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J. T. JANETTE

BRUSH HOLDER CONNECTION

Filed Feb. 6, 1926

Fig. 1.

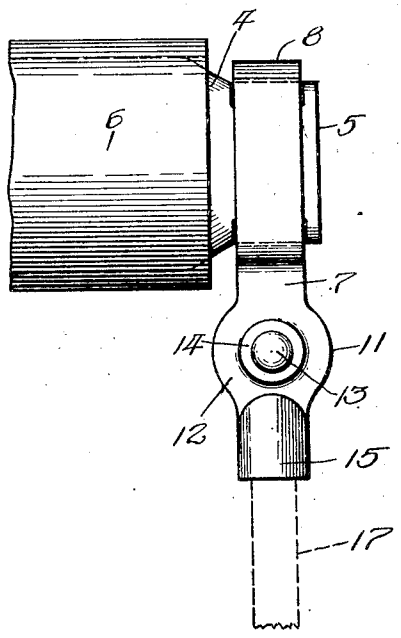


Fig. 2.

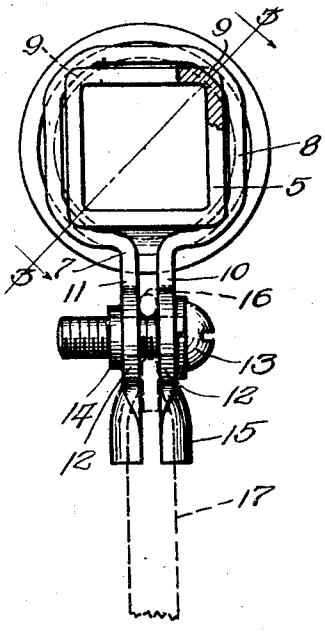
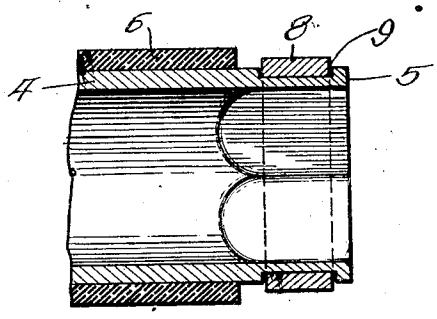


Fig. 3.



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JOHN T. JANETTE, OF CHICAGO, ILLINOIS.

BRUSH-HOLDER CONNECTION.

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This invention relates to means for securing terminal wires to brush holders for dynamo-electric machines, such as motors or generators.

The objects of this invention are to provide a new and improved terminal connection for brush holders; to provide a simple and efficient device for attaching a wire to a brush holder so that the parts are not apt to become loosened or separated; to provide a terminal clip or connection which may be cheaply made and which will be easily applied as well as durable and efficient in operation; and to provide such other novel features and details of construction as will appear from the following description.

In the accompanying drawings illustrating this invention:

Figure 1 is a side view of the holder with the terminal connection applied thereto;

Figure 2 is an end view; and

Figure 3 is a sectional view taken on the line 3—3 of Figure 2.

While the parts may of course be made in any desired size, these figures show a considerable enlargement of a standard size device such as used for small motors in which the brush holder is about one half inch in diameter.

In the particular form of the invention as shown in these drawings, the brush holder 4 is made in the form of a cylinder with the end 5 of square or angular cross-section. This end is made square for the purpose of holding the correspondingly shaped brush, and the holder as commonly used is mounted with this end adjacent to the commutator. The holder may be provided with a covering 6 of insulating material.

The terminal connection 7 comprises a clamp or clip preferably formed of a comparatively narrow strip of sheet metal. This clamp has a substantially rectangular portion or loop 8 which engages with the end 5 of the brush holder. In order that the clamp will be securely held in position, the end is turned or cut away to provide grooves or notches 9 at the corners, and the corners of the square loop are bent on a similar or corresponding curve so that they will fit in such notches, as clearly shown in Figures 2 and 3.

The arms or branches 10 and 11 of the clamp are preferably enlarged as shown at 12 for receiving a clamping screw 13, the branch 11 being provided with a threaded lug or projection 14 for receiving such screw. The outer ends of these branches are made substantially semi-circular in cross section as shown at 15 to form a socket for receiving the terminal or end 16 of the conducting wire 17. Such conductors are usually insulated and the ends are bared and wound around the bolt 13 when the connection is to be made. It will be readily seen that when the clamp or connection is placed in position on the brush holder and the wire is brought into fastening position as shown in Figure 2, the tightening of the screw 13 would cause the clamp to engage with the holder and will also bind the outer ends of the arms on the wire 16. When the parts are thus assembled, the conductor wire and the post will have a proper mechanical as well as electrical connection, and on account of the clamp fitting in the groove of the holder, it is not apt to become loosened or disconnected therefrom.

As different forms of brushes or holders may require modifications of the form of the connections, I do not wish to be limited to the exact arrangement herein shown and described, except as specified in the following claims, in which I claim:

1. The combination with a brush holder having a rectangular end portion with grooves cut therein, of a terminal clamp having a loop fitting over the rectangular portion and engaging with said grooves.

2. The combination with a tubular brush holder having a square portion with the corners cut away to provide notches, of a terminal connection comprising a loop portion adapted to engage with the holder and fit in said notches and having projecting arms for engagement with a conductor and means for drawing the arms together.

3. A brush holder connection comprising a loop for engagement with the holder, with projecting arms having their outer ends formed for engagement with the wire and a screw through said arms for tightening the loop and the outer ends simultaneously.

4. The combination of a cylindrical brush

holder having one end which is substantially square, the corners of the end portion being cut away to provide notches, and a clamp formed of a strip of metal having a loop passing around the end portion and engaging with said notches and having outwardly projecting arms with their ends formed for receiving a wire, a screw for drawing the arms together, and a terminal wire which is clamped by said arms, said screw serving to draw the arms against the wire and also to tighten the loop around the holder.

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