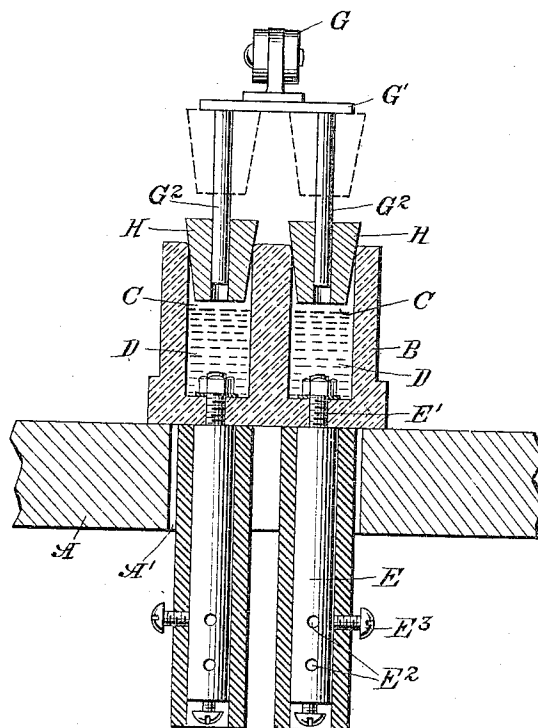


H. KOCH.
MERCURY SWITCH.
APPLICATION FILED SEPT. 11, 1908.

972,542.

Patented Oct. 11, 1910.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY KOCH, OF RAHWAY, NEW JERSEY, ASSIGNOR TO THE REGINA COMPANY, OF RAHWAY, NEW JERSEY, A CORPORATION OF NEW JERSEY.

MERCURY-SWITCH.

972,542.

Specification of Letters Patent.

Patented Oct. 11, 1910.

Application filed September 11, 1908. Serial No. 452,620.

To all whom it may concern:

Be it known that I, HENRY KOCH, a citizen of the United States, and resident of Rahway, county of Union, State of New Jersey, have invented certain new and useful Improvements in Mercury-Switches, of which the following is a specification.

My invention relates to switches in which mercury is used as one of the contact elements and commonly known as mercury switches and has for its object to so construct switches of this description that the mercury may be introduced therein before shipment and to provide said switches with a means for preventing the mercury from being spilled during shipment.

Reference is to be had to the accompanying drawings which show an elevation of my improved switch with parts in section.

A represents the support upon which the switch is mounted and B is the container made of porcelain or similar material and provided with chambers C adapted to receive the mercury or a similar electrical conducting liquid D.

E represents contact members having portions E' which extend into the chambers C and into the mercury D. These contact members E are supplied with suitable openings E² into which the ends of the wires are arranged to be secured by screws E³. These contact members E are surrounded by a covering of insulating material and extend through a suitable opening A' in the support A.

G is a pivoted member to which is secured a cross piece G' from which depend contact posts G². These contact posts G² are suspended centrally over the chambers C and are arranged to be dipped into the mercury D in the chambers C through the down-

ward movement of the member G and thus complete the electrical circuit, it being understood that the contact members E are each suitably connected with the source of electrical energy. H are stoppers or corks, which are slidably mounted on the contact posts G². Thus when it is desired to ship the switch, the mercury may be introduced into the chambers C, after which the corks H are moved down on the contact posts G² and forced into the open ends of the chambers C, thus securely closing or corking said chambers. It is therefore impossible to spill the mercury from the chambers during shipment. During use of the switch the stoppers H may be moved up on the contact posts into an inoperative position as indicated by dotted lines in the drawing.

Various modifications may be made without departing from the nature of my invention as defined in the claim.

I claim:

A switch member provided with a chamber adapted to contain an electrical conducting liquid, a movable contact member arranged to extend into said chamber, and means positively engaging said contact member and movable thereon to a position to engage the walls of said chamber for temporarily sealing said chamber and also movable on said contact member to a position where said means will not seal the said chamber as the contact member is operated.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HENRY KOCH.

Witnesses:

JOHN LOTKA,

JOHN A. KEHLENBECK.