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C. E. HANNY
ELECTRICAL TERMINAL

2,168,016

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Fig. 1.

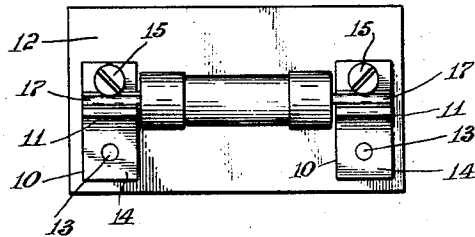


Fig. 2.

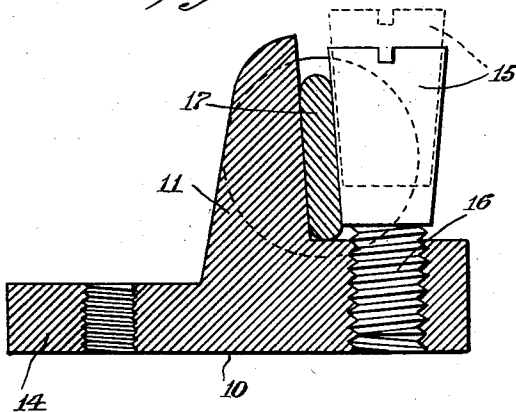


Fig. 3.

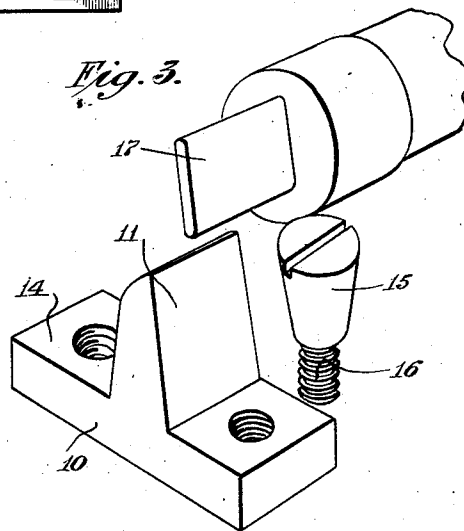


Fig. 4.

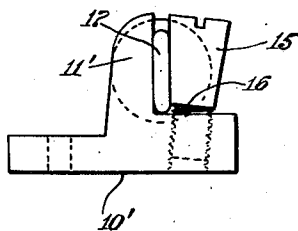


Fig. 6.

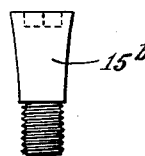


Fig. 5.

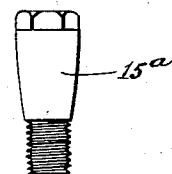
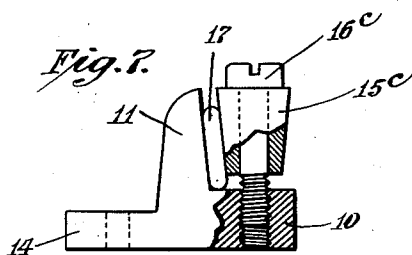


Fig. 7.



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ELECTRICAL TERMINAL

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7 Claims. (Cl. 200—134)

My invention relates to devices such as are frequently employed as clamps or anchorage devices for fuses and the like having flat or approximately flat terminal members.

5 The main object is to provide a simple but rugged and effective terminal.

In its simplest form only two parts are required, i. e. a base with an integral wall projecting therefrom and a tapered post screw threaded into the base with its axis at right angles to the base or slightly inclined relative to the surface of the adjacent correlated wall so as to provide for clamping a terminal or a similar device between the wall and the tapered surface of the clamping post.

Fig. 1 is a plan view showing a fuse with terminal blades held in a clamped connection involving one form of my invention.

Fig. 2 is a section of one terminal.

20 Fig. 3 is an exploded perspective view of one terminal of a fuse with the parts of a clamp.

Fig. 4 is an end view showing a modified form of clamp.

Figs. 5 and 6 are side views of modified forms of clamp posts.

Fig. 7 is a side view of another modification of the device.

The base or terminal 10 has a wall 11 projecting therefrom, preferably integral therewith. This base is adapted to be secured to a suitable support 12 in any suitable manner for instance by means of a screw or bolt 13 passing through the extension 14.

The clamp post 15 has a long tapered head portion and has its smaller end 16 screw threaded for adjustable connection with the base so that the blade or end 17 of a fuse or the like may be clamped or wedged between the wall 11 and the tapered post 15. The axis of the screw threaded post as shown in Fig. 2 is inclined somewhat with respect to the bearing surface of the wall so that as the screw is tightened it will draw the tapered post snugly against the blade 17 and thus press it firmly against the stationary wall. The rotation of the tapered surface of the post against the blade 17 scrapes the surfaces so as to ensure a clean contact surface.

In the form shown in Figs. 1 to 3 the axis of the tapered screw threaded post is at right angles to the plane of the base and the bearing surface of the wall is inclined so as to be parallel to the surface of the tapered head of the screw or clamping post 15.

In the form shown in Fig. 4 the wall 11' is at right angles to the base 10' while the screw post

15 has its axis at a slight angle relative to the base. The posts thus far described have screw slots of the usual type for screw driver actuation.

In Fig. 5 I have shown a post 15a having a slight bulge or rib around the center so as to engage and clamp a terminal at approximately the center of the terminal against a flat surface or against a concave surface. This may also be used to clamp a flat blade and readily adjust or adapt a terminal or blade to inequalities in the flat surface and still make a firm contact. This post has a hex-head instead of a screw driver slot.

In Fig. 6 the post 15b is slightly concave. This form of head may be used, for instance, in connection with a correspondingly convex wall for clamping a relatively thin and flexible terminal. This form shows a head adapted to receive a socket wrench (not shown).

In Fig. 7 the tapered clamping member 15c is formed separately and slides freely on the shank of the stud or screw 16c. When the stud is tightened or screwed into the base it draws the tapered member toward the base and will clamp a fuse or relay blade against the side wall 11.

From the foregoing it will be seen that the device of my invention is very simple and easy to adjust. The fuse or other blade or terminal may be quickly and easily inserted and secured in place or released by simply tightening or loosening the screw threaded clamping post.

I claim:

1. A two-part electric terminal comprising a metallic supporting base and a rotatable clamp member, the base having a wall integral therewith and projecting therefrom at substantially right angles, said wall having a flat abutment surface, said clamp member having screw threaded engagement in the base with its axis inclined relative to the adjacent flat abutment surface of the wall, said clamp member also having a long tapered head whose lateral surface provides a rotatable clamping means having a line contact parallel with the adjacent abutment surface of the base wall so that a flat terminal may be clamped between said wall and said tapered head by rotating said clamp member and causing a line contact of the lateral surface of its tapered head to rotate against the inserted flat terminal.

2. A two-part electric terminal having a base with a single wall projecting therefrom and having a substantially flat bearing surface extending at an obtuse angle relative to the main plane of the base and a clamp post having a rotatable

tapered head and a threaded engagement with the base and means for drawing the tapered portion of the post in a direction towards the main plane of the base so as to clamp a flat terminal between the wall and an extended line contact of the head of the tapered clamp post.

5 3. A two-part electric terminal including a metallic base having a single upstanding wall with a substantially flat bearing surface; a self
10 supporting clamp member having a screw threaded end adjustable in the base and a tapered rotatable head pressure portion having the pressure portion of its surface opposite to said wall and extending parallel to the bearing surface thereof, said clamp member being movable
15 toward the base for clamping a substantially flat member between said wall and the adjacent parallel side of said tapered pressure member.

4. A two-part electric terminal including a
20 base having a single metallic wall projecting therefrom and inclined at an obtuse angle to the plane of the base, a clamp screw having a conically tapered head and rotatably mounted in the base and having the conical portion of its surface opposite said wall and rotatable parallel
25 thereto and means for moving the clamp screw toward the base to grip a flat conductor against the wall.

5. A two-part electric terminal for a flat blade
30 of a fuse including a metallic base having a screw threaded opening, a single integral wall formed on the base extending at substantially right angles to the base and having a substantially flat bearing surface forming a clamping
35 surface for a fuse blade and a movable and adjustable member on the base adjacent said wall, said movable member including an elongated tapered body portion terminating at one end in a screw threaded portion engaged in the screw

threaded opening in the base, said wall and said movable member being arranged so as to cause a wedging action against the flat blade of a fuse placed therebetween when the adjustable member is rotated.

6. A terminal for an electric fuse with a flat blade including a metallic base having a screw threaded opening, an integral wall formed on the base extending at substantially right angles to the base and having a substantially flat bearing surface for a fuse blade, and a movable and adjustable clamp member on the base adjacent
10 said wall, said clamp member including an elongated tapered body portion terminating at one end in a screw threaded portion for engagement with the screw threaded opening in the base, said wall and said clamp member being arranged
15 relatively so as to cause a wedging action against the flat blade of a fuse placed therebetween when the clamp member is operated and means formed on the other end of the tapered body portion to receive a tool for actuating said
20 clamp member, said clamp member being free of support opposite said bearing surface.

7. An electric terminal including a metallic
25 base having an upstanding wall with a substantially flat bearing surface, a clamp member comprising a screw threaded stud adjustable in the base and a tapered pressure portion on said stud and having a portion of its pressure surface adjacent said wall parallel to the bearing surface
30 thereof, said clamp member being movable toward the base for clamping a substantially flat conductor between said wall and said tapered pressure member, said clamp member being sufficiently strong to provide the necessary lateral
35 pressure without additional support.

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