F. B. BOWER.

KNOB FOR ELECTRIC WIRING.

APPLICATION FILED JULY 27, 1910.

995,838.

Patented June 20, 1911.

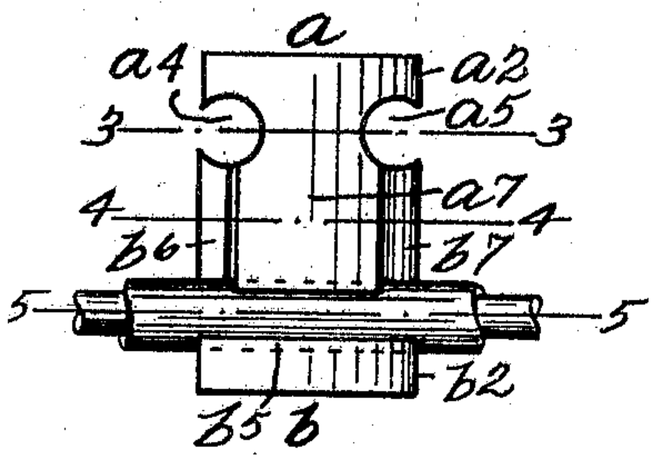

Fig. 1.

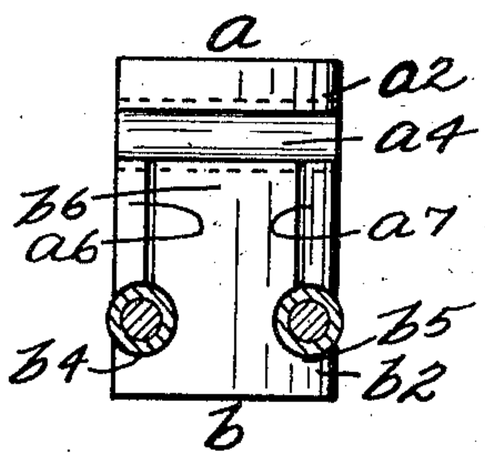

Fig. 2.

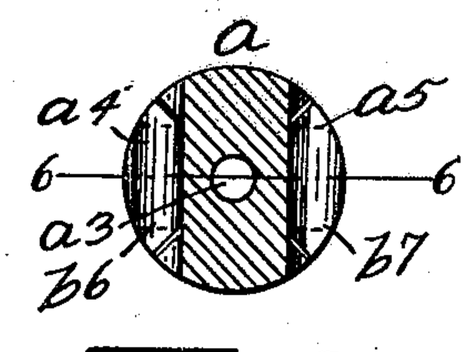

Fig. 3.

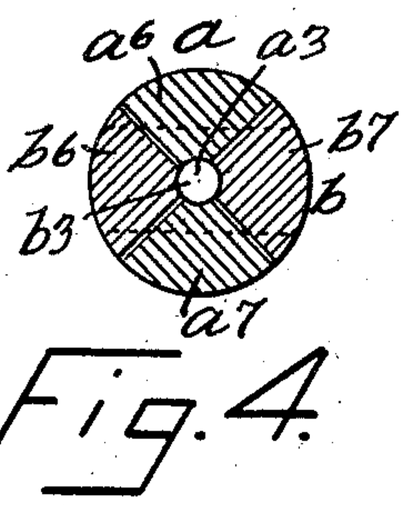

Fig. 4.

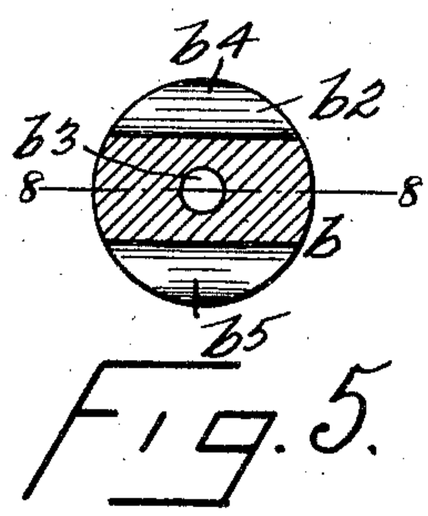

Fig. 5.

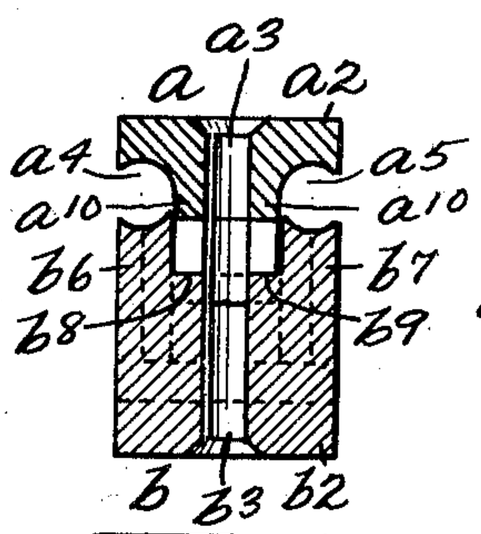

Fig. 6.

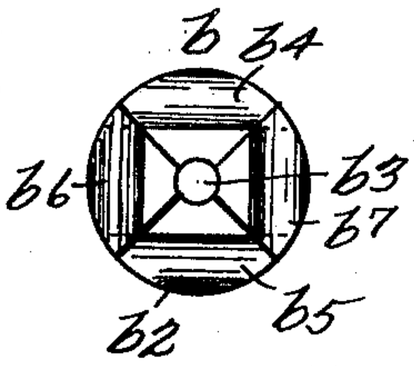

Fig. 7.

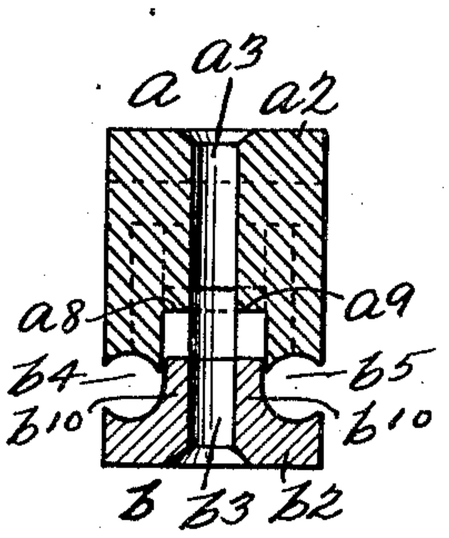

Fig. 8.

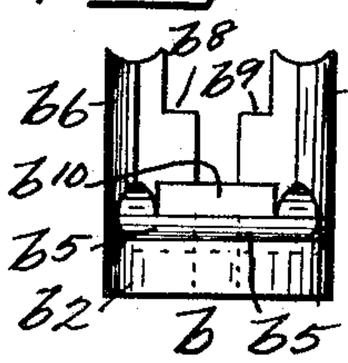

Fig. 9.

Witnesses:
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Fred B. Bower
By his Attorney
J. Chris Larsen

UNITED STATES PATENT OFFICE.

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KNOB FOR ELECTRIC WIRING.

995,838. Specification of Letters Patent. Patented June 20, 1911.

Application filed July 27, 1910. Serial No. 574,046.

To all whom it may concern:

Be it known that I, FRED B. BOWER, a citizen of the United States of America, and residing at Penn Yan, in the county of Yates and State of New York, have invented certain new and useful Improvements in Knobs for Electric Wiring, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to electric wiring, and the object thereof is to provide a knob for holding wires of this class, either singly or in pairs.

A further object is to form the said knob of two elements adapted to interlock and whereby adjustment is possible for different sizes of wires.

A further object is to make the said elements exactly alike whereby they may be interchangeable and also whereby the assembled knob may be placed in position with either end outwardly.

A further object is to secure such knobs in position by means of but one screw and which also serves as the adjusting means therefor.

A further object is to provide a separating wall on either side of the said screw in the positions of the wires held in the said knob; and a still further object is to provide such devices which are simple in construction and use, which are well adapted to the purposes for which they are intended, which are very inexpensive, and which fully comply with the regulations governing the use thereof.

My invention is fully set forth in the following specification, of which the accompanying drawings form a part, in which the separate parts are designated by the same reference characters in each of the views, and in which:—

Figure 1 is a side view of my invention in use; Fig. 2 is a similar view at right angles to Fig. 1; Fig. 3 is a section taken on the line 3—3 of Fig. 1; Fig. 4 is a section taken on the line 4—4 of Fig. 1; Fig. 5 is a section taken on the line 5—5 of Fig. 1; Fig. 6 is a section taken on the line 6—6 of Fig. 3; Fig. 7 is an inner plan view of one of the elements which I employ; Fig. 8 is a section taken on the line 8—8 of Fig. 5; and Fig. 9 is a side view of the element shown in Fig. 7.

In the drawings forming a part of this application I have shown a knob comprising two interlocking elements a and b exactly alike and adapted to be secured in position by means of a screw in the usual manner, said screw not being shown as it is of the usual or any desired form.

The element a comprises a base a^2 provided with a hole a^3 therethrough and having two directly opposite channels a^4 and a^5 on either side of the lower face thereof, and above which are two integral vertical posts a^6 and a^7 each being, in cross section, a sector of a circle the arc of which is slightly less than 90 degrees, said posts being preferably grooved at their outer ends as shown for reasons hereinafter clearly set forth. By reference to Fig. 7 it will be seen that the center of the arcs forming the said sectors is cut away in the projection of the hole a^3 and, by reference to both Figs. 7 and 9, it will be seen that the said sectors extend but a short distance beyond the base, beyond which they are cut away outwardly from the centers and forming segments with the ends removed at right angles to each other, thus forming shoulders a^8 and a^9 on the said posts, the distance between the said segments being slightly greater than the distance between the inner sides of the channels a^4 and a^5.

By reference to Figs. 6 to 9, inclusive, it will be seen that a wall a^{10} is provided between the channels a^4 and a^5 and the hole a^3, the object of which is to prevent any contact of the wires in the channels with the screw in the hole, these walls, however, terminating at a point approximately even with the corresponding side of the wires carried in the channels, and beyond which the sectors begin. The element b, as previously stated, is exactly like that a just described, comprising the base b^2, with a hole b^3 therein, and having the channels b^4 and b^5 and posts b^6 and b^7 having the shoulders b^8 and b^9, as well as the walls b^{10}, and it will be observed in both of these elements that the sectors of each are diametrically opposite and the channels of each element are parallel to the axial plane of the said sectors of the corresponding element, and it will also be noted that the holes a^3 and b^3 are each outwardly flared upon the outer faces of the bases a^2 and a^3, forming recesses for the head of the screw to be employed. It will be clearly seen that the axial planes of the sectors of the two elements are at right angles to each other when the said

elements are united, the sectors a^6 and a^7 separating those b^6 and b^7 and thus preventing rotary movement of the elements one upon the other but permitting longitudinal movement and the segments of the element a embrace the walls b^{10} whereas those of the element b embrace the walls a^{10} and the grooves in the outer ends of the posts a^6 and a^7 register with the channels b^4 and b^5 while those on the posts b^6 and b^7 register with the channels a^4 and a^5.

In placing the knobs in position, after assembling as last described, the wires are arranged in the channels farthest removed from the surface upon which the knobs are to be mounted, this being a legal requirement in order to insure a safe distance of the wires from the said surface, after which the screw is passed through the holes of the elements and driven into the said surface, the longitudinal movement possible of the elements over each other permitting great latitude in the size of the wire employed and still insuring a firm engagement between said elements, and it will be observed that either of the said elements may be contiguous to the said surface because of their resemblance to each other, and it is not necessary to maintain the elements in separate packages before their use, nor is it necessary to sort them, as any two grasped will readily unite as described, and the screw may be passed from either end of the assembled knob. As is well known these knobs are made of porcelain or similar non-conductive material, but I do not limit myself to such material, nor to the exact details set forth, as certain changes will, or may, suggest themselves in order to produce the desired result under varying conditions, and these changes or modifications still be within the spirit of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is:—

1. A device of the class described, comprising two similar elements adapted to interlock to hold wires therebetween, each of said elements consisting of a base and two diametrically arranged posts, the posts of each element slidably mounted between and separating the posts of the other element.

2. A device of the class described, comprising two similar interlocking elements having a wire channel therebetween, said elements comprising each a base and two diametrically opposed posts and each of said posts forming in cross section a sector, the arc of which is approximately 90 degrees of a circle.

3. A device of the class described, comprising two similar interlocking elements provided each with a screw hole in register one with the other and with a wall on each side of said hole, and having also two posts each in diametrical engagement, each of said posts having a portion thereof embracing a corresponding wall each of said posts forming in cross section a sector, the arc of which is approximately 90 degrees of a circle.

4. In a device of the class described, an element comprising a base two posts forming in cross section, each, a sector the arc of which is approximately 90 degrees, and a screw hole being provided therein, said element having also two wire channels on either side of and parallel to the axial plane of said posts, said post being diametrically arranged.

5. A device of the class described comprising two similar interlocking elements having wire channels therebetween said elements comprising each a base and two diametrically opposed posts and each of said posts forming in cross section a sector, the arc of which is approximately 90 degrees of a circle, said elements being slidably adjusted upon each other to vary the diameters of said wire channels.

6. A device of the class described, comprising two similar interlocking elements having wire channels therebetween, on either side thereof, and adjacent each end thereof, said elements comprising each a base and two diametrically opposed posts and each of said posts forming in cross section a sector, the arc of which is approximately 90 degrees of a circle, said pairs of wire channels being arranged at right angles to each other.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 21st day of July 1910.

FRED B. BOWER.

Witnesses:
H. K. Armstrong,
Oliver Sheppard.