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1,989,601

RESISTANCE MOUNTING

Filed June 28, 1933

Fig. 1.

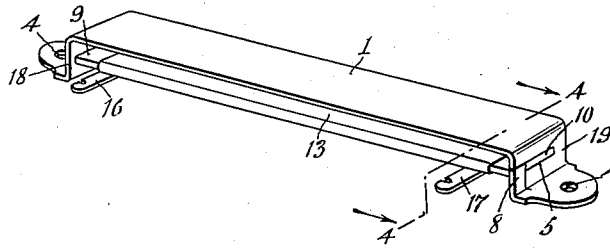


Fig. 2.

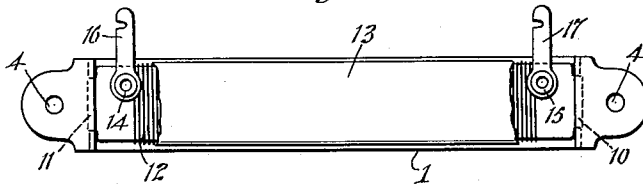


Fig. 3.

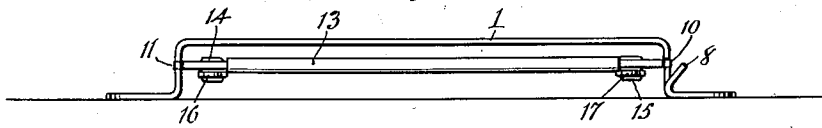


Fig. 4.

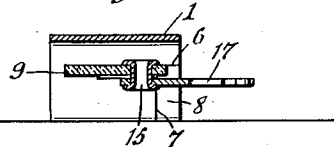


Fig. 5.

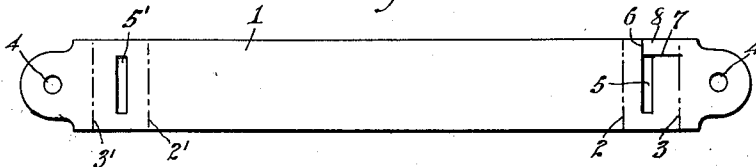
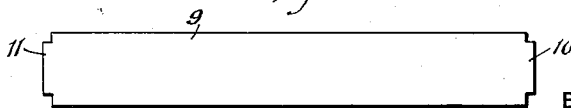


Fig. 6.

WITNESSES
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RESISTANCE MOUNTING

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3 Claims. (Cl. 248—20)

This invention relates to resistances and has for an object to provide an improved construction wherein a very simple and yet strong construction is provided whereby a desired resistance may be mounted for use with any desired circuit, with the resistance protected against accidental injury.

Another object of the invention is to provide an improved resistance wherein an extremely simple construction is presented with all parts of the resistance unit arranged within or covered by a supporting element.

A still further object, more specifically, is to provide a resistance unit of the type where the resistance wires are wound on an insulating support and wherein the insulating support is supported by integral extensions fitting into a protector and holder.

In the accompanying drawing—

Figure 1 is a perspective view of a resistance structure disclosing an embodiment of the invention;

Figure 2 is a bottom plan view of the structure shown in Figure 1;

Figure 3 is an end view of the structure shown in Figure 1, the slitted portion at one end being bent for illustrating how the resistance element is mounted;

Figure 4 is a sectional view through Figure 1 approximately on the line 4—4;

Figure 5 is a plan view of the blank from which the support and protector shown in Figure 4 is formed;

Figure 6 is a blank of the insulating foundation shown in Figures 1 to 3, inclusive.

Referring to the accompanying drawing by numerals, and particularly to Figure 5 thereof, it will be seen that the blank illustrated therein is provided with a body 1 adapted to be bent at the lines 2 and 2' and also at the lines 3 and 3', whereby a supporting and protecting structure as shown in Figure 1 is provided. When the blank is formed preferably an aperture 4 is formed at each end and also an aperture or slot 5. At one end there is provided slits 6 and 7 whereby a holding tongue 8 is formed.

After the blank has been bent along the lines 2 and 2', 3 and 3', the tongue 8 is bent to one side as shown in Figure 3 so that the insulating foundation strip or plate 9 may be inserted into the slot 5 at that end. It will be noted from Figure 6 that the foundation 9 is provided with integral extensions 10 and 11, extension 11 being adapted to be fitted into the slot 5' while extension 10 fits into slot 5, and then the tongue 8 is bent back to

the position shown in Figure 1. However, before the foundation plate 9 is placed in position a winding of resistance wire 12 is placed thereon and then the protecting and holding cover 13 is usually placed in position while in a liquid state and then allowed to dry. This coating is in the nature of a paint but is substantially fireproof so as to withstand the heat created by the electricity passing through the resistance wire 12. At the respective ends of the resistance wire there are arranged eyelets 14 and 15 which clamp the respective terminals 16 and 17 into electrical engagement with the ends of the winding 12, whereby when the proper wires of a circuit are connected to the terminals current may pass through the resistance. Instead of using eyelets, rivets or other fastening means could be utilized without departing from the spirit of the invention, though this form of fastening means is good mechanically and electrically and is also comparatively inexpensive.

In forming the blanks 1 and 9 preferably blank 9 is appreciably narrower than blank 1 so that when the complete resistance element is arranged in the supporting and protecting structure formed from blank 1, the edges of the resistance element will be within the edges of the member 1 and consequently will act not only as means for supporting the resistance element but as means for protecting the same against accidental injury.

It will be noted that by reason of the tongue 8 and extensions 10 and 11 the resistance element is mounted in place in the supporting and protecting member 1 without the use of special fastening means and in a way which is very inexpensive. This provides an efficient and yet inexpensive construction for use with radio tubes or circuits of any desired kind and used for any desired purpose. Preferably screws are passed through the opening 4 and into the supporting wood foundation or other structure so as to permanently mount the device, and when mounted the member 1 acts to cover and thereby protect as well as support the resistance element. Member 1 of the resistance unit, as it is commonly known on the market, is placed in position and removed as a unit. It will be evident that two or more of these units can be used together as well as separately, and, if desired, can be arranged in series, multiple or multiple series as preferred.

When the blank is bent along the lines 2 and 2' and 3 and 3' the result is that there are provided upstanding walls 18 and 19 and the slots or apertures 5 and 5' are arranged in these openings substantially midway between the top and bottom of the device so that the resistance element is

suspended out of contact with other objects and, in fact, out of contact with the supporting element except at the extensions 10 and 11. The base 9 may be fibre or any other desired form of insulating support and the wire 12 may be of any desired kind or size.

I claim:—

1. In a resistance unit a support having a substantially rectangular body provided with bent-down ends, and an apertured ear extending from each bent-down end, one of said ends having an aperture and the other of said ends being provided with an aperture, a slit extending from the aperture to one side of the end, and a slit extending from the last mentioned aperture toward the adjacent ear, the material within the space between said slits defining a bendable tongue adapted to be bent to one side to provide a side opening for the last mentioned aperture, said tongue also being capable of being bent back to close said side opening.

2. In a resistance unit, a supporting and protecting structure having a body and a pair of end

members extending at substantially right angles to the body, each of said end members having an opening therein, one of said end members having a pair of slits extending at right angles to each other and to the opening in that end, whereby a tongue is formed, said tongue being capable of being bent away from the opening to expose the opening so that an article may be moved into and out of said opening laterally.

3. In a resistance unit, a supporting structure having end portions formed with apertures, one of said end portions being provided with a pair of slits extending from the aperture, one slit extending to the edge of the supporting structure and the other at right angles thereto, whereby a tongue is formed, said tongue being adapted to be bent to one side to provide a side opening to said aperture for permitting an article to be inserted laterally into said opening, said tongue being adapted to be bent back to its original position to prevent accidental removal of said article.

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