

UNITED STATES PATENT OFFICE.

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TERMINAL CONNECTION.

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This invention relates to a terminal connection and has relation more particularly to a device of this kind particularly adapted for use with the terminal of a storage battery or the like, and it is an object of the invention to provide a connection of this character which can be effectively applied or removed.

Another object of the invention is to provide a device of this kind adapted to surround or embrace a battery terminal post together with means for effectively clamping the connection to the post and in a manner whereby it may be easily released.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved terminal connection whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawing, wherein:—

Figure 1 is a view in perspective of a terminal connection constructed in accordance with an embodiment of my invention in applied position;

Figure 2 is a view in top plan of the connection as herein disclosed unapplied;

Figure 3 is a view similar to Figure 2 showing the locking member in release position;

Figure 4 is a view in side elevation of the structure as illustrated in Figure 2.

As disclosed in the accompanying drawing, my improved terminal connection comprises a split annular member M providing the jaws 1 adapted to receive therebetween a terminal post P and to be effectively clamped thereto in a manner to be hereinafter described. The member M, as herein disclosed, at its base portion is provided with an outstanding slip barrel 2 in which an extremity of an electrical conductor 3 is adapted to be securely engaged.

The outer or free end portions of the jaws 1 are continued by the outstanding and substantially parallel blocks 4 preferably of a thickness materially greater than the thickness of the major portions of the jaws 1.

The outer faces of said blocks 4 are provided thereacross with the grooves or channels 5 preferably substantially V-shaped in cross section.

Freely disposed through the blocks 4 at substantially the longitudinal centers of the grooves 5 is an elongated shank 6 provided at one end with a head 7 and having threaded upon its opposite end portion a nut 8, said nut having contact from without with a washer 9 freely mounted on the shank 6 and of a diameter to bridge the adjacent groove 5 in order to have firm and close contact with the outer face of the adjacent block 4. The arms 1 possess a certain degree of inherent resiliency serving to normally maintain the blocks 4 spaced apart a distance whereby the jaws 1 may be readily and freely engaged or released from the post P and permitting said jaws to be moved one toward the other in a manner to result in said jaws having an effective clamping action upon the post P to hold the same against displacement with respect thereto.

Interposed between the head 7 of the shank 6 and the adjacent block 4 is an elongated head 10, the shank 6 being freely disposed through said head at substantially its longitudinal center. This head 10 in cross section is substantially in the form of an equilateral triangle with its apex disposed toward the adjacent block 4 so that when the head 10 is disposed transversely of such block 4 the groove 5 of said block 4 will readily receive the apex portion of the head 10, thus permitting sufficient separating movement of the blocks and the jaws 1 when it is desired to release or free the connection from the post P.

With the head 10 in its transverse position with respect to the adjacent block 4 and the jaws 1 properly engaged with the post P, upon substantially a quarter turn being given to the head 10 the same will readily ride out of the groove 5 and by contact with the head 7 will force the blocks 4 together with the jaws 1 one toward the other into effective clamping engagement with the post P.

One end portion of the head 10 preferably at its back is continued to provide an elongated handle member or lever 11 which will facilitate the requisite turning movement of the head 10.

It is to be noted that the blocks 4 are in duplicate. By this means the assembly of the connection is facilitated as the head 10

will operate with the same convenience and facility in connection with either one of said blocks.

From the foregoing description it is thought to be obvious that a terminal connection constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:—

1. A terminal connection comprising a pair of jaws adapted to receive a terminal post therebetween, blocks carried by the outer ends of the jaws, a shank freely disposed through the blocks, a transversely disposed groove provided in the outer face of each of the blocks, said shank being disposed through said grooves, means carried by the shank for contact with the outer face of one of the blocks, an enlargement carried by the opposite end portion of the shank, a head freely mounted on the shank between the enlargement of the shank and the second block, said head when in one position extending within the groove of the adjacent block to permit separating movement of the blocks and jaws, said head when turned to a position angular to the groove forcing the blocks and jaws one toward the other.

2. A terminal connection comprising a pair of jaws adapted to receive a terminal post therebetween, blocks carried by the outer ends of the jaws, a shank freely disposed through the blocks, one of said blocks

having a groove disposed across the outer face thereof, said shank being disposed through said groove, means carried by an end portion of the shank for contact with the outer face of the second block, an enlargement carried by the opposite end portion of the shank, a head freely mounted on the shank between the enlargement of the shank and the block provided with the groove, said head when in one position extending within the groove of the adjacent block to permit separating movement of the blocks and jaws, said head when turned to a position angular to the groove forcing the blocks and jaws one toward the other.

3. A terminal connection comprising a pair of jaws adapted to receive a terminal post therebetween, blocks carried by the outer ends of the jaws, a shank freely disposed through the blocks, one of said blocks having a groove disposed across the outer face thereof, said shank being disposed through said groove, means carried by an end portion of the shank for contact with the outer face of the second block, an enlargement carried by the opposite end portion of the shank, a head freely mounted on the shank between the enlargement of the shank and the block provided with the groove, said head when in one position extending within the groove of the adjacent block to permit separating movement of the blocks and jaws, said head when turned to a position angular to the groove forcing the blocks and jaws one toward the other, said head in cross section being substantially triangular with its apex disposed toward the adjacent block to be received in the groove of said block.

In testimony whereof I hereunto affix my signature.

JAMES H. EATON.