

Sept. 1, 1925.

1,552,382

J. H. BREAZNELL

TERMINAL CLIP CONNECTER

Filed July 27, 1922

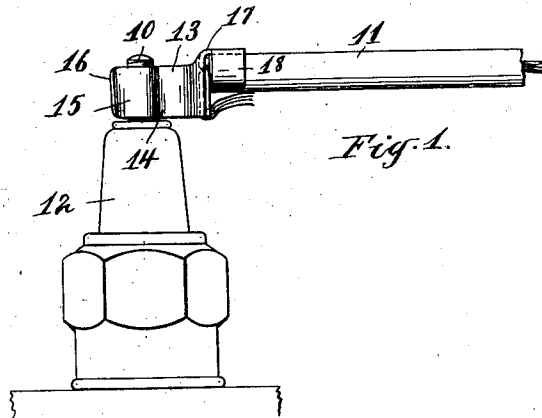


Fig. 1.

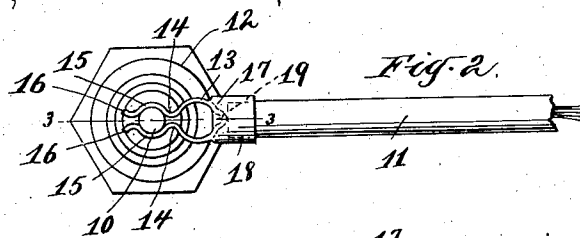


Fig. 2.

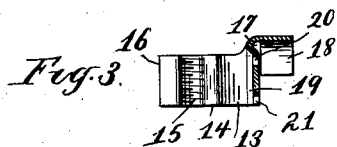


Fig. 3.

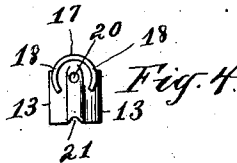


Fig. 4.

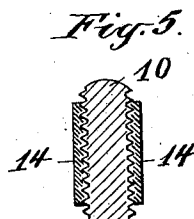


Fig. 5.

Inventor:
Joseph H. Breaznell
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UNITED STATES PATENT OFFICE.

JOSEPH H. BREAZNELL, OF BROOKLYN, NEW YORK.

TERMINAL-CLIP CONNECTER.

Application filed July 27, 1922. Serial No. 577,956.

To all whom it may concern:

Be it known that I, JOSEPH H. BREAZNELL, a citizen of the United States, residing in the city of New York, borough of Brooklyn, in the county and State of New York, have invented a certain new and useful Improvement in Terminal-Clip Connecters, of which the following is a specification.

The invention relates to clips for connecting wire terminals to the posts of sparkplugs and the like, and the object of the invention is to provide a simple, economically manufactured spring clip by which the wire may be easily and quickly attached to and detached from the post, and which in the attached condition will hold reliably and maintain the desired electrical contact efficiently.

The invention consists in certain novel features and details of construction by which the above objects are attained, to be hereinafter described and claimed.

The accompanying drawings form a part of this specification and show the invention as it has been carried out in practice.

Figure 1 is a side elevation of a preferred form of the improved clip attached to a sparkplug.

Figure 2 is a corresponding plan view.

Figure 3 is a section taken longitudinally of the clip between its jaws, on the line 3-3 in Figure 2.

Figure 4 is a rear elevation corresponding to Figure 3.

Figure 5 is a section on an enlarged scale, taken through the jaws of the clip and the inclosed post.

Referring to Figures 1 to 4 inclusive, 10 is the screwthreaded post of which the terminal wire 11 is to be attached, shown as part of a sparkplug 12 but which may be a binding-post or any like screwthreaded member.

The clip is shown as formed in a single piece from sheet metal, preferably spring brass, stamped and shaped by suitable dies to the form shown. It comprises an open cylindrical body 13 having spring jaws 14 extending side by side therefrom, each formed with a semicylindrical bend 15, which bends are arranged oppositely to produce an open socket between them in which the post 10 is grasped and inclosed. The jaws extend beyond the bends and are curved outwardly and oppositely as at 16 to

facilitate engagement with the post by forcibly spreading and guiding the jaws in the operation of applying the clip.

An important feature of the invention resides in the means for insuring reliable engagement of the jaws 14 with the post. This is effected by tapping or otherwise producing internal screwthreads in the bends 15 matching the threads on the post when the jaws are separated, as shown in Figure 5, so that when the clip is forced upon the post by springing apart the jaws 14, the threads of the bends engage the threads of the post and resist effectually any strains tending to move the clip axially of the post while permitting the clip to rotate or oscillate thereon to any extent required by the relative position of the terminal wire to the post.

From the upper edge of the closed rear side of the body 13 extends a branch having oppositely extended curved wings 18 adapted to be bent around the insulated terminal of the wire 11 and partially inclose it in a firm grip. On the rear face of the body 13 is formed an internal groove 19, and near the upper edge is an opening 20 in axial alinement with the terminal wire, and at the rear lower edge of the body is a notch 21.

The wire 11 is attached to the clip by removing a short section of the insulation to expose a length of the core-wires which are then threaded through the opening 20 to the inner face of the body 13 and drawn taut to bring the insulated portion within the wings 18 which are then bent closely thereupon; the core wires are drawn tightly through the notch 21 and lie partially in the groove 19 and are then bent sharply back to lie below the wings. Thus attached the engagement is reliable and electric contact insured. A drop of solder may be applied to the core wires in the groove or at any convenient point if desired.

Although the spring jaws are described as tapped to match the standard threads of the post and to be applied to the latter in place of the usual nut, it will be understood that the post may be specially formed with a series of annular grooves and the jaws correspondingly formed to match thereto; the screwthreads of the post and jaws perform no function other than a means of engagement by which movement of the jaws

longitudinally of the post is prevented, and it will also be understood that the means for attaching the clip to the terminal wire may be widely varied from the preferred means shown and described.

I claim:—

As an improved article of manufacture, the clip described comprising in a single integral element an open cylindrical body with 10 spring jaws extended side by side each with a semi-cylindrical bend to form a post-grasping socket, the rear face of the body

being formed with an internal groove, and curved wings extended from said rear face at right angles to the body and bendable 15 around a wire, the rear wall of said groove being formed with an opening for the passage of a wire to the inner face of said body, and a cut-away portion adjacent said hole for the reception of the wire with a portion 20 of said wire lying in said groove.

In testimony that I claim the invention above set forth I affix my signature.

JOSEPH H. BREAZNELL.