June 8, 1937. W. G. FOTSCH 2,082,947

TERMINAL CONNECTER

Filed Dec. 3, 1934

Fig. 1

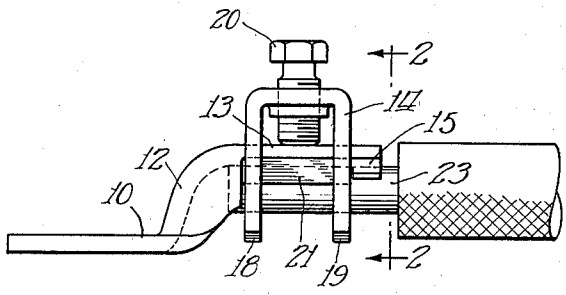
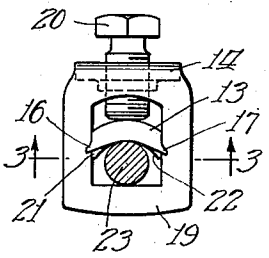


Fig. 2



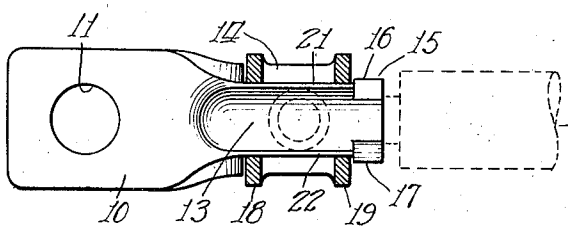


Fig. 3

Fig. 4

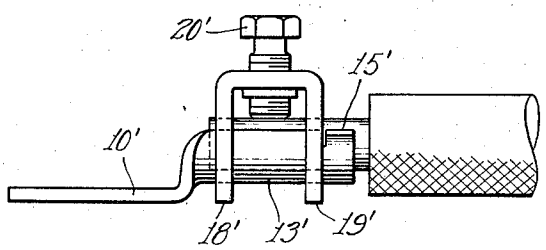
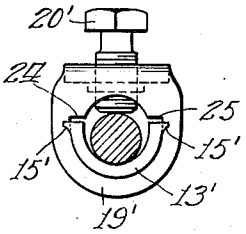


Fig. 5



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Patented June 8, 1937 2,082,947

UNITED STATES PATENT OFFICE

2,082,947

TERMINAL CONNECTER

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Application December 3, 1934, Serial No. 755,791

4 Claims. (Cl. 173—269)

This invention relates to terminal connecters for connecting electrical conductors to terminal posts and has for its principal object the provision of a connecter in which all of the parts stay together as one piece normally and which is capable of being clearly and strongly attached to the conductor.

It is further a purpose of this invention to provide a connecter of this character which is readily attachable to a wide variation in size of conductors without any loss in gripping efficiency.

Other and more specific objects and advantages of the invention will appear as the description proceeds in connection with the accompanying drawing. It is to be understood, however, that the drawing and descriptions are illustrative only and not to be taken as limiting the invention except in so far as it is limited by the claims.

In the drawing—

Fig. 1 is a side elevation of a connecter embodying the invention;

Fig. 2 is an end view of the connecter;

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

Fig. 4 is a side elevation of a modified form of the invention; and

Fig. 5 is an end view of this modified form.

Referring now in detail to the drawing, the connecter consists of the plate 10 which is apertured at 11 for attachment to the usual terminal screw, the plate 10 being preferably of a good conducting metal such as copper. There is a flat portion immediately around the opening 11 and the other end of the plate 10 is bent up to form a shoulder at 12 offsetting the curved portion 13 from the flat portion of the plate. The extent of the offset between the jaw 13 and the mounting portion is sufficient to bring the plane of the mounting portion at least even with the free ends of the legs 18 and 19.

The portion 13 constitutes a clamping jaw which is curved upon a radius equal to that of the largest wire it is expected to clamp. This jaw portion 13 passes through a yoke 14 and has the free end 15 thereof spread at the points as shown at 16 and 17 in Fig. 2 so as to position the yoke on the jaw. This yoke is apertured with the substantially rectangular aperture in each of the legs 18 and 19 and the base portion of the yoke is screw threaded to receive the clamping screw 20. The simplicity of the device and its use is evident from the foregoing description.

The yoke is guided on the jaw 13 by means of the portions 21 and 22 which are cut off substantially flat so that the jaw can slide in the apertures in the yoke without rotation. Thus the yoke 14 is properly aligned with the jaw 13 at all times. Also, all of the parts of the connecter are secured together sufficiently for handling and it is only necessary to insert the conductor 23 and to tighten the screw 20 to clamp the conductor firmly against the jaw 13 by means of the spaced legs 18 and 19 of the yoke.

In Figs. 4 and 5, the plate 10' in this form has the jaw 13' curved upwardly instead of downwardly to receive the conductor, the legs 18' and 19' of the yoke being engaged with the back of the jaw 13' and the conductor being engaged by the screw 20'. The jaw is spread at the free end at 15', the same as in Figs. 1–3, but the openings in the yoke legs 18' and 19' are shaped somewhat differently to accommodate for the semicircular shape of the jaw 13'. The shoulders at 24 and 25 prevent rotation of the jaw in the yoke so that the parts are always properly aligned.

The jaw 13' is also offset with respect to the mounting portion of plate 10' sufficiently to bring the bottom surface of the plate 10' down to the ends of the legs 18' and 19' so that the terminal connecter may be clamped on a flat surface.

From the above description, it is believed to be evident that I have provided a very simple, cheap and efficient terminal connecter. It is also believed to be evident that various minor modifications may be made from the exact detail shown and described without departing from the invention.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. A terminal connecter comprising in combination a plate having a substantially flat apertured terminal mounting portion and a clamping jaw portion provided with a curved side to engage a conductor, a U-shaped yoke member mounted on said jaw portion and having spaced substantially parallel leg portions running crosswise of said jaw portion, said legs having conductor receiving apertures through which said jaw portion extends, said yoke member having a screw in its base cooperating with said leg portions to clamp a conductor to said jaw portion, said jaw portion and the legs having cooperating surfaces thereon preventing rotation of the jaw portion within the apertures in said legs, and said jaw portion having its free end projecting beyond the yoke and spread to retain the yoke thereon.

2. A terminal connecter comprising in combi-

nation a plate having a substantially flat apertured terminal mounting portion and a clamping jaw portion provided with a curved side to engage a conductor, a U-shaped yoke member mounted on said jaw portion and having spaced substantially parallel leg portions running crosswise of said jaw portion, said legs having apertures through which said jaw portion extends, said yoke member having a screw in its base cooperating with said leg portions to clamp a conductor to said jaw portion, said jaw portion and the legs having cooperating means thereon preventing rotation of the jaw portion within the apertures in said legs, said plate being offset between the jaw portion and mounting portion in a direction to extend the plane of said mounting portion out to the ends of said leg portions, and said jaw portion having its free end projecting beyond the yoke and spread to retain the yoke thereon.

3. A terminal connecter comprising in combination a plate having a substantially flat apertured terminal mounting portion and a clamping jaw portion provided with a curved side to engage a conductor, a U-shaped yoke member mounted on said jaw portion and having spaced substantially parallel leg portions running crosswise of said jaw portion, said legs having conductor receiving apertures through which said jaw portion extends, said yoke member having a screw in its base cooperating with said leg portions to clamp a conductor to said jaw portion, said jaw portion and the legs having cooperating means thereon preventing rotation of the jaw portion within the apertures in said legs, said means comprising flat portions at the opposite side edges of said jaw portion and corresponding straight portions in the walls around the apertures in said legs, and said jaw portion having its free end projecting beyond the yoke and spread to retain the yoke thereon.

4. A terminal connecter comprising a plate having an apertured terminal portion at one end, said plate being bent up between its ends to form a shoulder offsetting the other end of said plate from said terminal portion to provide a clamping jaw portion spaced from the plane of the terminal portion, a U-shaped yoke member mounted on said jaw portion and having spaced substantially parallel leg portions running crosswise of said jaw portion toward the plane of said terminal portion, said legs having conductor receiving apertures through which said jaw portion extends, said yoke member having a screw in its base cooperating with said leg portions to clamp a conductor to said jaw portion, said jaw portion and the legs having cooperating surfaces thereon for abutting each other and preventing rotation of the jaw portion within the apertures in said legs, and said jaw portion having its free end projecting beyond the yoke and spread to retain the yoke thereon.

WILLIAM G. FOTSCH.