United States Patent Hernandez

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[54] ROTATEABLE ELECTRIC CONTACT

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[57] ABSTRACT

A device for the connection of an output switch and an input lead for a battery, a plate portion of the device allowing for rotation of the upper portion. This device also contains a screw for securing the rotatable members.

1 Claims, 3 Drawing Figures





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ROTATEABLE ELECTRIC CONTACT

This invention relates to electrical contacts, and more particularly to a rotatable electrical contact.

It is therefore the main purpose of this invention to provide a rotatable electrical contact which will have few moving parts 5 and will be able to carry high current.

Another object of this invention is to provide a rotatable electrical contact which will have screw means connecting a rotor portion with spring means to have the plate portion in constant contact with an inner member.

Other objects of the present invention are to provide a rotatable electrical contact which is simple in design, inexpensive to manufacture, rugged in construction, easy to use and efficient in operation.

These and other objects will become readily evident upon a 15 study of the following specification and the accompanying drawing wherein:

FIG. 1 is a side view of the present invention;

FIG. 2 is an exploded view of FIG. 1 shown in section with the mounting brackets removed therefrom; and

FIG. 3 is a view taken along the line 3-3 of FIG. 2.

According to this invention, a rotatable electrical contact 10 is shown to include a base member 11 which is secured between L-shaped configurated mounting brackets 12 by means of a plurality of screws 13. A plate portion 14 above the 25 base 11 is provided with an internally threaded opening 15 for the output to a switch (not shown).

A washer member 16 abuts with the top of plate 14 at one face and abuts with a bushing 17 at its other face. Bushing 17 carries a coiled spring 18, the upper end of which receives a 30 downward successively through an upper of said bushings. similar bushing 19 and screw 20 receives bushings 17 and 19 and also spring 18. Washer 16, bushings 17, spring 18 bushing 19, and bolt 20 are enclosed within a cylindrical cover 21 and screw 20 of the assembly is freely carried within opening 22 of plate 14. 35

A member 23 is conical at its upper extremity and is rotatably received within the conical lower portion of opening 22 within plate 14, this arrangement allowing for continuous rotary contact of member 23 of plate 14.

Member 23 is also provided with threaded and parallel openings 25 and 26. A vertical opening 27 through base 11 provides for the introduction of an input lead 28 from a battery (not shown). Input lead 28 is secured within member 23 by means of a suitable bolt fastener.

What I now claim is:

1. A rotatable electric contact comprising in combination a base, a pair of L shaped brackets, said base being positioned between said brackets and secured thereto by screws for placement of said base against a securing surface, a rotor plate carried by said base providing electrical contact means with a member in said base, an underside of said rotor plate being provided with a conical opening which matingly engages an upper conical portion of said member within said base, an input lead wire for connection to a battery being received within a central opening in said base and being secured by a fastener means to said member within said base, a vertical upstanding screw threadingly engaged in a threaded opening in said member within said base, a vertical clearance opening through said rotor plate receiving said screw therethrough, said clearance opening being concentric with said conical opening, a flat washer upon the upper side of said rotor plate, a pair of spaced apart bushings upon said washer, a compression coil spring between said bushings, said screw being fitted said spring, a lower of said bushings, said washer and through said clearance opening of said rotor plate for engagement to said member in said base, and an enlarged head of said screw being positioned against an upper side of said upper bushing.

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