Feb. 16, 1960 R. W. FRASER 2,925,488

LAMP SOCKET

Filed June 27, 1957

FIG. 1.

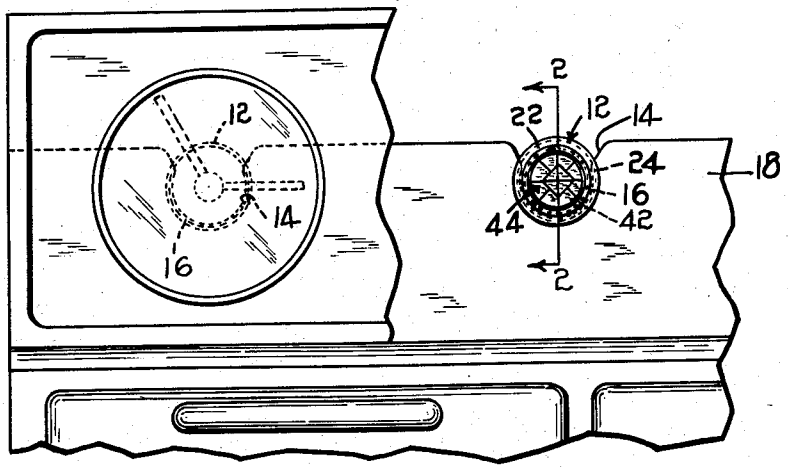


FIG. 2.

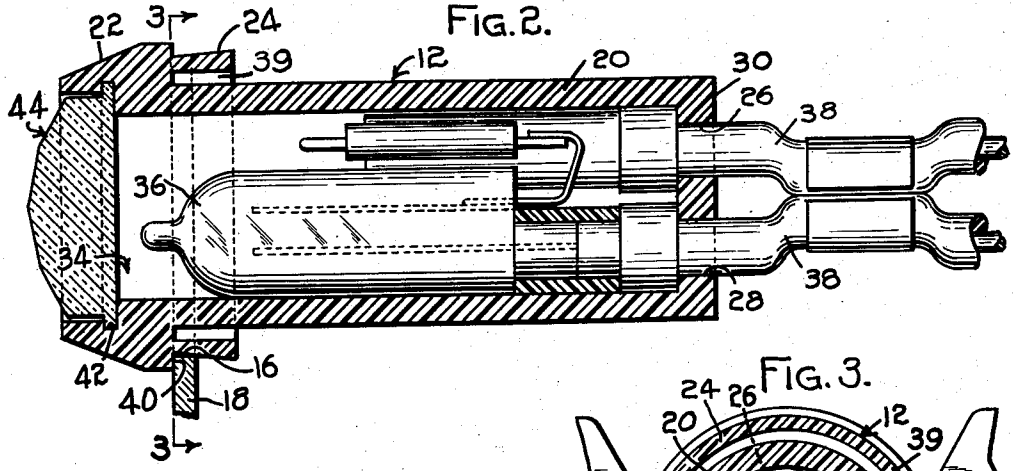


FIG. 3.

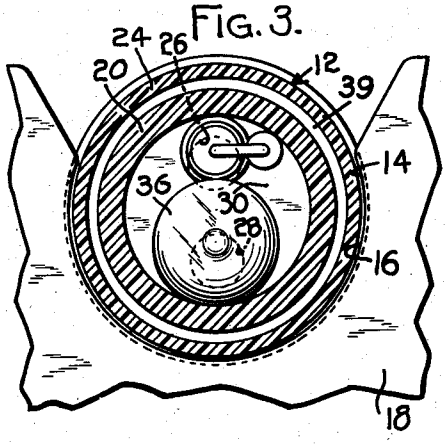
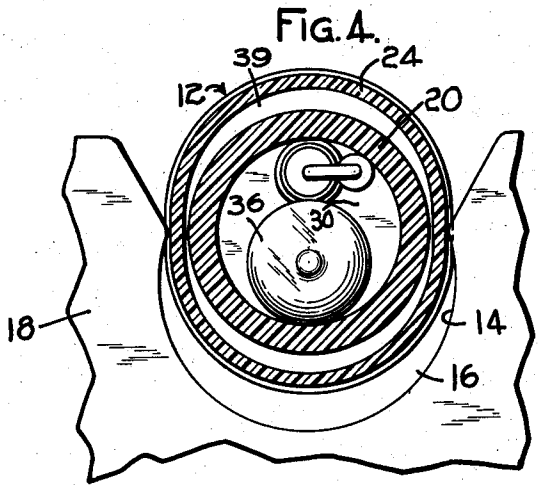


FIG. 4.



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LAMP SOCKET

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2 Claims. (Cl. 240—52.1)

This invention relates to a lamp socket assembly and more particularly to a lamp socket adapted for snap fastener engagement with a semi-circular support and aims generally to improve existing sockets of this type.

In many types of electrical stoves, a housing forming a control panel is provided with means for illuminating the various timing and control instruments. These panels are usually constructed of thin metal and difficulty has been experienced in the retention of lamp sockets of the push-in type due to the thinness of these panels with the resulting misalignment of cover panels.

A primary object of this invention is the provision of a lamp socket assembly adapted for sideways insertion into a semi-circular aperture formed in the housing.

Another object of this invention is to provide a one piece lamp socket which may be molded integral with the attaching elements.

A further object of this invention is to provide a lamp socket of improved and simplified construction having a one piece housing formed of a semi-resilient material which may be assembled with the lighting elements prior to insertion into a support.

Other objects of this invention will, in part, be obvious, and will, in part, appear hereinafter.

In the drawing:

Fig. 1 is a view in front elevation of a lamp socket embodying the invention, broken away to show the application to a semi-circular support opening.

Fig. 2 is a section on line 2—2 of Fig. 1, partly in elevation.

Fig. 3 is a section on line 3—3 of Fig. 2, showing the socket fully inserted into the application plate.

Fig. 4 is a view similar to Fig. 3 showing the socket partly inserted into the application plate.

Referring to the drawings, the numeral 12 designates a lamp socket assembly adapted for snap fastener engagement with the edges 14 of a segment of a circular opening 16 in a support panel 18. The support 18 may be a portion of a stove or the like and the socket assembly 12 is designed to snap into sideways engagement therewith.

Generally described, the socket assembly comprises a one piece housing 20 having tapering collars 22 and 24 on one end thereof and collaterally spaced wire receiving apertures 26 and 28 formed in the base 30.

The housing 20 is made of a thermo plastic resilient material, preferably nylon or the like, and comprises a tubular housing 20 having an open end 34 for reception of the lamp element 36 and a closed base 30 apertured at 26 and 28 for the passage of current conducting wires 38.

Adjacent its open end, the housing 20 is provided with successive collars 22 and 24 having a taper running toward the open end 34, the inner collar 24 spaced from the housing 20 providing a recess 39 into which the collar 24 may contract, and intermediate the two flanges 22 and 24 lies a shoulder portion 40 adapted to abut against one face of the support 18.

The open end 34 of the housing 20 is provided with an inner recess 42 adapted to receive in snap engagement therewith a glass lens 44 which will effectively seal the open end 34.

To assemble the socket, the lighting elements 36 with the wires 38 permanently attached thereto is inserted into the open end 34 so that the wires protrude out of the apertured base 30. The glass lens 44 is snapped into engagement with the recess 42. The socket assembly is then snapped into the semi-circular opening 16, thereby engaging the support panel 18 by pressing the resilient collar 24 against the edges 14 of the panel 18 at the semi-circular opening 16, resulting in the collar 24 contracting inwardly toward the recess 39. The edges 14 at the semi-circular opening 16 comprise an arc of lesser diameter than the diameter of the collar 24 as shown in Fig. 4, while the diameter of the aperture is of a size to retain the collar 24 securely in position as shown in Fig. 3.

During the assembly operation, the collar 24 is compressed by the edges 14 at the aperture 16 until it has passed therethrough and has cleared the edges thereof at which time it snaps outwardly within the main body of the opening 16. In this position, the shoulder portion 40 abuts the outer face of the support 18 and together with the tapered collar 24 prevents the socket from moving in an axial direction.

Since certain other obvious modifications may be made in the device without departing from the scope of the invention, it is intended that all matters contained herein be interpreted in an illustrative and not in a limiting sense.

I claim:

1. An electrical lamp socket comprising a one-piece body forming a housing having lamp means positioned therein, an integral one-piece axially extending continuous resilient collar of substantially constant diameter adjacent one end of said body having inner and outer walls surrounding said body in substantially equi-spaced relationship thereto, a shoulder means adjacent one end of said resilient collar where it joins said body, the outer wall of said collar diverging from its connection with said shoulder means, said collar adapted for resilient engagement with a notch on the edge of a panel, said notch comprising a segment of a curve slightly more than 180°.

2. An electrical lamp socket in accordance with claim 1 wherein the notch comprises the segment of a circle having a range more than 180° and less than 360°.

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