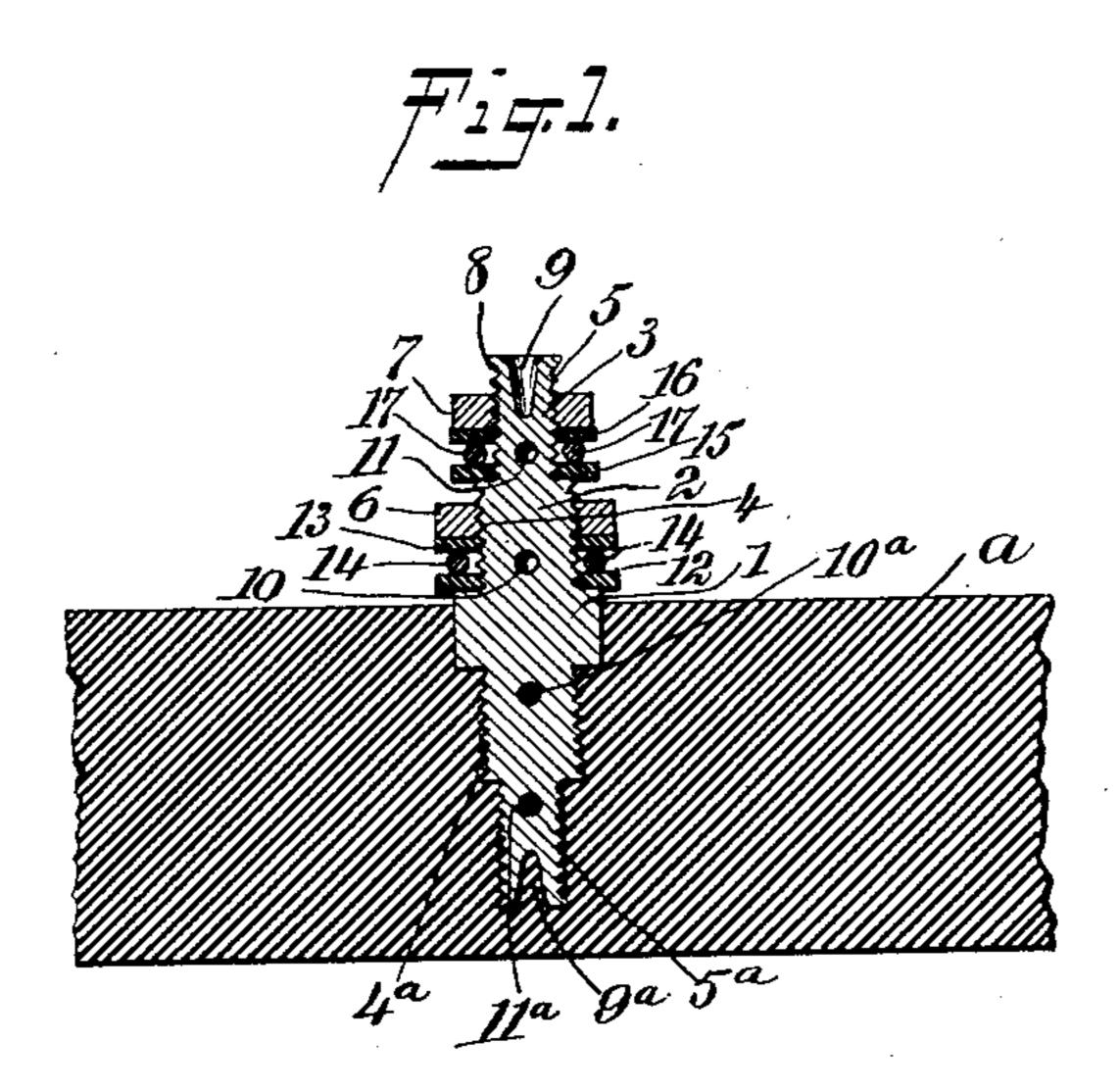
No. 750,723.

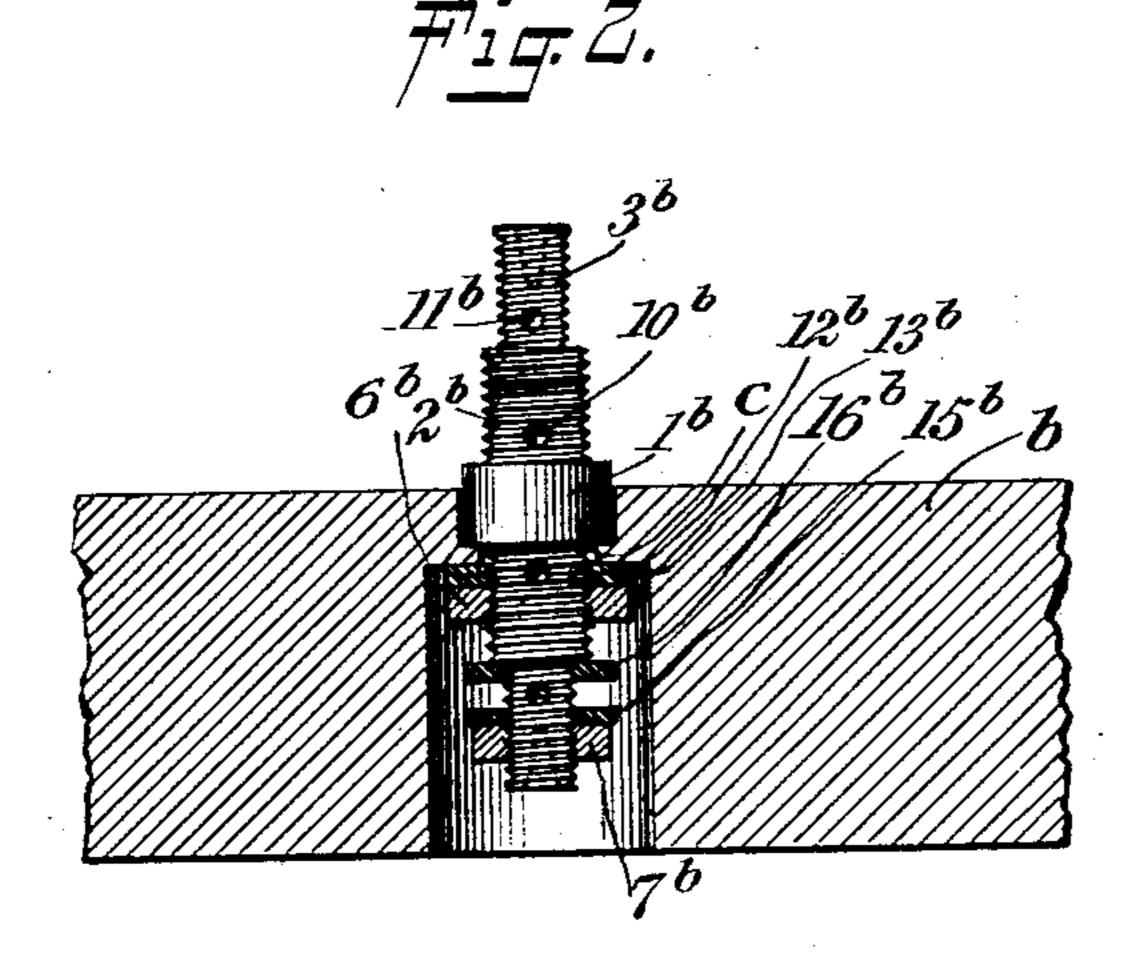
## L. STEINBERGER.

BINDING POST.

APPLICATION FILED JUNE 22, 1903.

NO MODEL.





William P. Goebel. Walton Harrison.

INVENTOR Louis Steinberger

BY

Muund ATTORNEYS

## United States Patent Office.

## LOUIS STEINBERGER, OF NEW YORK, N. Y.

## BINDING-POST.

SPECIFICATION forming part of Letters Patent No. 750,723, dated January 26, 1904.

Application filed June 22, 1903. Serial No. 162,573. (No model.)

To all whom it may concern:

Be it known that I, Louis Steinberger, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Binding-Post, of which the following is a full, clear, and exact description.

My invention relates to binding-posts for electrical machines or apparatus and admits of general use and is peculiarly applicable to electrical apparatus in which it is required to

frequently disturb the wiring.

The object of my invention is to produce a strong, effective, and useful device adapted for service in a great variety of places in or about electrical machines or apparatus and to provide a mode of attachment which, while forming a perfect electrical contact between the conductors, shall also mechanically clamp or bind them together in the most secure manner without diminishing their tensile strength and which shall at the same time permit them to be readily attached to or detached from the support whenever necessary and admit of either one of the wires being attached or removed without disturbing either of the remaining wires.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

In Figure 1 is shown a vertical section of one form of binding-post in which a portion is embedded in an insulating material, preferably the compound known as "electrose;" and in Fig. 2 is shown an elevation of a similar post mounted upon an insulating-base of the usual construction.

The binding-post consists of a comparatively large portion 1, to which are integrally connected substantially cylindrical portions 2 3, provided with threads 4 5. Upon the thread 4 is mounted a revoluble threaded nut 6, while upon the portion 3 is mounted a similar but smaller nut 7. An end 8 of the portion 3 is upset, so as to prevent the removal of the nut 7, and is provided with a conical aperture 9 for this purpose. The portion 2 is pro-

vided with a hole 10, while the portion 3 is 50 provided with a hole 11. The two portions 2 3 have different diameters and are also of smaller diameter than the portion 1, so that the several portions are separated from each other by annular shoulders or terraces, as 55 shown in the figures. Washers 12 13 are disposed between the nut 6 and the member 1 and are used for the purpose of engaging a wire 14, the action of these washers upon the wire being substantially the same as the action of washers and wires heretofore in use. Similar washers 15 16 engage a wire 17.

The binding-post may be mounted either as shown in Fig. 1 or as shown in Fig. 2. For this purpose it is made double-ended, the sev- 65 eral portions at the lower end of the screw of the post having the same conformity as those at the upper end. The post may be mounted, as shown in Fig. 1, by merely embedding its lower end in a base a of insulating material, 70 this material engaging the threads 4° 5° on the portion 1 and holes 10<sup>a</sup> 11<sup>a</sup> and a conical aperture 9° in said portion 1, whereby the post is held firmly in position. If, however, it is desired to use the type of base shown at b in Fig. 75 2, the base is provided with a countersunken opening c and the post is merely dropped in and tightened by means of a revoluble nut 6°.

The binding-post (shown in Fig. 2) is reversible—that is to say, it is double ended and 80 either end may be used as the body portion proper of the post. If desired, the post can be used, as shown in Fig. 2, until its upper end is worn out and then the post may be reversed, the other end being comparatively 85 new and ready for service. When used, as indicated in Fig. 2, the large or central portion 1<sup>b</sup> of the post is placed in the countersunken opening c and the post is held in position by the nut 6<sup>b</sup> and washers 12<sup>b</sup> 13<sup>b</sup>. A 90 nut 7<sup>b</sup> and washers 15<sup>b</sup> 16<sup>b</sup> may be left in the position indicated, where they normally remain idle, but may be removed at any time for use upon the upper end of the post. The threaded portions 2<sup>b</sup> 3<sup>b</sup> and the holes 10<sup>b</sup> 11<sup>b</sup> are nor- 95 mally used in the same way as the threaded portions 2 3 and holes 10 11 in Fig. 1. The several metallic parts shown in Fig. 1 are

similar to those shown in Fig. 2; but in the two figures the mountings are different, and the respective lower ends are employed in somewhat different relations.

I do not limit myself, however, to the doubleended form, nor to the feature of reversibility, nor to any particular form of base to enable

it to be mounted.

My invention is used as follows: Suppos-10 ing it is desired to secure two wires to the same post, as is frequently necessary. To render these wires independent, so that either one may be detached at will without disturbing the other, the washer 12 is slipped over 15 the portion 2, the wire 14 is bent around this portion, the washer 13 is placed in position upon the wire, and the nut 6 is screwed down, so as to clamp the wire. The washers 15 16 are permanently mounted upon the thread 5, 20 their removal being prevented by the fact that the nut 7 is unable to pass over the upset end 8 of the portion 3. The wire 17 is merely inserted between the washers 15 and 16, and the nut 7 is screwed down in position so as to 25 clamp the wire. It will be observed that either wire may be loosened from the post at pleasure without disturbing any other wire. It will also be observed that neither the nut 6 nor the nut 7 is liable to be lost, for the rea-30 son that the nut 7 cannot leave the threaded portion 3, as explained above, and that the nut 6 is unable to leave the portion 2, for the reason that it cannot pass over the washers 15 16.

If desired, the wires need not encircle the portions 2 3, as above described, but may be inserted directly into the holes 1011, and thus clamped in position by the pressure of the nut. When thus used, it is desirable that 40 the holes 10 11 shall be so disposed that the washers 12 15 compensate for the height of the holes above the respective shoulders supporting the washers, so that the wires when clamped within these holes are engaged by

45 the washers below. Having thus described my invention, I claim

as new and desire to secure by Letters Patent— 1. A binding-post, comprising a member provided with a stem having a plurality of 50 portions immovable relatively to each other and of different diameters, and separate fastening mechanisms respectively engaging said portions of different diameters for the purpose of separately securing wires to said members.

2. A binding-post, comprising a member having a plurality of portions immovable relatively to each other and of different diameters. said portions of different diameters each being provided with a hole for engaging a conductor, 60 and separate clamping members engaging said

portions of different diameters.

3. A binding-post, comprising a member having a plurality of portions immovable relatively to each other and of different diameters,

each of said portions being provided with an 65 aperture for admitting a wire, and a clamping member mounted upon each of said portions and free to move relatively thereto for engaging said wire.

4. A binding-post, comprising a member 7° provided with portions of different diameters disposed one over the other so as to form terraces and immovable relatively to each other, each of said portions being provided with an aperture for engaging a wire, and a clamping 75 member engaging each of said portions of different diameters and free to move relatively thereto.

5. A binding-post, comprising a member provided with portions of different diameters 80 disposed one over the other so as to form terraces and immovable relatively to each other, each of said portions being provided with an aperture for engaging a wire, said aperture of one portion being spaced a slight distance over 85 the terrace below it for admitting a washer between said aperture and said terrace, and detachable clamping members engaging the several portions of different diameters.

6. A binding-post, comprising a member 90 having portions of different diameters each provided with a screw-thread, said portions being disposed one above the other so as to form terraces, and immovable relatively to each other, each of said portions being provided 95 with an aperture for receiving a wire, and a revoluble nut mounted upon each of said portions and provided with a screw-thread engag-

ing said screw-thread of said portion.

7. A binding-post, comprising a member 100 provided with two portions of different diameters, said portions of different diameters being immovable relatively to each other and with a screw-thread upon each of said portions, said portions of different diameters being each pro- 105 vided with an aperture for receiving a wire, and a revoluble nut mounted upon each of said portions of different diameters and provided with a screw-thread engaging said screwthread of said portion.

8. As an article of manufacture, a metallic member provided with oppositely-disposed ends, one of said ends having threads and terraces for engaging nuts of different diameters, said terraces being immovable relatively to 115 each other, the other of said ends being provided with means for securing said metallic

member to a base.

9. A binding-post, comprising a member provided with two portions of different diame- 120 ters and with two terraces of different diameters, said portions being immovable relatively to each other and each having a screw-thread, one of said portions being upset, and a revoluble nut mounted upon each of said portions 125 of different diameters and provided with a screw-thread engaging said screw-thread thereof.

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10. A binding-post, comprising a member provided with two ends, each of said ends having terraces of different diameters and each of said ends having means to secure said member upon a base or to secure conductors upon said member, as desired, said binding-post being reversible.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOUIS STEINBERGER.

Witnesses:

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Walton Harrison, Everard Bolton Marshall.