

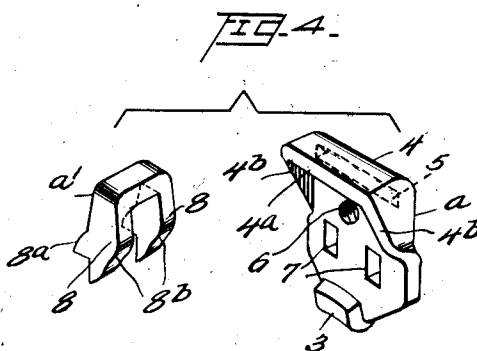
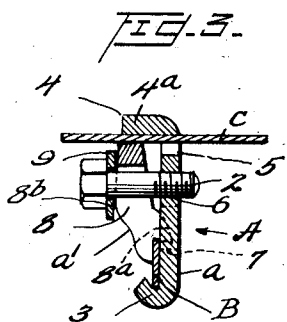
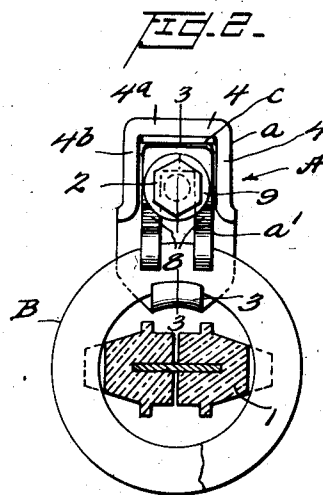
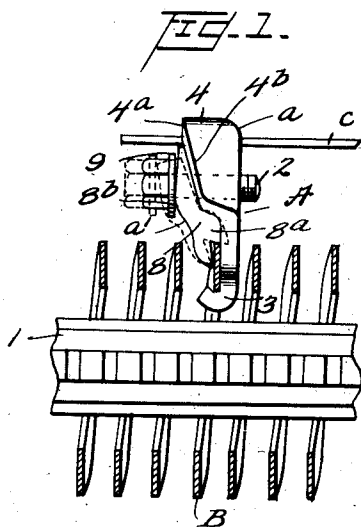
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CONNECTER FOR EDGEWISE WOUND COILS

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CONNECTER FOR EDGEWISE WOUND COILS

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4 Claims. (Cl. 173—324)

This invention relates to a connector adapted for connecting conductors to resistors made from flat ribbons of resistance metal, and more particularly for connecting conductors to the intermediate convolutions of resistors composed of such ribbons wound helically on edge. In my co-pending application Serial Number 48,585, filed November 6, 1935, I have shown a connector for this purpose consisting of a relatively flat body having a hook at one end which engages one edge of the ribbon and having a flange at the opposite end, a wedge piece having a part which engages the opposite edge of the ribbon and also the flange, and a bolt for forcing the wedge piece toward the body to cause the wedge piece to bear forcibly against the edge of the ribbon and clamp it between the wedge piece and the hook. In the device of that application, the conductor which serves as a lead or tap from an intermediate convolution of a resistor is secured to the connector by the bolt and a nut. In the present invention, the connector is much the same as in the aforesaid application but instead of securing the conductor to the bolt, the body of the connector is formed with a slot adjacent the flange through which the conductor is extended and the wedge piece bears against the edge of the resistor ribbon and also against the conductor and when the bolt is tightened, the wedge piece is forced against the edge of the resistor ribbon and also against the conductor and clamps the latter against the flange.

In the accompanying drawing,

Fig. 1 is an edge view of the connector applied to a convolution of an edgewise wound coil;

Fig. 2 is a side view of the connector applied to the coil, looking from left to right in Fig. 1;

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

Fig. 4 is a perspective view of the parts of the connector, separated.

Referring to the drawing, A indicates the connector and B indicates an edgewise wound helix mounted upon a suitable insulating support 1.

The connector comprises a body *a*, a wedge piece *a'* and a bolt 2 for forcing the wedge piece toward the body. The body is relatively flat except for a hook 3 at one end and a flange 4 at the opposite end on the same side of the body as the hook. The side edges of the body taper towards its hooked end, as shown, and the end of the tapered portion is doubled backwardly over the body to form the hook. The flange has a straight central portion 4^a extending transversely of the body and parallel end portions 4^b extend-

ing longitudinally of the body. The body also has a slot 5 adjacent and extending parallel with the central portion of the flange through which a flat conductor *c* may be extended. The flat portion of the body has a threaded opening 6 on a line passing through the center of the flange and the center of the hook, and between said opening and the hook and at opposite sides of said line are short slots 7 extending longitudinally of the body. The wedge piece *a'* consists of a flat metal strip bent into U-form with similar parallel arms 8 having lugs or shoulders 8^a projecting from their edges, near their ends, adapted to extend into said slots when the wedge piece is in place on the body. The opposite edges of the arms are preferably made convex near the bend in the strip, as shown at 8^b. The bolt extends between the arms of the wedge piece into the threaded opening in the body and a washer 9 under the bolt head is adapted to bear against the convex edges of the arms and force the wedge piece toward the body when the bolt is tightened.

In order to connect the conductor *c* to an intermediate convolution of an edgewise wound coil, the bolt is loosened and the hooked end of the connector is then engaged with the inner edge of the convolution. The wedge piece is then placed in its position with the lugs 8^a in the slots 7 and engaging the outer edge of the convolution, and the ends of the arms bearing against the side of the convolution. The end of the conductor is then pushed through the slot 5 and the bolt is then tightened, causing the lugs on the wedge piece to bear forcibly against the outer edge of the convolution and the central part of the wedge piece, which is relatively straight, to be forced against the conductor and clamp it against the flange on the body. Before tightening the screw, and while the wedge piece and bolt are in the dotted line position shown in Fig. 1, the conductor can easily be pulled through the slot far enough to take up any slack in the conductor.

What I claim is:

1. The combination with a flat resistor ribbon of a connector comprising a relatively flat body having a hook at one end adapted to engage one edge of the ribbon and having a flange at its opposite end and a slot extending through the body adjacent said flange, a conductor extending through said slot, a wedge piece engaging the conductor and the opposite edge and one side of the ribbon, and means connected with the body for forcing said wedge piece toward the body.

2. The combination with a flat resistor ribbon

of a connector comprising an oblong body having a hook at one end adapted to engage one edge of the ribbon and having a flange extending transversely of the body at its opposite end and
5 a slot extending through the body adjacent and parallel with said flange, a conductor extending through said slot, a wedge piece engaging the conductor and the opposite edge and one side of the ribbon, and means connected with the body
10 for forcing said wedge piece toward the body.

3. A connector for connecting conductors to flat resistor ribbons comprising a relatively flat oblong body having a hook at one end adapted to engage one edge of the ribbon, a transversely
15 extending flange at its opposite end on the same side of the body as said hook and an opening extending through the body between the hook and flange and close to the latter, said opening adapted to receive a conductor, a wedge piece between
20 said hook and flange adapted to engage the opposite edge and one side of the ribbon, and, when

so engaged, to extend into position to engage a conductor extended through said opening, and means connected with the body for forcing said wedge piece toward the body.

4. A connector for connecting conductors to flat resistor ribbons comprising a relatively flat oblong body having a hook at one end adapted to engage one edge of the ribbon, a transversely extending flange at its opposite end on the same side of the body as said hook and a slot extending through the body between the hook and flange close to and parallel with the latter, said slot adapted to receive a flat conductor, a wedge piece between said hook and flange adapted to engage the opposite edge and one side of the ribbon, and,
15 when so engaged, to extend into position to engage a flat conductor extended through said opening, and means connected with the body for forcing said wedge piece toward the body.

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