



FIG. 5—Inside view of resistor box shows five series-connected resistors that provide thirteen resistances within decade

assembled in minutes.

Careful attention must be given to some constructional details to ensure strength and durability. Experience indicates that the snap fasteners used on the connecting leads require reinforcement at the junction between the solder tab and the body of the snap. Breaking at this point is much less likely if the cross section is built up with a liberal flow of solder. The point where the wire joins the solder tap also requires added strength, which can be obtained by extending the braid covering on the wire under the first clamping tabe in the wire holding

The snap connectors around the bottom edge of the basic frame and around the socket plates are subject to heavy mechanical strain. The necessary mechanical strength can be obtained for these parts by shaping a cotter pin from a piece of #12 solid copper wire. The solder lug of the snap fastener is bent at a right angle relative to the face, and the shank of the cotter pin is firmly clamped and soldered into the lug. The resulting structure has been found capable of withstanding considerable abuse.

Finally, accidental short circuits between adjacent snap fasteners can be avoided by covering the lug with plastic tubing.

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