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J. R. KEARNEY

ELECTRICAL CONNECTION

Filed April 24, 1922

Fig. 1.

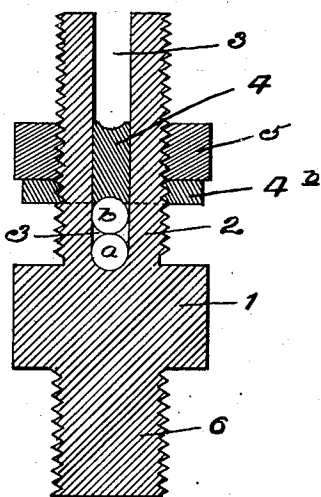


Fig. 3.

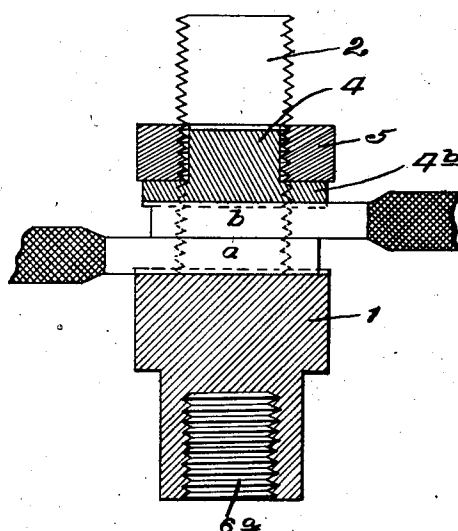


Fig. 2.

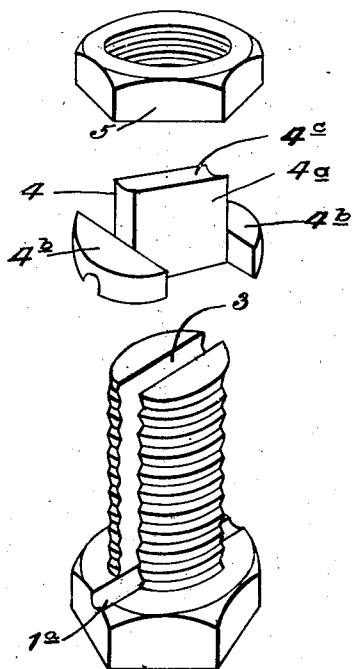
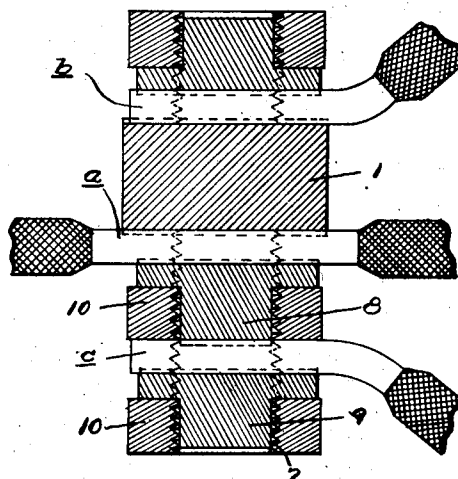


Fig. 4.



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ELECTRICAL CONNECTION.

Application filed April 24, 1922. Serial No. 556,277.

Figure 1 is a vertical sectional view through my improved electrical connection.

Figure 2 is a detail view of the parts separated.

Figure 3 is a vertical sectional view taken at right angles to Figure 1.

Figure 4 is a vertical sectional view of a modified form.

This invention relates to a new and useful improvement in electrical connections, and is designed particularly as an improvement upon that type of connection shown in United States Letters Patent No. 822,492, granted to Morris C. Turner June 5, 1906, the object being to provide a supporting element in the slotted bolt so that the legs of the bolt cannot collapse or bend inwardly so as to release the nut.

My invention is designed particularly for use as an electrical connection for telephone wire taps, electric power taps, telephone switch boards, and other electrical apparatus such as battery connectors, dry cells, storage batteries, etc., temporary connections for tests and connectors on telephone, telegraph or cable terminal boxes.

In the drawings, 1 indicates a bolt head, preferably hexagonal in shape from which extends a threaded bolt member 2 having a longitudinally disposed slot 3 extending substantially through its entire length.

4 indicates a plug member, more clearly shown in Figure 2, which member consists of a body portion 4^a, the thickness of which is approximately equal to the width of the slot 3, so that the plug fits snugly in the slot but is free to move therein. At one end of this plug member are wings 4^b which wings extend beyond the sides of the bolt to cooperate with an ordinary nut 5, preferably of less diameter than the head 1.

In operation, assuming that the wire *a* is a terminal or main line wire, as, for instance, a telephone wire, and it is desired to connect the terminal or tap the main line wire, and electrically connect wire *b* thereto, the nut 5 and plug 4 are removed leaving an open ended slot which may receive the main

line wire, after which the plug is inserted in position and the nut 5 screwed home, clamping the two wires tightly together.

As above described, the construction may be employed as a floating connection for tapping main line wires, but if it is desired to use the device as a binding post, it may be provided with a threaded stud 6 on the opposite side of the head, as shown in Figure 1, or said head may be provided with a tapped opening 6^a as shown in Figure 3. The head 1 may be grooved as at 1^a to provide a recessed seat for the main line wire, and the plugs may have recesses 4^c in their upper and lower faces for the same purpose.

In Figure 4, I have shown a modification in which the opposite side of head 1 is provided with a slotted bolt 7 in which operate one or more plug members 8 and 9, corresponding in all respects with plug member 4 above described, and these plug members may be held in position by nuts 10. In this manner, the main line wire *a* may be tapped by wires *b* and *c*.

What I claim is:

1. In an electrical connection, a member slotted longitudinally, a washer having a diametral portion fitting in the slot in said member and a portion adapted to extend across said slot, and a securing element fitting over the exterior of said member and removably engaging said washer.

2. In an electrical connection, a member slotted longitudinally, a washer having a diametral portion fitting in the slot in said member and extending a substantial distance above the upper face of the body of the washer to fill said slot, and a portion adapted to extend across said slot on the exterior of said slotted member, and a securing element fitting over the exterior of said member, surrounding said extended diametral portion and engaging the upper face of the body of the washer.

In testimony whereof I hereunto affix my signature this 10th day of April, 1922.

JAMES R. KEARNEY.