

June 7, 1932.

L. E. MENUT

1,862,275

TERMINAL

Filed May 11, 1927

FIG. 1

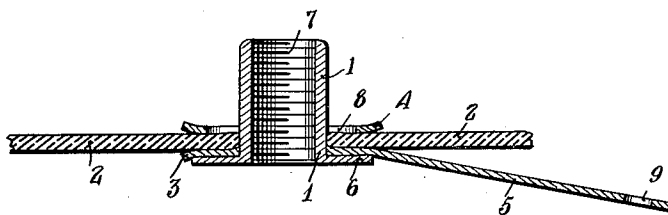


FIG. 2

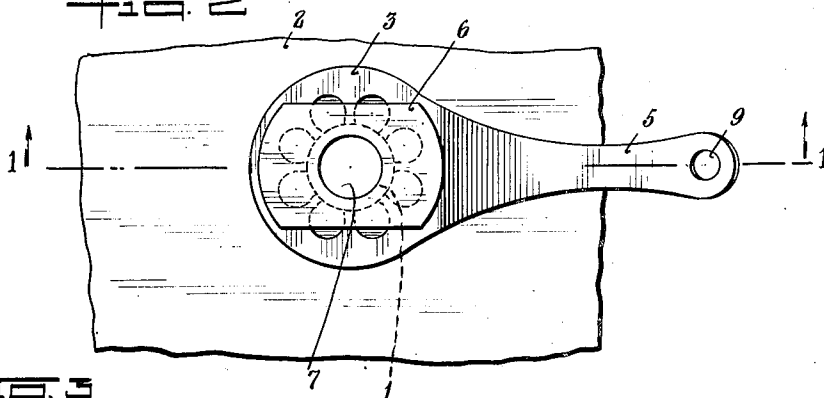


FIG. 3

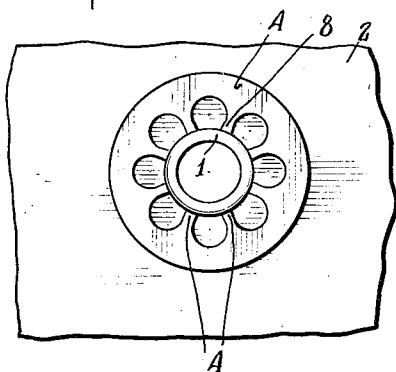


FIG. 4

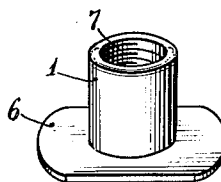
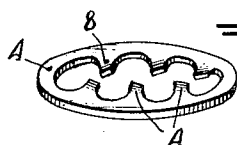


FIG. 5



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TERMINAL

Application filed May 11, 1927. Serial No. 190,485.

This invention relates to terminals for use in electrical apparatus such as condensers, and more particularly to terminals for any type of electrical device requiring several modes for attaching conductors thereto.

An object of the invention is to provide an internally threaded terminal that is much more convenient to handle than the previous terminals during installation.

A further object is to make the terminal so simple that during assembling no threaded connections whatever are used. At the same time no riveting or flow of metal that might distort the parts takes place.

Other objects and advantages are set forth in the following description, taken with the drawing, which shows a preferred embodiment of my invention. But this disclosure is illustrative only, and I may vary the details of shape, size and arrangement of parts to the full extent permitted by the scope and meaning of the appended claims, in which the novelty of the invention is expressed.

In the drawing—

Fig. 1 is a front elevation in cross section taken on line 1—1 of Fig. 2, of the complete terminal, fully assembled,

Fig. 2 is a bottom plan view of what is shown in Fig. 1,

Fig. 3 is a top plan view of what is seen in Figure 1,

Fig. 4 is a perspective view of one element of the terminal; and

Fig. 5 is a perspective view of the body or principal member of the complete terminal.

Similar reference numerals refer to the same parts throughout the figures.

Referring to Fig. 1 of the drawing, reference numeral 1 indicates a tubular body or ferrule, resembling an eyelet; numeral 2 indicates a sheet of insulating material through which this body is inserted; and 3 indicates a lock member, more fully shown in Fig. 2, which is located adjacent the insulation sheet 2.

A ring or lock washer 4 is located opposite the lock member 3 on the other side of the insulating strip 2. This ring 4 is more fully shown in Figs. 3 and 4.

More in detail, the lock member 3 includes a long arm 5. The body 1 carries at one end a flange 6 which holds the lock member 3 against the insulating strip 2. The hollow body 1 is equipped with internal threads 7. Lock ring or washer 4 is also provided with inside projections or teeth 8, and lock member 3 is also provided with these teeth 8. The principal objects of the invention center about these teeth 8. The arm 5 of the lock member 3 has a perforation 9.

The complete assemblage is held together by the teeth 8 of the lock washer 4 because the inner ends of these barbs 8 project in so far that the inside diameter of the lock washer 4 is less than the external diameter of the terminal body 1. Moreover, the lock washer 4 is made of steel, preferably of clock spring steel, while the body 1 is made of brass or some relatively soft alloy. Hence, these barbs score into the body 1 when the washer is forced into place, marring or grooving the sides of the body 1 due to excessive tightness of fit and hold the entire assemblage together very firmly with the aid of the flange 6 or expanded end on the body 1. The projections 8, as seen on looking at the perspective of Fig. 4, have their inner ends twisted with respect to the plane of the washer as a whole. That is, each individual projection is warped somewhat like the blade of a screw propeller or like a common fan blade. The result is that the two points at the inner ends of these teeth may stick into the material of the insulating strip or the like 2. This embedding of the prongs 8 into the insulator strip 2, of course, prevents relative rotation of the washer with respect to the insulating strip and since these same prongs or barbs are imbedded in the sides of the body 1, the complete assemblage is prevented from

having any rotational movement as well as any other looseness. This same rigidity or prevention of rotation is also found in the lock member 3, for its inwardly projecting prongs are likewise skewed or twisted at their inner ends and forced into the insulating strip 2 and possibly a little bit into the flange 6.

The internal threads 7 of the body 1 are standard machine screw threads so that upon the installation of any device bearing this type of terminal, the necessary connections can be made by means of machine screws in the body 1, and by the arm 5. That is, stock screws of standard diameter and thread can be employed.

At the time that the electrical device is assembled, the insulation strip 2 is so turned that the lock washer or member 3 is positioned on the inside and the opening 9 in the arm 5 of this lock member facilitates soldering or any other mode of connection from this member to the inside units that go to make up the complete device.

Having described my invention, what I believe to be new and desire to protect and secure by Letters Patent of the United States is:

1. A binding post assembly comprising a mounting strip and a terminal passing therethrough, means for securing said terminal in position comprising a deformable washer bearing against one side of the mounting strip and surrounding said terminal and having spurs embedded therein, said spurs also being embedded in the mounting strip, whereby the washer prevents both longitudinal and rotary movement of said terminal.

2. A binding post assembly comprising a mounting strip and a conducting stud passing therethrough, means secured to the stud and abutting one side of the mounting strip to prevent longitudinal movement of the stud in one direction, and means for locking the stud in position comprising a deformable washer abutting the other side of the mounting strip and having spurs embedded in the stud.

3. A binding post assembly comprising a mounting strip having a conducting stud passing therethrough, means secured to the stud and abutting one side of the mounting strip to prevent longitudinal movement of the stud in one direction, and means for securing the stud against longitudinal movement in the opposite direction comprising a deformable washer abutting the other side of said mounting strip and having spurs embedded in the stud, said spurs also being embedded in the mounting strip to prevent turning of the stud.

4. A binding post assembly comprising a mounting strip of insulation having a conducting stud passing therethrough, the stud having threads to facilitate an electrical con-

nection therewith, and having an extending portion abutting one side of the mounting strip to prevent longitudinal movement of the stud in one direction, and means for securing the stud against longitudinal movement in the opposite direction comprising a deformable washer abutting the other side of said mounting strip and having spurs embedded in the stud, said spurs also being embedded in the mounting strip to prevent turning of the stud.

In testimony whereof I affix my signature.
LEROY E. MENUT.

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