

1,149,599.

Patented Aug. 10, 1915.

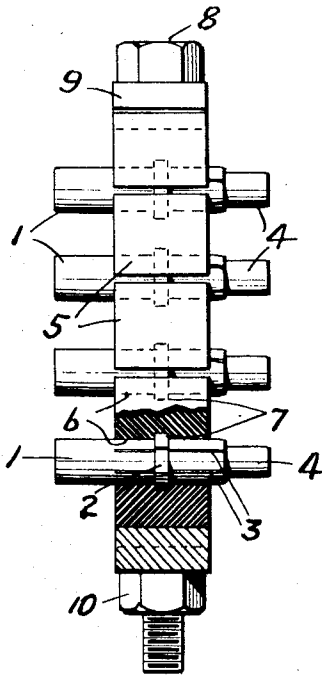


FIG. 1.

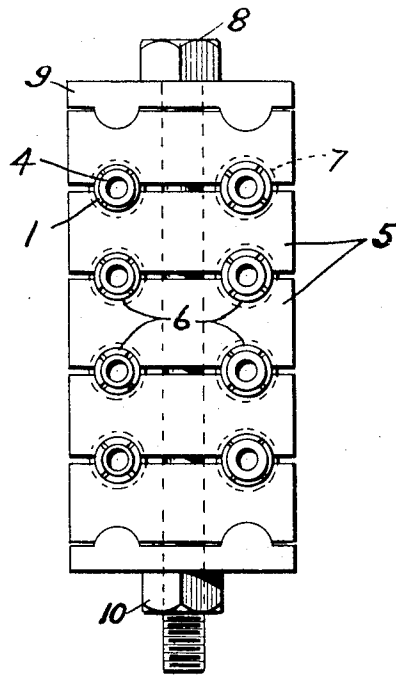


FIG. 2.

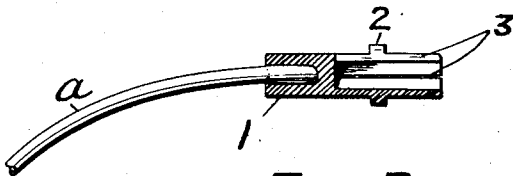


FIG. 3.

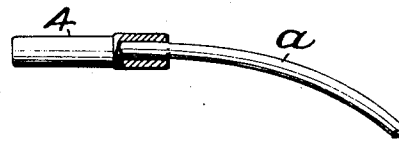


FIG. 4.

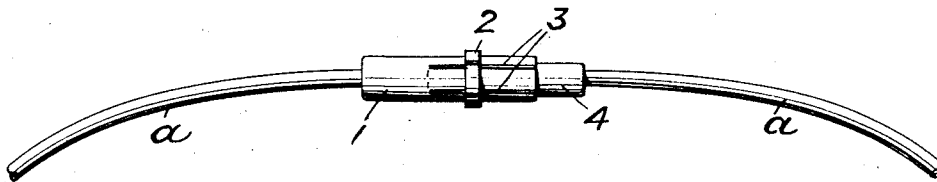


FIG. 5.

WITNESSES:

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HOWARD SMALL, OF WYNCOTE, PENNSYLVANIA, ASSIGNOR TO VULCAN MOTOR DEVICES COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

JUNCTION OR TERMINAL BLOCK.

1,149,599.

Specification of Letters Patent.

Patented Aug. 10, 1915.

Application filed October 17, 1913. Serial No. 795,621.

To all whom it may concern:

Be it known that I, HOWARD SMALL, a citizen of the United States, residing at Wyncote, in the county of Montgomery and State of Pennsylvania, have invented a certain new and useful Junction or Terminal Block, of which the following is a specification.

The principal object of the present invention is to provide a simple, compact and efficient device by means of which a number of conductors can be connected up and disconnected conveniently, rapidly and without possibility of mistake.

The invention will be claimed at the end hereof but will be first described in connection with the embodiment of it chosen for illustration in the accompanying drawings forming part hereof and in which—

Figure 1, is an edge view, partly in section. Fig. 2 is a front view. Fig. 3, is a sectional view of a socket member detached. Fig. 4, is a sectional view of a plug member, and Fig. 5, is a detached view of a socket and plug member assembled.

In the drawings 1, is an externally flanged split socket member. The flange is shown at 2, and the splits are shown at 3.

4, is a plug member adapted for insertion into and removal from the socket member 1. Each of these members 1 and 4, is arranged for connection with a wire *a*. As shown each member is cupped or countersunk for this purpose. There may be any number of these complementary socket and plug members. In the present instance eight are shown but the number is not material. They are all alike except as to size and in that respect they differ so that in assembling the parts the fit of the plugs in the sockets is a guide to correct assemblage. For example, the plug shown in Fig. 4, will correctly fit only the socket shown in Fig. 3, and by observing this fit it necessarily follows that the parts of wire *a*, are connected together. Externally certain of the sockets are larger than the others. For example, those at the right in Fig. 2, are larger than those at the left and this constitutes a means for identifying and distinguishing sets of conductors, for instance, positive from negative.

5, are insulating blocks and they are all duplicates of each other. Each block is grooved crosswise as at 6, for the accommodation of the socket members and is

also grooved lengthwise as at 7, for the accommodation of the flanges 2. One of the grooves 6, the one at the right in Fig. 2, is larger than the other so as to accommodate the socket members of large and small external diameter. The flanges 2, and the grooves 6, prevent endwise movement of the socket pieces. The blocks 5, have centrally arranged holes in them and are strung on a bolt 8, between end pieces 9, so that when the nut 10, is tightened or loosened the various blocks are clamped together or are released. Each end piece is fitted with a large and with a small rib which take into the grooves 6, of the end blocks to clamp in line with the sockets.

By loosening the nut 10, the split socket members free their plug members so that any one of them can be readily removed and replaced, whereupon by the single operation of tightening the nut 10, the blocks are drawn together and cause the split socket members to tightly clamp and retain their plug members. By the use of the described apparatus each of the complementary socket and plug members is insulated from all the rest. The number of complementary socket and plug members can be easily increased or diminished by the addition or removal of one or more insulating blocks and it is practically impossible for even those unskilled in the art to mix or confuse the conductors in disconnecting and connecting.

It will be obvious to those skilled in the art that modifications may be made in details without departing from the spirit of the invention which is not limited in respect to those matters nor further than the prior state of the art may require.

What I claim is:

1. A junction or terminal block comprising the combination of complementary externally ribbed split socket members and plug members of different sizes and arranged in groups, crosswise and lengthwise grooved insulating blocks between said groups, end pieces or blocks, and a bolt and nut on which the blocks and end pieces are strung and by means of which all the plug members can be clamped and unclamped in their respective sockets.

2. A junction or terminal block comprising the combination of complementary externally ribbed split socket members and plug

members of different sizes and arranged in groups, crosswise and lengthwise grooved insulating blocks between said groups, and a bolt and nut on which the blocks are strung and by means of which all the plug members can be clamped and unclamped in their respective sockets.

3. A junction or terminal block comprising the combination of complemental plug members and externally flanged split socket members of which some have larger external dimensions than the others and of which all have different internal dimensions, insulating blocks grooved crosswise and lengthwise to accommodate socket members of different external dimensions, and a nut and bolt on which the blocks are strung and which serves to clamp and unclamp them.

4. A junction or terminal block comprising the combination of complemental plug members and externally flanged split socket members of which some have larger external dimensions than the others and of which all have different internal dimensions, insulating blocks grooved crosswise and lengthwise to accommodate socket members of different external dimensions, end plates fitted to fit crosswise grooves in the end blocks, and a bolt and nut on which the blocks and

plates are strung and by which the plug members are clamped and unclamped.

5. A junction or terminal block comprising the combination of a plurality of socket-and-plug members, insulating blocks between which the socket-and-plug members are arranged, and a single bolt for clamping and unclamping all said parts.

6. A junction or terminal block comprising the combination of a plurality of socket-and-plug members of different sizes, insulating blocks between which the socket-and-plug members are arranged, and a single bolt for clamping and unclamping all said parts.

7. A junction or terminal block comprising the combination of a plurality of socket-and-plug members, insulating blocks between which the socket-and-plug members are arranged, end pieces with projections bearing upon the blocks in line with the socket-and-plug members, and a single bolt for clamping and unclamping all said parts.

In testimony whereof I have hereunto signed my name.

HOWARD SMALL.

Witnesses:

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FRANK E. FRENCH.