened to the sign plate, portions of the receptacle being also shown in section; and

Figure 4 is a perspective view of the resilient attaching means.

Like figures of reference refer to like parts throughout the several views of the drawing.

In the copending application of M. N. Russell and J. W. Brooks for electric signs, Serial No. 151,803, filed on November 30, 1926, there is disclosed a sign receptacle which can be attached to a sign plate from the rear face thereof in a temporary manner whereby a single workman may attach the receptacle and wire the same and then apply the final attaching means from the front of the sign plate whereby a single workman may apply the receptacles without assistance on large signs. The present invention contemplates an improvement on the disclosure in that application, comprising a simplified attaching means formed from but a single piece of material and adapted to be snapped into position in the insulating base of the receptacle.

Referring to the drawing, there is disclosed at 10 the metal plate forming the face of the sign. It is perforated to form a circular hole as shown at 11 and the pair of oppositely disposed radial slots 12 leading from the hole. The receptacle comprises essentially the insulating body 13 provided with a recess enclosing the center contact 14 and the screw shell contact 15. The front face 16 of the insulating body is plane and is adapted to abut against the rear face of the plate 10. It is preferably provided with the integral circular flange 17 which is so sized as to pass readily thru the circular hole 11 so as to accurately position the receptacle in respect to the plate and to prevent any sliding movement of one in respect to the other.

The shape of the insulating body is immaterial but as shown it is provided with the wings or extensions 18 and 19 near the front face thereof and having their faces coextensive with the surface 16. The extension 18 is provided with a bore 18′ reduced in diameter near the center in order to receive the threaded bushing 20 which is spun or otherwise suitably secured therein. The bushing is so positioned that when the flange is fitted in the hole 11 a screw 21 may be passed thru one of the slots 12 to engage the threads in the bushing for the purpose of firmly attaching the receptacle to the plate, the head 22 of the screw engaging the outer face of the plate 10.

To provide a temporary attachment for the receptacle which later forms a part of the permanent attachment, the insulating body

and the extension 19 are drilled or otherwise provided with a suitable hole 23, preferably rectangular in cross section and extending from the back of the extension 19 to the face 16, in position to register with the opposite slot 12 in the sign plate. This hole is adapted to receive the bowed shank 24 of the attaching device shown in Figure 4. Integral with the shank is a flat head 25 substantially circular in plan and normally almost at right angles to the chord of the shank. The shank is attached to the edge of the head and diametrically opposite the attaching point the head is curved, as shown at 26, out of its normal plane. The opposite end of the shank is bent over in the same direction as the head, as shown at 27, and the end 28 thereof turns downwardly somewhat toward the head.

The hole 23 is enlarged on the outer side in the back of the extension 19 to form the shoulder 29. The shoulder may project slightly higher adjacent the wall of the hole 23 than somewhat remote therefrom to provide a slight depression 30 behind the shoulder. The length of the attaching means between the inner face of the head 25 and the end 28 is substantially equal to the distance between the depression 30 and the face 16. The width of the hole is substantially equivalent to the width of the shank 28.

After the attaching means has been formed to the proper configuration it may be secured to the insulating body by inserting the shank thru the hole 23 and pressing on the junction of the shank and the head. This will cause the end 28 to snap over the shoulder 29 and drop into the groove 30 where it will be held in position by the resilience of the shank. The bow of the shank is sufficient to substantially cause the central portion thereof to engage the inner wall of the hole 23. The inner face of the head 25 will thus be held normally against the face 16.

In attaching a receptacle to the sign plate it is first positioned substantially as shown in Figure 2 with the head 25 just passing over the edge of the hole 11 at one of the slots 12. The curved end of the head enables it to be slid over the edge of the plate and a continued movement causes the shank, adjacent the head, to pass into the slot 12 until sufficient movement of the insulating body is attained to allow the flange 17 to drop into the hole 11. The resilience of the attaching means, which is made from suitable springy material, allows the head to move out a distance equivalent to the thickness of the sign plate but holds it securely against that plate to retain the receptacle in position, assisted by the flange which prevents any rotation about the attaching means. When thus attached the receptacle may be wired in the usual manner and finally the workman may apply the screw 21 from the front of the sign plate, all the other operations having been performed from the rear side thereof. The temporary securing means becomes a portion of the permanent securing means after the screw 21 has been attached and the receptacle is rigidly attached to the sign plate at two points.

The extreme simplicity of the automatic attaching means will be appreciated. It will be seen that it is made from a single strip of metal which can be punched to size and shape and snapped into the insulating material at the time of its manufacture. The attachment of the securing means to the insulating body is automatic and unfailing. The operation of securing the receptacle to the sign plate is extremely simple and yet the receptacle is held with considerable force against the back of the sign plate so that the wiring operation can be performed without the workman moving to the front to add the additional securing means to the receptacle.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. In an electric lamp receptacle, in combination, a body of insulating material having a face adapted to abut the back of a sign plate, said body having a hole therein opening into said face and a member having a head in engagement with said face, and a resilient extensible shank secured in said hole.

2. In an electric lamp receptacle, in combination, a lamp contact receiving body of insulating material having a face adapted to abut the back of a sign plate, said body having a hole therein opening into said face, a ledge near the end of said hole remote from said face and a member of resilient material having a head in engagement with said face when the body is not mounted on a sign plate, a shank secured to said head and arranged in said hole, and a part on said shank engaged over said ledge to normally retain the head in engagement with said face.

3. In an electric lamp receptacle, in combination, a body of insulating material having a face adapted to abut the back of a sign plate, said body having a hole therein opening into said face, a shoulder in said hole remote from said face, a member of resilient material having a head in engagement with said face, and a curved shank in said hole, said shank being engaged over said shoulder.

4. In an electric lamp receptacle, in combination, a lamp contact receiving body of insulating material having a face adapted to abut the back of a sign plate, means on said body to engage said plate to prevent sliding of said body along said face, said body having a hole therein opening into said face, an attachment member having a head adapted to engage the front of said plate, when the body is mounted thereon to prevent rearward movement of said body from the plate, said member having an integral portion passing

into said hole, an enlargement at the rear end of said hole forming a shoulder, and a hook on said integral portion resiliently engaging said shoulder.

5. In an electric lamp receptacle, in combination, a body of insulating material having a face adapted to abut the back of a sign plate, said body having a hole therein opening into said face, a securing member having a head normally in engagement with said face, a curved resilient shank on said member arranged in said hole, and means attaching the end of said shank remote from said head directly to said insulating body.

6. In an electric lamp receptacle, in combination, a body of insulating material having a face adapted to abut the back of a sign plate, said body having a hole therein opening into said face, an enlargement of said hole forming a shoulder at one side of the hole remote from said face, a securing member having a part normally in engagement with said face, said member having a shank curved longitudinally and arranged in said hole and an end on said shank adapted to hook over said shoulder to retain the member in position.

7. In an electric lamp receptacle, in combination, a body of insulating material having a face adapted to abut the back of a sign plate, said body having a hole therein opening into said face, an enlargement of said hole forming a shoulder at one side of the hole remote from said face, a securing member having a part normally in engagement with said face, said member having a shank curved longitudinally and arranged in said hole and an end on said shank adapted to hook over said shoulder to retain the member in position, said curved shank engaging the walls of said hole to resiliently retain said end over said shoulder.

In testimony whereof I hereunto affix my signature.

DANIEL M. LE FEVER.