Feb. 18, 1930. F. P. GATES 1,747,896

CONTACT SOCKET

Filed Dec. 6, 1926

Fig. 1.

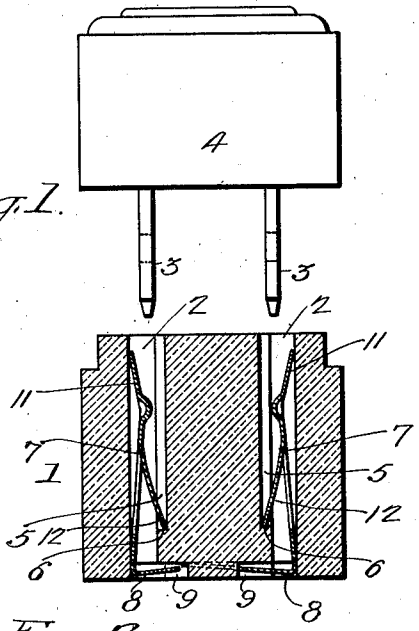


Fig. 4.

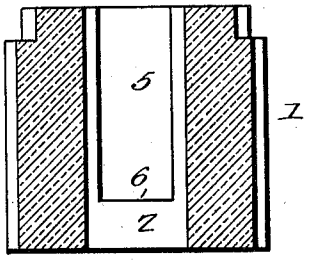


Fig. 2.

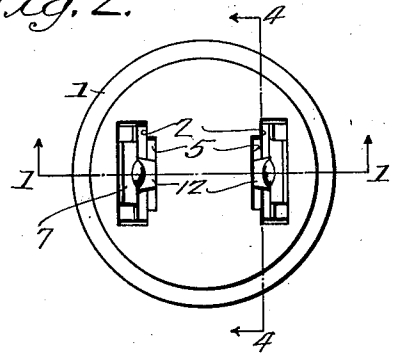


Fig. 5.

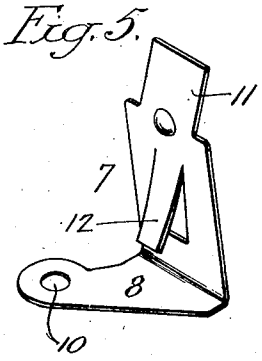
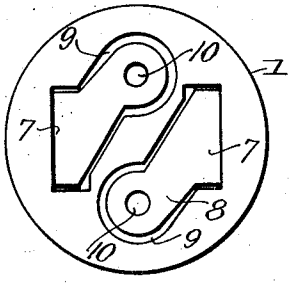


Fig. 3.



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Patented Feb. 18, 1930 1,747,896

UNITED STATES PATENT OFFICE

FREDERIC P. GATES, OF WEST HARTFORD, CONNECTICUT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE ARROW-HART & HEGEMAN ELECTRIC COMPANY, OF HARTFORD, CONNECTICUT, A CORPORATION OF CONNECTICUT

CONTACT SOCKET

Application filed December 6, 1926. Serial No. 152,958.

The object of my invention is to so design a contact socket that the contact plates can be secured in place without the use of screws or other separate fastening means.

In the accompanying drawing:

Fig. 1 is a sectional view, on the line 1—1, Fig. 2, of my improved contact socket with the plug in elevation;

Fig. 2 is a plan view of the socket;

Fig. 3 is an inverted plan view;

Fig. 4 is a sectional view on the line 4—4, Fig. 2; and

Fig. 5 is a detached perspective view of one of the contact plates.

The body 1 of the socket is made of hard rubber or other suitable non-conducting material, molded into shape, and two passages 2—2 are formed in the rubber for the reception of the contact plates 7 and the blades 3 of the plug 4 to which the wires are attached.

The passages 2 are rectangular in shape and have offset portions 5 which stop short of the bottom of the socket to form shoulders 6, as shown in Figs. 1 and 2.

The contact plates 7 are made as shown in Fig. 5. Each plate has a base 8 adapted to rest in a recess 9 in the bottom of the socket and is perforated at 10 for the reception of a binding-screw by which a wire or other conductor is secured to the plate.

At the opposite end of the plate is a lip 11, reduced in width and bent backward to rest against one of the walls of a passage 2. A tongue 12 is cut from the body of the plate and bent forward to enter the offset portion 5 of the passage, and engages the shoulder 6, when the plate is forced into the socket from the bottom as shown in Fig. 1.

The engagement of the tongue with the shoulder 6 locks the tongue in position without other fastening means. This construction allows for the removal of the binding-screws without detaching or loosening the contact plates.

To remove a contact plate, all that is necessary is to force a flat instrument into the passage until it presses the tongue away from the shoulder; then the plate can be readily removed and replaced if necessary.

This invention is particularly adapted for use where the socket is comparatively small, but it will be understood that it can be used in any form of socket where a contact plate is located in a passage such as illustrated.

The socket is shaped in the present instance to fit a cylindrical holder, but it will be understood that the shape of the socket may be varied, depending upon the mechanism to which it is applied.

I claim:—

A contact socket comprising an insulating member having a plurality of longitudinal passages extending therethrough, one wall of each passage being offset, the offset portion terminating short of the bottom, forming a shoulder, the lower portion of each passage adjacent the bottom being widened to form a shallow channel; a resilient contact clip in each of said passages, each clip having a resilient tongue engaging the shoulder to secure the clip from movement in one direction, said clip being flanged at the other end to fit in said shallow channel, to prevent movement in the other direction and to act as a terminal.

FREDERIC P. GATES.