April 16, 1929. O. ADLER 1,709,452

FLOATING TUBE SOCKET

Filed Feb. 26, 1927

Fig. 1.

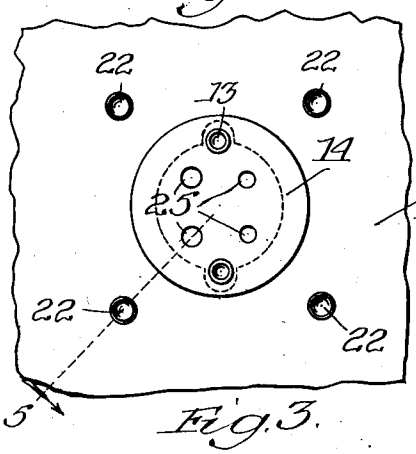


Fig. 2.

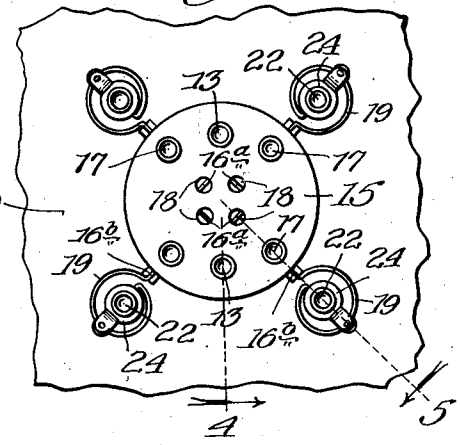


Fig. 3.

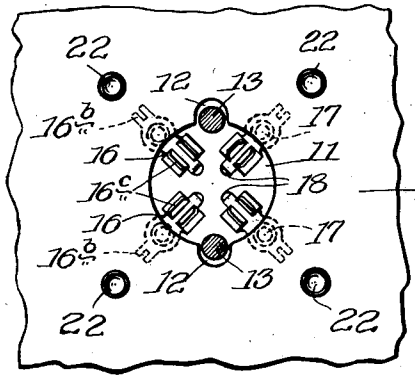


Fig. 4.

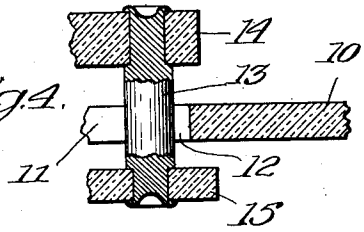


Fig. 5.

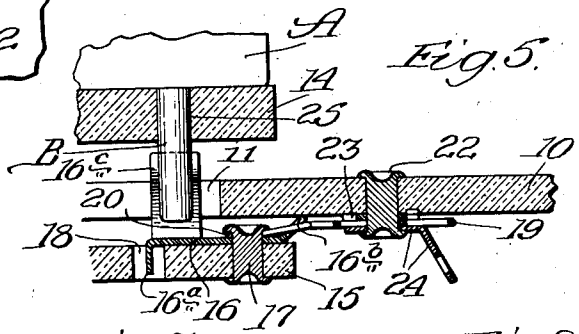


Fig. 6.

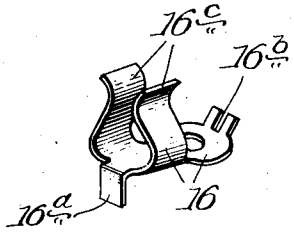


Fig. 7.

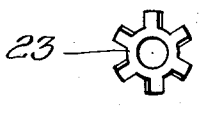
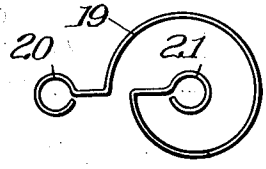


Fig. 8.



Inventor:
Oscar Adler,
By Dyrenforth & Co., Chrittons & Hiles,
Attys.

Patented Apr. 16, 1929. 1,709,452

UNITED STATES PATENT OFFICE.

OSCAR ADLER, OF NORTH CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO NATIONAL ELECTRICAL PRODUCTS COMPANY, OF WAUKEGAN, ILLINOIS, A CORPORATION OF ILLINOIS.

FLOATING TUBE SOCKET.

Application filed February 26, 1927. Serial No. 171,277.

This invention relates to floating sockets for audion tubes, rectifying tubes and the like and has for an object the provision of such a socket which is efficient in operation and which at the same time is simple and economical to manufacture.

These and other objects as will later appear are accomplished by this invention which is fully described in the following specification and shown in the accompanying drawing, in which:

Figure 1 is a top plan view of a section of a panel showing the socket applied thereto;

Fig. 2 is a bottom plan view of the same;

Fig. 3 is a view similar to Fig. 1, but showing the top plate of the socket removed;

Figs. 4 and 5 are partial enlarged sections on the lines 4 and 5 of Fig. 2;

Fig. 6 is a perspective view of a clip removed;

Fig. 7 is a front elevation of one of the lock washers; and

Fig. 8 is a similar view of the spiral spring.

The embodiment illustrated comprises a panel 10 normally disposed horizontally when in use in which is formed an opening 11 having recesses 12 which are adapted to serve as guide-ways for pins or rivets 13 which serve to tie together top and bottom plates 14 and 15 respectively of the tube socket.

The bottom plate 15 is provided with a plurality of spring clips 16, preferably four in number, which are secured thereto by means of rivets 17, the ends of the clips 16 being provided with tongues 16^a which extend into holes 18 in the bottom plate.

The bottom plate 15 is supported by means of a plurality of spiral wire springs 19, the outer end of each being provided with an eye 20 which is also held by the rivet 17 while the inner end is provided with an eye 21 which is secured to the panel 10 by means of a rivet 22. To further insure the proper positioning of these elements, the outer end of the spring 19 passes through a slot 16^b in the clip 16. The inner end 21 of the spiral spring is preferably held under the rivet 22 between a well known form of lock washer 23 having burred edges and a well known form of terminal 24.

Each of the clips 16 is provided with spring fingers 16^c each of which lies beneath one of the holes 25 in the top plate 14. These holes 25 are made of a size and spaced to suit standard audion tubes. In Fig. 5 is shown part of the base of an audion tube A having a pin B extending through one of the holes 25 and yieldably held between spring fingers 16^c. As shown in Fig. 1, these holes differ in size so that the tube can be inserted in only one position so that there is no danger of its being inserted in other than the correct position.

Experience has shown that this tube socket gives a very soft springy action so that the latter absorbs any vibrations in the tube which are received from outside sources, thereby preventing the tube from humming or from producing any disagreeable noise. This humming is often due to the relative change of positions of the tube elements which is brought about by vibrations received from external sources.

It is also apparent that I have provided a very simple and efficient form of floating tube socket, and one which at the same time can be efficiently and economically made and assembled.

While I have shown and described but a single embodiment of this invention, it is to be understood that it is capable of many modifications. Changes therefore in the construction and arrangement may be made which do not depart from the spirit and scope of the invention as disclosed in the appended claims.

I claim:

1. A floating tube socket comprising a base of insulating material having an opening therethrough, two spaced members, one on each side of said base, spacers connecting said members, clips carried by one of said members, each clip adapted to engage a prong of an audion tube, and a yieldable conductor extending from each clip to a terminal on said base.

2. A floating tube socket comprising a base of insulating material having an opening therethrough, two spaced members, one on each side of said base, spacers connecting said members, guides in said opening for said spacers, clips carried by one of said members, each clip adapted to engage a prong of an audion tube, and a yieldable conductor extending from each clip to a terminal on said base.

3. A floating tube socket comprising a base

of insulating material having an opening therethrough, two spaced members, one on each side of said base, spacers connecting said members, clips carried by one of said members, each clip adapted to engage a prong of an audion tube, the upper member having holes adapted to selectively receive the prongs of the tube, and a yieldable conductor extending from each clip to a terminal on said base.

4. A floating tube socket comprising a base of insulating material having an opening therethrough, two spaced members, one on each side of said base, a spacer connecting said members, a guide in said opening for said spacer, clips carried by one of said members, each clip adapted to engage a prong of an audion tube, and a yieldable conductor extending from each clip to a terminal on said base.

5. A floating tube socket comprising a base of insulating material having an opening therethrough, two spaced members, one on each side of said base, a spacer connecting said members, means for preventing rotation between said base and said spaced members, means on one of said members for engaging the prongs of an audion tube, and a yieldable connector extending from each prong engaging means to a terminal on said base.

In testimony whereof I have hereunto set my hand this 14th day of February, 1927.

OSCAR ADLER.