

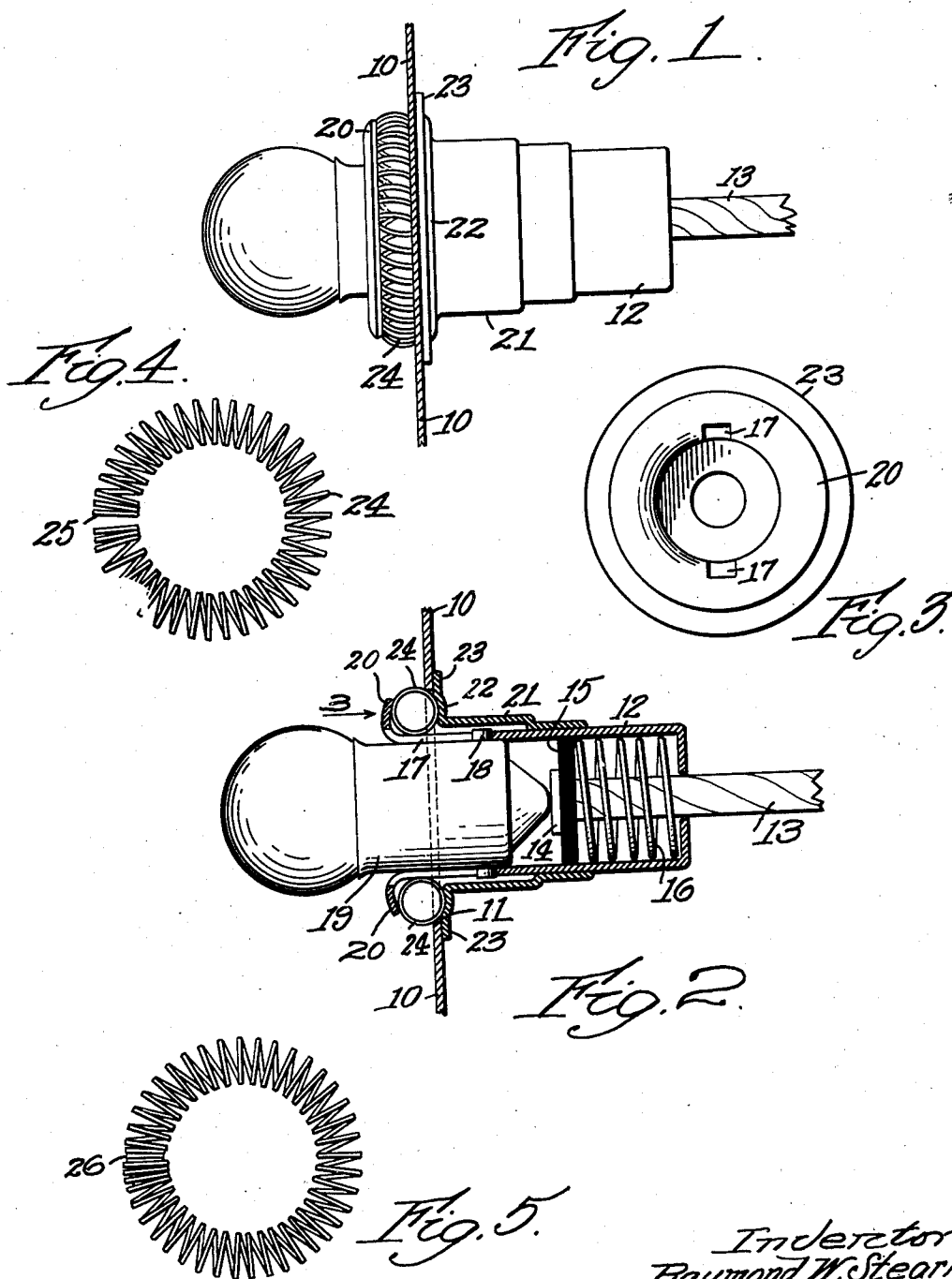
July 5, 1938.

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2,122,848

SNAP-IN SOCKET

Filed Dec. 24, 1937



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UNITED STATES PATENT OFFICE

2,122,848

SNAP-IN SOCKET

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Application December 24, 1937, Serial No. 181,670

1 Claim. (Cl. 173-339)

This invention relates to a socket for a lamp or other electrical device adapted to be held in a perforation in a panel board or other support.

The principal objects of the invention are to provide an inexpensive and extremely simple means for holding the socket in a perforation yieldingly; to avoid accidental displacement or any noticeable vibration and yet permit ready removal, when desired; to provide the socket with a double flange, one part of which is adapted to pass through the hole, preferably circular, in the panel board or support and the other having a flange held against the same for the purposes above described, and to provide a length of coil spring flexed into circular form to come between these two flanges and constitute the holding means, above described. This spring, preferably, is a straight length of coiled spring having the two ends abut each other or having one end located inside the other to provide an additional safety means against accidental removal.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawing, in which

Fig. 1 is a side view of a socket, constructed in accordance with this invention and shown as holding an electric lamp on the panel board of an automobile or other support;

Fig. 2 is a diametrical sectional view of the same;

Fig. 3 is an end view in the direction of the arrow 3 in Fig. 2;

Fig. 4 is an elevation of one form of spring holding device, and

Fig. 5 is a similar view of another form of spring holding device, also coming within the scope of this invention.

This is a self-contained socket avoiding the necessity of a bracket on the panel board or the like, thereby reducing the expense. The invention is shown as applied to a panel board 10, or other support, having a circular perforation 11 for receiving the entire socket and the instrument or lamp with which it is provided.

The socket comprises a tubular member 12 of sheet metal having a bottom closed except for an opening to receive an electric cable 13 which connects with a terminal 14 inside the tubular member. It is provided with a plate 15, preferably backed up by a spring 16, so as to provide a spring-pressed terminal. The tubular member 12 is provided with the usual bayonet slots 17 for receiving the pins 18 on the base 19 of an elec-

tric lamp or other electrical instrument. The tubular member 12 is provided at the end with an outwardly projecting concave flange 20. It is also provided with a fixed tubular member 21 having a corresponding flange 22 spaced from the flange 20 and also having a flat annular extension 23 beyond it.

These two flanges 20 and 22 are concave so as to receive a holding device in the form of a coil spring 24 of circular cross section. This coil spring is a very inexpensive device for use in holding the socket in the panel board, or the like, and it is preferably made with its two ends finished and the end coils at 25 contacting, as shown in Fig. 4. This constitutes a preferred form but, if desired, it can be made with a little more difficulty to remove by providing one end exactly as shown in Fig. 4 and reducing the other end 26, as shown in Fig. 5, to such a degree that it will enter the larger end and hold the spring more firmly in place. The spring in this case is made a little longer than in the other. In either case it furnishes a yielding holding device.

The spring is put in between the two flanges 20 and 22, both of which preferably are concave a little to bear on its outer side and hold it in place. It will be noticed that the two flanges 20 and 22 are at a fixed distance apart and the spring has to be entered between them. Then the socket and the lamp or other instrument are forced through the hole or perforation 11 to the point shown in Figs. 1 and 2. The spring 24 will yield to this action but it is necessary to put one side through with the socket at an angle and then turn the socket to bring the other side of the spring through the hole, ordinarily.

The supports, as for example panel boards 10, may be of different thicknesses in different instances and a single construction will take up these differences so that whatever the thickness of this support may be within ordinary limits, different sizes of springs will not have to be used. It will be seen that the spring comes in back of the edge of the hole, at one end, and that at the other end at 20 the concave flange reaches over the center of the spring. In both cases it is held up against the member 12 so that there will be no undue vibration and in fact, it is only with difficulty that anybody can turn the socket in the perforation.

This constitutes a very inexpensive and neat device for the purpose intended, without projecting parts and without the use of any brackets. The projecting flange 23, of course, comes against one side of the plate 10 while the spring

bears against the other side and thus the socket is held against longitudinal dislocation.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as
5 set forth in the claim, but what I claim is:

As an article of manufacture, an electric socket comprising a hollow sheet metal member, a tubular member secured therein and projecting
10 therefrom, a spring pressed electric terminal in said tubular member, and means for detachably

holding the socket in a perforation through a supporting plate, comprising a circular flange on the tubular member, a circular flange on the sheet metal member, and a yielding coiled spring surrounding the socket, located between said
5 flanges, and slightly larger in outside diameter than said perforation, to enable it to be pushed into the perforation and hold the socket in place, but capable of yielding under pressure to allow
10 the socket to be withdrawn.

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