E. J. TOMLINSON.

BINDING POST FOR ELECTRIC CABLES.

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1,303,524. Patented May 13, 1919.

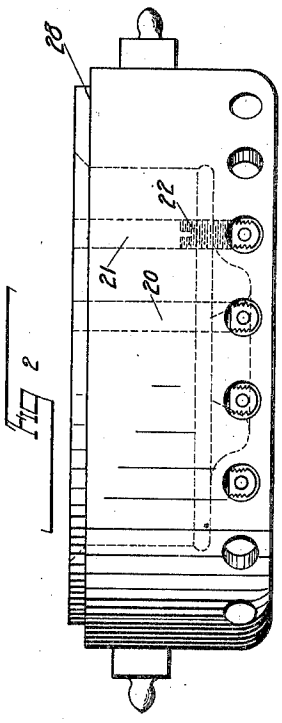


FIG. 2

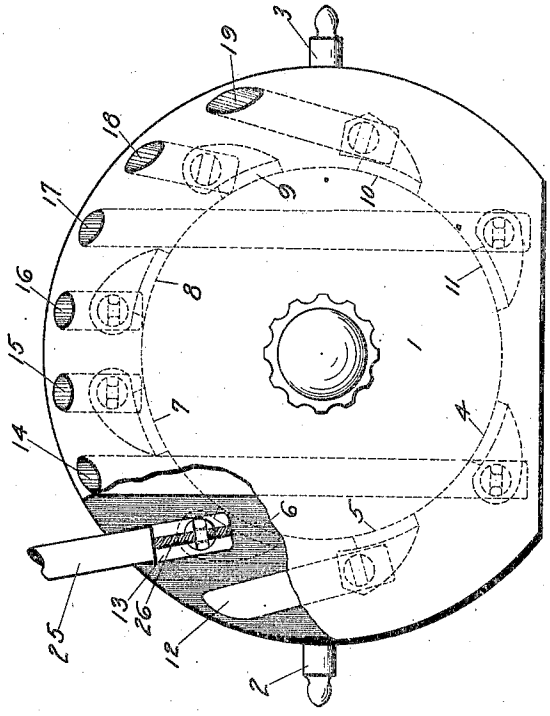


FIG. 1

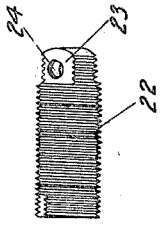


FIG. 4

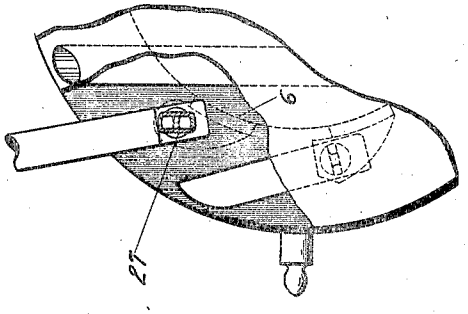


FIG. 3

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BINDING-POST FOR ELECTRIC CABLES.

1,303,524. Specification of Letters Patent. **Patented May 13, 1919.**

Application filed February 18, 1918. Serial No. 217,339.

To all whom it may concern:

Be it known that I, EDWARD J. TOMLINSON, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Binding-Posts for Electric Cables, of which the following is a specification.

My invention relates to binding posts for electric cables, more particularly those used in connection with ignition apparatus. In the use of ignition apparatus on internal combustion engines, special care must be directed to the method of attaching the electric cables to the ignition machine on account of the vibration produced by the engine itself as well as the entire autovehicle which is operated by the engine. On aeroplanes the vibration from the engine is exceedingly great on account of the large horse power of the engine used and a great deal more care must be used in attaching the electric cables to the ignition machine than on an automobile.

The object of my invention is to furnish a binding post which will give a strong, reliable connection electrically and mechanically as well as to provide a water and dust proof connection at the junction of the cable with the binding post.

Other and further objects will be apparent from a study of the specification taken in connection with the drawing which forms a part thereof.

In the drawing, Figure 1 illustrates an eight cylinder distributer block for an ignition magneto showing my binding post attached thereto.

Fig. 2 is a top plan view of Fig. 1.

Fig. 3 is a part sectional view of Fig. 1 showing the cable in its secured position.

Fig. 4 is a view of an element of my binding post.

Referring particularly to the various views, wherein like numbers refer to corresponding parts, 1 is a distributer block of insulating material which is adapted to be fastened to the magneto by means of studs 2 and 3. The block 1, as shown, is suitable for an eight cylinder engine since there are eight metallic distributer connecting pieces 4 to 11 inclusive, shown in dotted position in Fig. 1. The block has sets of two borings which are preferably substantially at right angles leading from a point adjacent the metallic connecting pieces above referred to. The vertical borings are shown as 12 to 19 inclusive, while for the purpose of clarity only two of the horizontal borings 20 and 21 are shown in Fig. 2.

In order to simplify this description only one set of borings with its coacting connecting piece, cable, etc., will be referred to as my binding post is applicable to a single point block as well as a multiple point block, as shown. I have merely shown, by way of preference, an eight cylinder block suitable for aeroplane purposes. The metallic connecting piece 6 has a threaded opening which is in line with the horizontal boring associated with the boring 13 that is in a plane substantially at right angles to said horizontal boring. Seated within said threaded opening is a screw 22 preferably having two flat surfaces 23 at its end and a hole 24 extending through the end from one flat surface 23 to the other.

The screw 22 in the horizontal boring is seated as explained above in the threaded opening of the connecting piece 6 and the end having the hole 24 extends into the vertical boring 13. The cable 25 is adapted to have its end 26 bared and introduced within the boring 13 so that the bared end 26 enters hole 24 of screw 22 as shown in Fig. 1. By turning the screw the end 26 of the cable 25 is wound up around the end of the screw as shown at 27 in Fig. 3, at the same time the cable 25 is drawn downward into the boring and will be clamped against one wall of the insulated block. I preferably use a left handed thread on the screw 22 so that by turning right handed the cable will be drawn against the rear wall of the block. By rear wall I mean that end designated by 28. In the construction of certain types of distributer blocks with which my binding post is adapted for use the part of the block adjacent the vertical boring or borings is usually thicker than the front wall, however, I do not wish to be limited to this particular detail as the vertical boring and the front wall of the block may be such that the cable may be clamped against the front wall instead of rear wall as just described.

I preferably make the vertical boring 13 just a trifle larger than the cable 25 that is to be used therein so as the cable 25 is drawn into the boring as described, the boring will be substantially closed by the cable and

thereby render the connection substantially water and dust proof.

While I have shown a preferred form of my invention and shown its applicability to a certain type of distributer block for ignition purposes it will be apparent that numerous changes and alterations may be made in the details and their application without departing from the spirit of my invention or the scope of the appended claims.

Having thus described my invention what I claim is:—

1. In a device of the character described, the combination of a block of insulating material having two borings, of a metallic connecting piece securely held in said insulation and having a threaded opening in line with one of said borings, a screw adapted to be carried in said threaded opening and having a hole in one end thereof, said hole in the screw end adapted to receive the bared end of an electric cable introduced in the other of said borings whereby when said screw is turned said cable is drawn into the boring and its bared end wrapped around the end of said screw as and for the purpose described.

2. In a device of the character described, the combination of a block of insulating material having two borings, of a metallic connecting piece securely held in said insulation and having a threaded opening in line with one of said borings, a screw having two flat surfaces on one end and a hole through said end from one flat surface to the other, said screw adapted to be seated in said threaded opening, the other of said borings being adapted to receive an electric cable whose bared end is adapted to enter the hole in said screw whereby when said screw is turned said cable end is wrapped around the screw, the cable drawn into the boring and clamped against the side wall thereof for the purpose described.

3. In a device of the character described, the combination of a block of insulating material having two borings substantially at right angles to each other, of a metallic connecting piece securely held in said insulation and having a threaded hole opening into both of said borings, a left hand screw seated in said threaded hole and extending into one of said borings, of means on the inner end of said screw for receiving the bared end of an electric cable introduced into the other of said borings whereby when said screw is turned in a right hand direction the bared end of the cable is wound around the end of the screw, the cable drawn into the boring and clamped against the inner wall of the block.

4. In a device of the character described, the combination of a block of insulating material having two borings substantially at right angles to each other, of a metallic connecting piece securely held in said insulation and having a threaded hole opening into both of said borings, a screw in one boring seated in said threaded hole and extending from said boring into the other, of means on the inner end of said screw for receiving the bared end of an electric cable introduced into the last mentioned boring, whereby when said screw is operated the bared end of the cable is wound around the screw end, the cable drawn into the boring and clamped against one wall of the block.

In witness whereof, I affix my signature.

EDWARD J. TOMLINSON.