April 26, 1938. F. H. WESTON 2,115,600

ELECTRIC SOCKET

Filed March 20, 1936

Fig. 1.

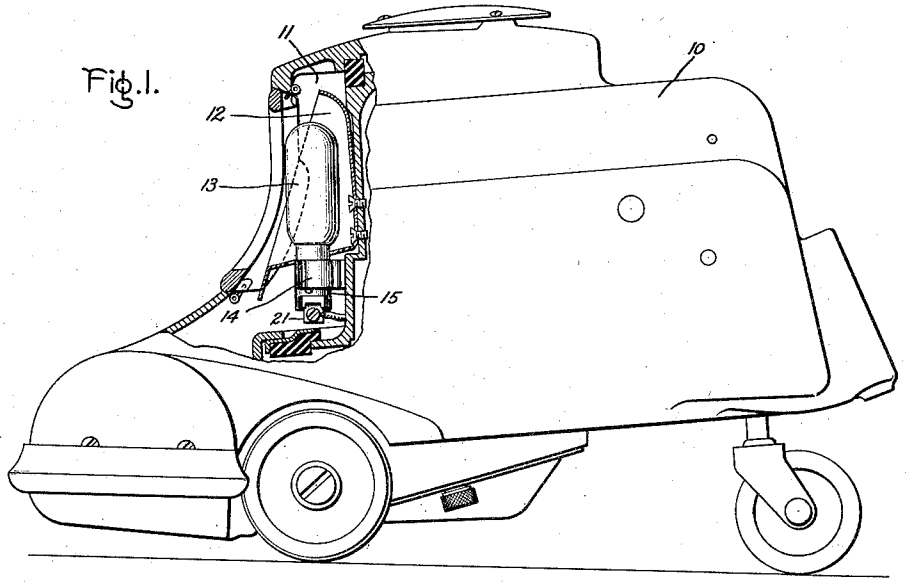


Fig. 2.

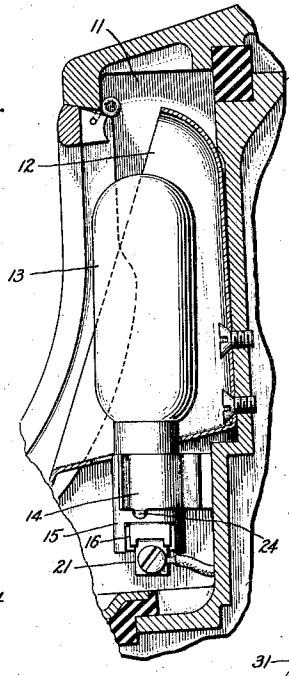


Fig. 3.

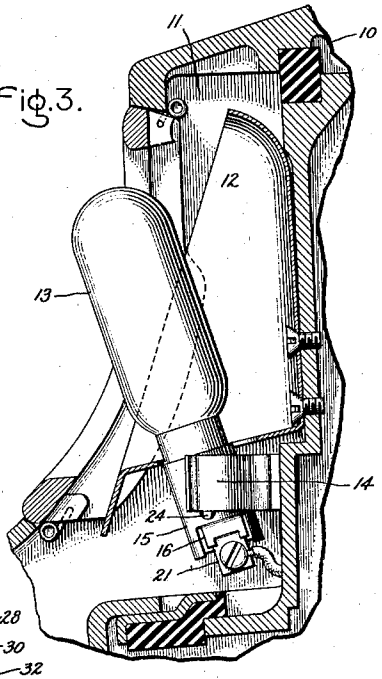


Fig. 4.

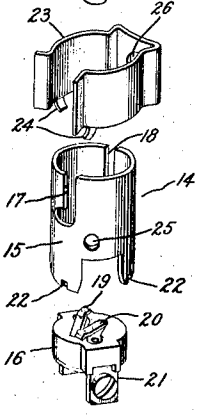
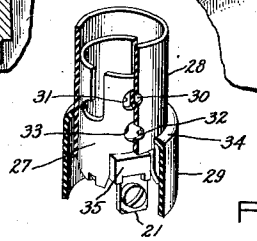


Fig. 5.



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UNITED STATES PATENT OFFICE

2,115,600

ELECTRIC SOCKET

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Application March 20, 1936, Serial No. 69,809

2 Claims. (Cl. 240—52)

My invention relates to electric sockets and more particularly to such sockets for use in confined spaces.

An object of my invention is to provide an improved socket which is adapted to facilitate the insertion and removal of a lamp located in a very confined space.

What I consider to be novel and my invention will be better understood by reference to the following specification and appended claims when considered in connection with the accompanying drawing in which Fig. 1 is a side elevation of a portion of a vacuum cleaner partly in section; Fig. 2 is an enlarged, sectional view of a portion of the vacuum cleaner with my improved socket mounted in position; Fig. 3 is a view similar to Fig. 2 with the lamp moved ready for removal from the socket, Fig. 4 is an exploded, perspective view of the socket, and Fig. 5 is a perspective view partly in section of a modified construction.

Referring to the drawing, 10 indicates a portion of a vacuum cleaner having a recess 11 to accommodate a light. In recess 11, a reflector 12 is secured with a lamp 13 located in position in front of it. For connecting lamp 13 to the electrical supply, a socket 14 is provided in which the lamp 13 is mounted. As is better indicated in Figs. 2, 3 and 4, socket 14 consists of a cylindrical metal shell 15 and base 16 of insulating material. To secure the lamp 13 in the socket 14 the usual bayonet slots 17 and 18 are provided which receive the pins, not shown, provided on the base of the lamp 13. Mounted on base 16 are two spring contacts 19 and 20 which are connected to terminals 21 one of which is shown in Fig. 4. Base 16 is secured in shell 15 by peening over portions of the bottom end of shell 15 at spaced points 22 into engagement with the bottom of base 16. It is frequently necessary to mount sockets of this type in very confined spaces. By way of example the socket is illustrated in the drawing as being mounted in the space provided for a light in a vacuum cleaner. The recess 11 is amply large to accommodate the lamp 13 and socket 14. However, it is not sufficiently large to permit easy removal of the lamp so that it would be necessary to disassemble the vacuum cleaner to replace the lamp 13 if the socket were rigidly mounted in position. Thus to permit the ready removal of lamp 13 without disassembly of the vacuum cleaner, socket 14 is provided with a U-shaped supporting clip 23 with tangs 24 projecting from the bottom sides of the two arms and adapted to enter openings 25 provided in shell 15. Only one of such openings 25 may be seen in Fig. 4 but a similar opening is provided at the opposite side. By this arrangement the shell 15 is pivotally mounted in the supporting clip 23. To secure the supporting clip 23 to its housing, an opening 26 is provided through which a bolt or screw may pass. As better indicated in Fig. 3, the lamp 13 is removed by tilting it forward pivoting the socket shell 15 about the tangs 24 until the top of lamp 13 is substantially clear of the opening of recess 11. In this position, lamp 13 may be twisted readily to disengage the pins from bayonet slots 17 and 18 and the lamp may be removed from the shell 15.

In the modified construction shown in Fig. 5 shell 27 is provided with an insulating covering consisting of a sleeve 28 and skirt 29 both of insulating material. Sleeve 28 is secured to shell 27 by means of integral projections 30 which extend into openings 31. For pivotal mounting of shell 27 openings 32 are provided in sleeve 28 smaller in diameter than corresponding openings 33 in shell 27 (only one of the openings being shown) into which tangs 24 of supporting clip 23 enter. By this arrangement tangs 24 do not engage the metal shell 27 and so the shell 27 is insulated from its support. Skirt 29 has an inturned annular edge 34 which engages a projecting ear 35 of the base to hold the skirt in position below the supporting clip 23.

From the foregoing it may be seen that an improved socket is provided which facilitates the replacement of a lamp when the socket is located in a confined space.

What I claim as new and desire to secure by Letters Patent of the United States, is:

1. An electric socket and support therefor comprising a cylindrical shell for the socket having spaced openings and a flexible U-shaped clip yieldingly gripping said shell to hold it in normal position, said clip having projections extending into said openings whereby said shell is pivotally mounted for movement from said normal position upon flexing of said clip.

2. An electric socket and support therefor comprising a socket shell having spaced openings and a flexible U-shaped clip gripping said shell to hold it in normal position, said clip having integral projections extending from the bottom of the arms of the U near their outer ends and entering the openings in the shell to permit pivotal movement to a second position upon flexing of said clip.

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