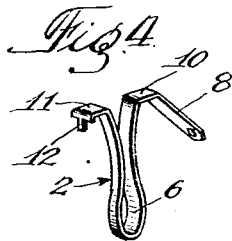
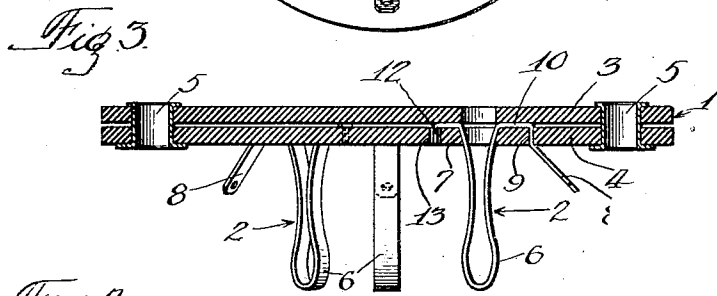
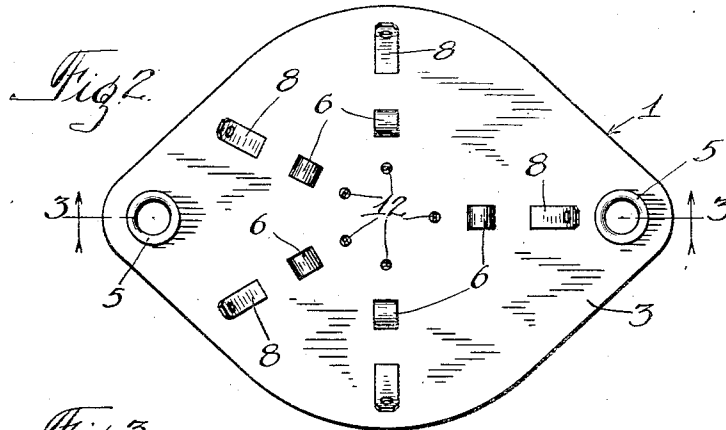
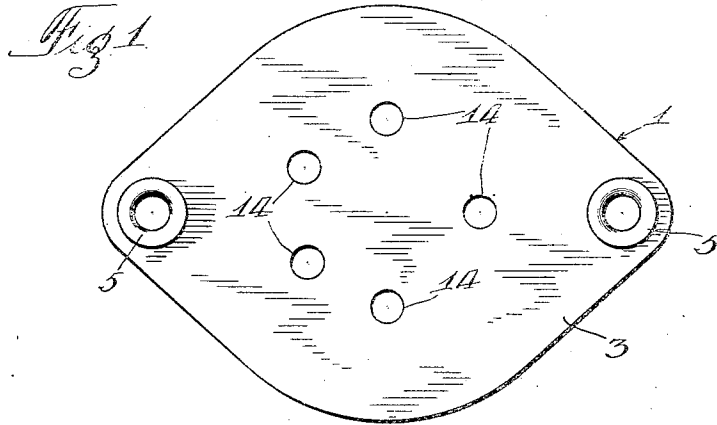


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 SOCKET FOR VACUUM TUBES  
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1,904,662



Witness:  
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# UNITED STATES PATENT OFFICE

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## SOCKET FOR VACUUM TUBES

Application filed November 30, 1928. Serial No. 322,687.

My invention relates to sockets for vacuum tubes and the like.

One of the objects of my invention is to provide an improved socket which will ensure good contact with the prongs of the tube, which will be easily wired, which can be readily mounted on a panel, which will have a dead front, and which will be cheap to manufacture.

Further objects will appear from the description and claims.

In the drawing, in which an embodiment of my invention is shown—

Figure 1 is a front view of the socket;

Fig. 2 is a rear view;

Fig. 3 is a section on the line 3—3 of Fig. 2; and

Fig. 4 is a perspective view of the contact and wiring terminal member.

Referring to the drawing in detail, the construction shown comprises a two-part insulating base 1 and a plurality of wiring terminal and contacts members 2 mounted thereon. The insulating base is formed of two plates 3 and 4 of insulating material, such as fiber or the like, held together by a pair of eyelets 5 which may provide means for attachment to a panel or frame. The contact and wiring terminal members 2 are assembled on the inner base part 4 before the two parts of the base are secured together so that the securing of the two base parts together holds these members in assembled position. The members are assembled with respect to the inner base by inserting the U-shaped contact portions 6 through the openings 7 in the base from the front side thereof, the wiring terminal portion 8 being sprung so as to enter the openings 9 in the base provided therefor so that when the members are pushed to their final position the portions connecting the contact portions 6 and wiring terminals will lie flat against a portion of the base between the contact-opening 7 and the wiring terminal opening 9. The other end of the strip forming this member is bent to provide a securing foot portion 11 and a positioning finger 12 which extends into an aperture 13 in the base portion 4 to definitely position this end of the

strip. The strip may be formed of any suitable springy metal or alloy, such as brass, and the wiring terminal portion may be tinned, if desired, to provide an easy soldering connection.

In use, the prongs of the tube are inserted through the openings 14 in the front insulating shield 3 and enter between the inwardly sprung portions of the U-shaped contact loops 6 which are formed so that they must be sprung apart slightly when the contact pins are inserted. This insures perfect contact and provides a rugged construction which is easy to assemble and wire and costs very little to manufacture.

I claim:

1. A tube socket construction comprising an insulating base plate having an aperture therethrough, a second apertured plate and a U-shaped spring contact between the arms of which the contact pin enters, and having its connecting portion at the inner end, said U-shaped spring contact being insertable through the aperture in the base plate from the front side thereof and each arm of said U-shaped spring contact having a securing tip overlying the base plate adjacent said aperture, and clamped between the plates, said base plate having a second aperture adjacent said first aperture and one of the overlying portions of the contact having a wiring terminal extension extending through said second opening to the rear of the base plate, the arms of said U-shaped spring contact being bowed toward each other whereby the intermediate portions of the opposed arms are closer together than the inner and outer portions and thus exert a spring pressure on the inserted contact pin.

2. A tube socket construction comprising an insulating base plate having an aperture therethrough, a second apertured plate and a U-shaped spring contact between the arms of which the contact pin enters, and having its connecting portion at the inner end, said U-shaped spring contact being insertible through the aperture in the base plate from the front side thereof and each arm of said U-shaped spring contact having a securing tip overlying the base plate adjacent said

aperture, and clamped between the plates, said base plate having an aperture adjacent said contact aperture and one of said over-  
5 lying portions having an extension tip extending into said aperture from the front side of the base to hold the tip against lateral movement, said base plate having another aperture adjacent the contact aperture at the rear of the base and the other of said  
10 overlying portions having a wiring terminal extension extending through said aperture to the rear of the base plate, the arms of said U-shaped spring contact being bowed toward each other whereby the intermediate  
15 portions of the opposed arms are closer together than the inner and outer portions and thus exert a spring pressure on the inserted contact pin.

3. In a socket receptacle, a plurality of  
20 clips, a pair of plates of insulation material, one plate having spaced openings for the clips and the other perforated in line with the openings, contact structure connected with said clips, each comprising a U-  
25 shaped contact member extending through one of the openings and having the ends of the U spread away from each other, one end comprising an intermediate portion of that clip and having a soldering lug connected  
30 thereto and both ends clamped between the two plates.

4. In a socket receptacle, two plates of insulation, one having a plurality of apertures for plug passage and for the insertion of  
35 contact clips, a plurality of contact clips, one in each aperture, having anchoring parts turned in opposite directions on diametrically opposite sides of the apertures to lie between the plates and be clamped between them, one  
40 of them having a projection directed laterally from the plane between the plates to enter one plate and to lock against withdrawal parallel to the plates and the other having a terminal soldering connection extending be-  
45 yond the clamped portion and through one plate.

In witness whereof, I have hereunto subscribed my name.

REUBEN B. BENJAMIN.

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