

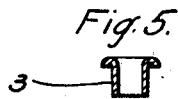
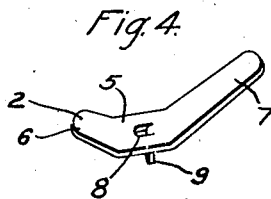
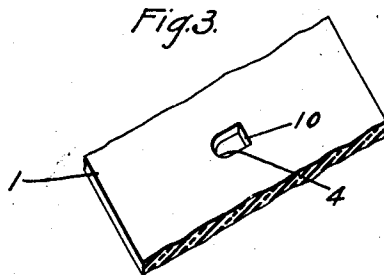
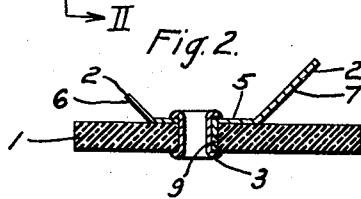
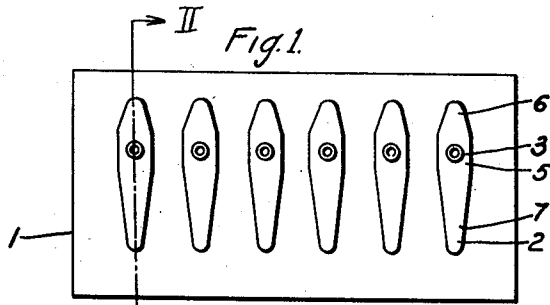
Oct. 1, 1929.

P. M. HENGSTENBERG

1,729,873

TERMINAL FOR ELECTRIC CONDUCTORS

Filed July 14, 1927



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# UNITED STATES PATENT OFFICE

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## TERMINAL FOR ELECTRIC CONDUCTORS

Application filed July 14, 1927. Serial No. 205,547.

My invention relates to terminals for electric conductors and particularly to means for securing terminal clips to their bases.

Heretofore, terminal clips have been secured to their bases by means of square-shaped rivets, in order to maintain the terminal clips in rigid positions with respect to the base upon which they are mounted. Inasmuch as such rivets are usually made of rather soft or pliable metal, the clips have a tendency to work loose or to rotate about their rivets.

The object of my invention is to provide for mounting a clip upon a base with the use of the well-known round-shaped rivet in such a manner that the clip will be held firmly and will have little tendency to work loose or rotate.

It is also an object of my invention to provide a clip that shall be simple and efficient in operation and capable of being readily and economically manufactured.

Another object of my invention is to facilitate the fastening of the clip upon its base or support.

Other objects of the invention will, in part, be obvious and will, in part, appear hereinafter.

The invention, accordingly, is disclosed in the embodiment thereof shown in the accompanying drawing and comprises the structural features and the combination of elements and arrangement of parts which will be exemplified in the construction hereinafter set forth, and the scope of the application of which will be indicated in the claims.

For a fuller understanding of the invention, reference may be had to the following detailed description, taken in connection with the accompanying drawing, in which:

Figure 1 is a top plan view of a plurality of terminal clips mounted upon a base, in accordance with my invention;

Fig. 2 is a view, in section, taken on the line II—II of Fig. 1;

Fig. 3 is a view, in perspective, of a portion of a base prepared to receive a clip.

Fig. 4 is a view, in perspective, of one of the clips illustrated in Fig. 1; and

Fig. 5 is a vertical, sectional view of a rivet for uniting the clip to its base.

In the drawings, I have illustrated the terminal structure as comprising a base 1 and a terminal clip 2 that is mounted upon the base by means of a rivet 3.

The base 1 may be constructed of any suitable insulating material, such as fiber board, or the like, and is provided with a D-shaped aperture 4 for receiving the rivet 3 and a portion of the clip, as will be more fully described hereinafter.

As shown, the clip 2 is an elongated plate of suitable length and width and is preferably stamped from sheet metal. It has a substantially flat portion 5, which is here shown as intermediate its end portions 6 and 7, for engagement with the supporting base.

For the purpose of soldering or otherwise securing circuit conductors to the end portions 6 and 7 of clip, they are bent upwardly so that they will not be in contact with the insulating base 2 after the clip is mounted thereon.

It will be noted that the clip is secured to the base by means of a single round rivet. In order to prevent the clip from working loose or rotating on the rivet, the rivet aperture 8 therein is formed by displacing a portion of the clip and thereby forming a tongue or lug 9 that will be disposed in the aperture 4 in the base when the clip is mounted upon and riveted to the base. The aperture in the base is larger than the aperture in the clip and is shaped somewhat like a D in order that the lug 9 may be disposed therein, with one side against its flat wall 10 while the rivet is secured in the rounded portion of the aperture. While the D-shaped aperture has proved to be satisfactory in holding the rivet and lug and thereby preventing the clip from rotating, it will be understood that an aperture of any other shape may be employed which will receive the rivet and lug in side-by-side relation.

In assembling the terminal, the terminal clip 2 is seated upon the base 1 with its lug 9 disposed against the flat wall 10 in the D-shaped aperture 4 and with its aperture

8 in alinement with the unfilled portion of the aperture 4. While the clip is in this position, the round rivet 3 is pushed through the aperture 8 in the clip into the rounded part of the aperture 4 in the base and its ends are turned over to securely fasten it in such position. With the lug 9 of the clip 2 located beside the rivet 3 in the base, the clip will be held firmly and will be prevented from working loose or rotating upon the rivet.

While the illustrated example constitutes a particular embodiment of my invention, I do not limit myself strictly to the details shown, since, manifestly, the same may be varied considerably without departing from the spirit of the invention, as defined in the appended claims.

I claim as my invention:  
 1. A terminal for electric conductors comprising a base provided with a D-shaped aperture, a terminal clip provided with a D-shaped aperture disposed for mounting upon the base, and a rivet disposed in said apertures to secure the clip to the base, said clip having a depending lug extending into the D-shaped aperture of the base and disposed to engage the flat side wall of said D-shaped aperture for preventing relative movement of the clip and the base.

2. A terminal for electric conductors comprising a base provided with a D-shaped aperture, a terminal clip having a flat central body portion disposed to form a D-shaped aperture and a lug depending laterally from the flat side of said aperture, and a rivet disposed to extend through the apertures to secure the clip to the base, said lug on said clip being disposed beside the rivet in the opening and adjacent to the flat side of the base aperture for preventing relative movement of the clip and the base.

3. A terminal for electric conductors comprising, in combination, a base having a D-shaped aperture, a terminal member having a D-shaped aperture, a tongue depending from the terminal member, said tongue comprising the portion cut from the terminal member to provide the aperture, the terminal member being mounted on the base, the tongue engaging in the base aperture and a rivet extending through the apertures and retaining the tongue in engagement with the straight side defining the side of the D-shaped aperture in the base.

4. A terminal for electric conductors comprising, in combination, a base member having a D-shaped aperture, a terminal member provided with a flat central portion having a D-shaped aperture in said flat central portion, a tongue depending from the terminal member, said tongue comprising the portion cut from the terminal member to provide the aperture, the terminal member being mounted on the base with the tongue extending through the aperture, the flat side of the

tongue engaging the flat side of the D-shaped aperture in the base, thereby causing the curved sides of the D-shaped apertures to coincide, and a rivet extending through the apertures, said rivet being disposed to engage the tongue and the curved sides of the apertures to maintain the sides of the apertures in alignment and to retain the tongue in engagement with the flat side of the base aperture, thereby to prevent the terminal member from being rotated on the base.

In testimony whereof, I have hereunto subscribed my name this 7th day of July, 1927.  
 PAUL M. HENGSTENBERG.

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