UNITED STATES PATENTS

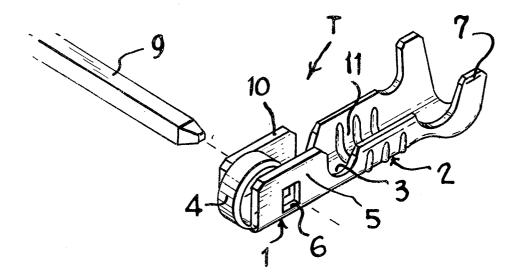
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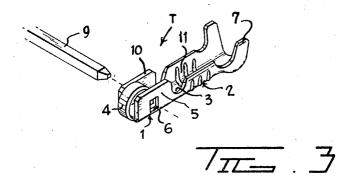
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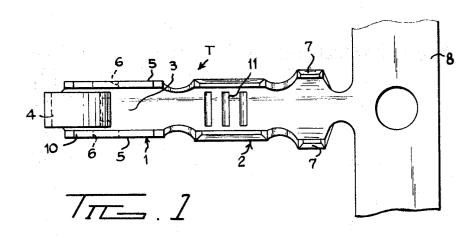
[72] [21]	Appl. No.	Geroge Sylvester Reider Highspire, Pa. 869,405	1,005,283 1,661,124 2,027,220	2/1928	Neher Koretzky Benson	339/260X 339/220 339/260X
[22] [45] [73]	Filed Patented Assignee	Apr. 23, 1969 May 4, 1971 AMP Incorporated Harrisburg, Pa.	3,060,349 3,221,291 3,312,931	10/1962 11/1965 4/1967	Brady et al Pratt Keller	339/258X 339/258X 339/258 339/258
		Continuation of application Ser. No. 669,551, Sept. 21, 1967.	1,495,973		OREIGN PATENTS France	339/258
[54]	ELECTRIC 4 Claims, 3	Primary Examiner—Richard E. Moore Attorneys—Curtis, Morris & Safford, Marshall M. Holcombe, William Hintze, William J. Keating, Frederick W. Raring, John R. Hopkins, Adrian J. LaRue and Jay L. Seitchik				
[52] [51]	U.S. Cl Int. Cl	339/258 H01r11/08,	ABSTRACT: A detachable flag-type terminal which may be stacked on a post is disclosed. The terminal is generally U-			
[50]	Field of Sea	rch	shaped in cross section. The web is extended and arched rearwardly to form a spring means which acts as a post-holding means. Openings are formed in the sidewalls of the web. The			
[56]		References Cited	openings are formed in the sidewalls of the web. The openings			

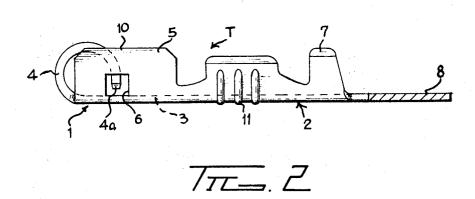
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al which may be al is generally U-and arched rear-as a post-holding s of the web. The openings are formed in the sidewalls of the web. The openings are aligned thereby creating a passage through which a post may be inserted in a direction normal to the axis of the ferrule of the terminal.









ELECTRICAL TERMINAL

This is a continuation of application Ser. No. 669,551, filed Sept. 21, 1967.

The present invention relates to electrical connectors of the type used to connect a wire to a post and more particularly to a detachable flag-type terminal which may be stacked onto a

It is an object of this invention to provide an improved terminal for making flag-type connections.

Another object is the provision of an electrical terminal 10 having a contact section provided with aligned openings through which a post extends and spring means to maintain the terminal in position on the post.

An additional object is to provide an electrical terminal having a U-shaped contact section in which a post is disposed in 15 engagement with a floor portion thereof by a spring means which is part of the floor portion.

It is a further object to provide a flag terminal which can be manufactured with relative ease and which does not involve close manufacturing tolerances.

Other objects and attainments of the present invention will become apparent to those skilled in the art upon a reading of the following detailed description when taken in conjunction with the drawings in which there is shown and described an illustrative embodiment of the invention; it is to be understood, however, that this embodiment is not intended to be exhaustive nor limiting of the invention but is given for purposes of illustration and principles thereof and the manner of applying it in practical use so that they may modify in various forms, each as may be best suited to the conditions of a particular

These and other objects are achieved in one embodiment in which the terminal is generally U-shaped in cross section. The web or floor is extended and arched back over that part of the web enclosed by sidewalls thereby creating a spring means. In each parallel sidewall there is an opening which may either be enclosed by the sidewall thereby creating an enclosed hole in the sidewall, or partially enclosed by the sidewall thereby creating a slot in the sidewall. The openings in the sidewalls are aligned thereby creating an opening through which a post may be inserted in a direction normal to the axis of the ferrule of the terminal. The spring means is arched over the portion of web enclosed by sidewalls such that the end of the spring spring means is spaced from the web or floor a distance which is less than the thickness of the post to be inserted.

The insertion of the post causes deformation in the spring means thereby creating a constant force on the post and causing the terminal to remain in position on the post. Several ter- 50 spring means for engaging and biasing said post. minals may be placed on the post by simply inserting the post through the openings of the required number of terminals.

In the drawings:

FIG. 1 is a top plan view of the terminal in accordance with the invention:

FIG. 2 is a side elevational view of FIG. 1; and

FIG. 3 is an exploded perspective view showing a post and its path of insertion into the terminal.

A terminal T, in accordance with the present invention, is of substantially U-shape cross section throughout and comprises 60 a contact section 1 and a ferrule or conductor-engaging section 2. Contact section 1 comprises a floor or web 3 which includes an extension 4 arched back over a portion of web 1 and contained within parallel sidewalls 5 thereby forming a spring means. Spring means 4 is substantially the same width as web 1 and is arched back to form a substantially smooth arch so that its free end 4a terminates a short distance from web 3.

Each sidewall 5 contains opening 6; these openings being in

alignment. The aligned openings 6 as shown in FIGS. 1, 2 and 3 are for illustrative purposes only and in no way limits other possible opening configurations including those which would create a slot in the sidewalls by being only partially enclosed thereby. Ferrule section 2 includes a serrated wire-engaging member 6 and an insulation-engaging member 7 which is at-

tached to a feed strip 8.

The centerline of the aligned openings is perpendicular to the longitudinal terminal axis such that post 9 may be inserted normal to this axis as shown in FIG. 3. Openings 6 are larger than post 9 to allow free passage of the post through the openings. Spring means 4 is aligned such that free end 4a is disposed about midway of the height of openings 6 as illus-

trated in FIG. 2.

When post 9 is inserted into openings 6, it is engaged by free end 4a and spring means 4 is deformed upwardly or outwardly thereby creating a constant force to be exerted on post 9 at the point of contact therewith to thereby force the post into engagement with web 3 which provides adequate area contact therebetween. Post 9 is provided with a beveled end to facilitate engagement with end 4a of the spring means.

Openings 6 are larger than post 9. This coupled with spring means 4 is an advantage because exact tolerances are not necessary. The spring means compensates if the post is smaller

25 or larger than the established mean value.

A particular advantage of the invention is that the openings and the post have a mateable configuration, e.g. rectangular, to prevent the terminals being rotated about the post. Of course, a round post can be inserted in the rectangular 30 openings without the antirotation feature.

Changes in construction will occur to those skilled in the art and various apparently different modifications and embodiments may be made without departing from the scope of the invention. The matter set forth in the foregoing description 35 and accompanying drawings is offered by way of illustration only.

I claim:

1. An electrical terminal comprising a conductor-engaging section for engagement with a wire conductor and defining a 40 first longitudinal axis, a contact section for engagement with an electrically conductive post, said contact section having a floor and sidewalls which define a second longitudinal axis parallel to said first axis, said sidewalls having aligned openings therein adjacent said floor for receiving said post means is adjacent the openings in the sidewalls, the end of the 45 therethrough, said openings defining a third axis transverse to said second axis, and an extension of said floor extending outwardly from a front end thereof and being bent back over said floor with a free end disposed between said aligned openings and intersecting said third axis, said extension defining a

2. An electrical terminal according to claim 1 wherein said openings have a configuration conforming to that of said post.

3. An electrical terminal according to claim 1 wherein said spring means engages and biases the post against said floor.

4. An electrical terminal comprising a conductor-engaging section for engagement with a wire conductor and defining a first longitudinal axis, a contact section for engagement with an elongated electrically conductive member, said contact section having a floor and sidewalls which define a second longitudinal axis parallel to said first axis, said sidewalls having aligned openings therein for receiving the elongated electrically conductive member therethrough, said openings defining a third axis transverse to said second axis, and an extension of said floor extending outwardly from a front end thereof and being bent back over said floor and intersecting said third axis to define a spring means for engaging and biasing said elongated electrically conductive member away from said floor.