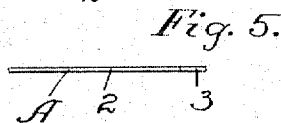
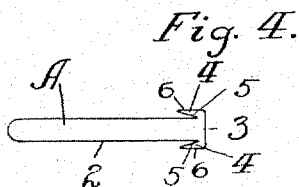
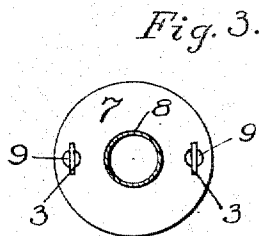
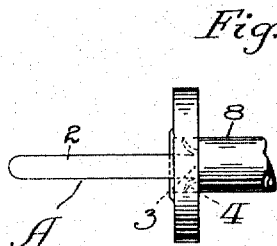
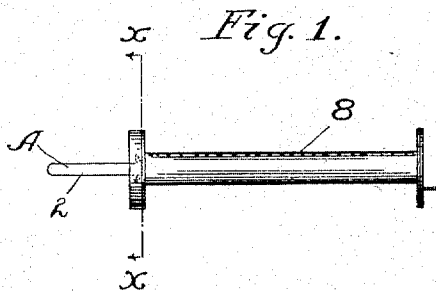


C. E. LUNDGREN.
 TERMINAL.
 APPLICATION FILED JULY 5, 1907.

984,097.

Patented Feb. 14, 1911.



Witnesses:
 K. K. M. Lind.
 J. M. Dahlgren.

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 Attorney.

UNITED STATES PATENT OFFICE.

CARL E. LUNDGREN, OF LA CROSSE, WISCONSIN, ASSIGNOR TO THE VOTE BERGER COMPANY, A CORPORATION OF WISCONSIN.

TERMINAL.

984,097.

Specification of Letters Patent. Patented Feb. 14, 1911.

Application filed July 5, 1907. Serial No. 382,248.

To all whom it may concern:

Be it known that I, CARL E. LUNDGREN, a citizen of the United States, residing at La Crosse, in the county of La Crosse and State of Wisconsin, have invented a certain new and useful Improvement in Terminals, of which the following is a specification.

My invention relates particularly to a terminal used in connection with electrical conductors by which a device of its kind is produced having means for supporting it rigidly and without breaking or becoming detached from the conductor with which it is connected and the support on which it is mounted.

Much trouble and annoyance are produced by electric terminals such as are used on magnet coils becoming broken or detached from the end pieces of the spools or cores on which the coils are wound and such terminals as have heretofore been used have usually become disconnected from their conductors after being used but a short time.

The primary object of my invention is to overcome these objections in a simple and efficient manner and by inexpensive construction.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view of a spool on which a magnet coil is adapted to be wound showing my improvement attached thereto; Fig. 2 is an enlarged side view of a detail portion of the spool illustrated in Fig. 1 showing my invention; Fig. 3 is a section of Fig. 1 taken on the line X—X; Fig. 4 is a plan view of my improved terminal, and Fig. 5 is a view looking at an edge of said terminal.

In the drawings A represents my improved terminal which consists in a general way of a shank 2 and a head 3 on one end of said shank. This head is provided with a pair of barbs 4, one barb being formed adjoining each edge of the shank and the inner edge 5 of each barb tapering or spreading downwardly and outwardly along the shank 2 forming spreading points, the outer

edges 6 of which are substantially parallel with the edges of the shank. These pointed barbs are adapted to spread outwardly by means of their tapering edges as indicated by the broken lines in Fig. 2 when the shank of the barb is driven or pressed into a suitable support. A spool 7 of insulating material and of usual construction is illustrated in the drawings on which a magnet coil not shown, is adapted to be wound. An end 8 of this spool is provided with a pair of openings 9 through which the shanks of a pair of terminals are passed, their barbs being driven into the end and spreading and locking therein. In this manner the terminals are firmly supported upon the spool. In producing my improved terminal the barbs are formed by splitting the end of the shank, the entire device being stamped or cut out of a single piece of material.

In use, after the terminals have been secured upon an end of the spool as described, the conductor of the coil is soldered or otherwise fastened to the terminals in the usual manner.

It is obvious that this invention is applicable as an electrical terminal to various electrical devices and the construction described is not limited for use in connection with magnet coils, but may be applied to electric circuits in general where a stationary electrical contact is required.

In accordance with the patent statutes, I have described the principle of operation of my invention, together with the apparatus which I now consider to represent the best embodiment thereof, but I desire to have it understood that the apparatus shown is only illustrative and that the invention can be carried out by other means and applied to uses other than those above set forth, within the scope of the following claims.

Having described my invention, what I claim as new and desire to protect by Letters Patent, is:—

1. An electrical terminal adapted to be

secured upon a support by a driving movement, comprising, a shank having its end pointed and formed with a diverted edge adapted to revert the point as it is driven
5 into engagement with the support.

2. An electrical terminal adapted to be secured upon a support by a driving movement, comprising, a shank having a head, said head being formed with a pair of barbs;
10 each having a turning edge adapted to re-

vert into the support as said points are driven into engagement therewith.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

CARL E. LUNDGREN.

Witnesses:

C. D. ENOCHS,

C. C. BREWER.