

H. E. LEPPERT.

BINDING POST.

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940,335.

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Fig. 1.

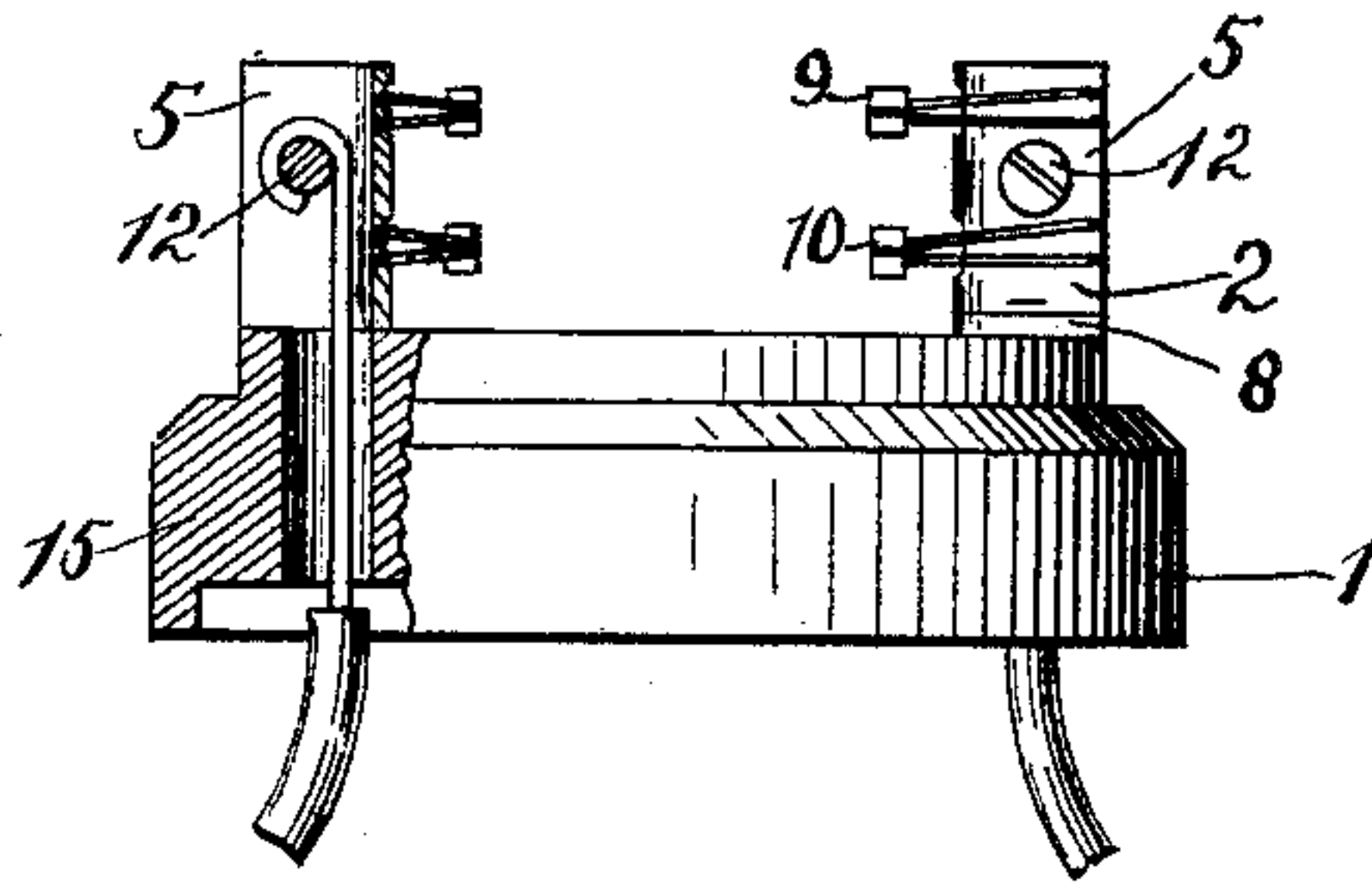


Fig. 2.

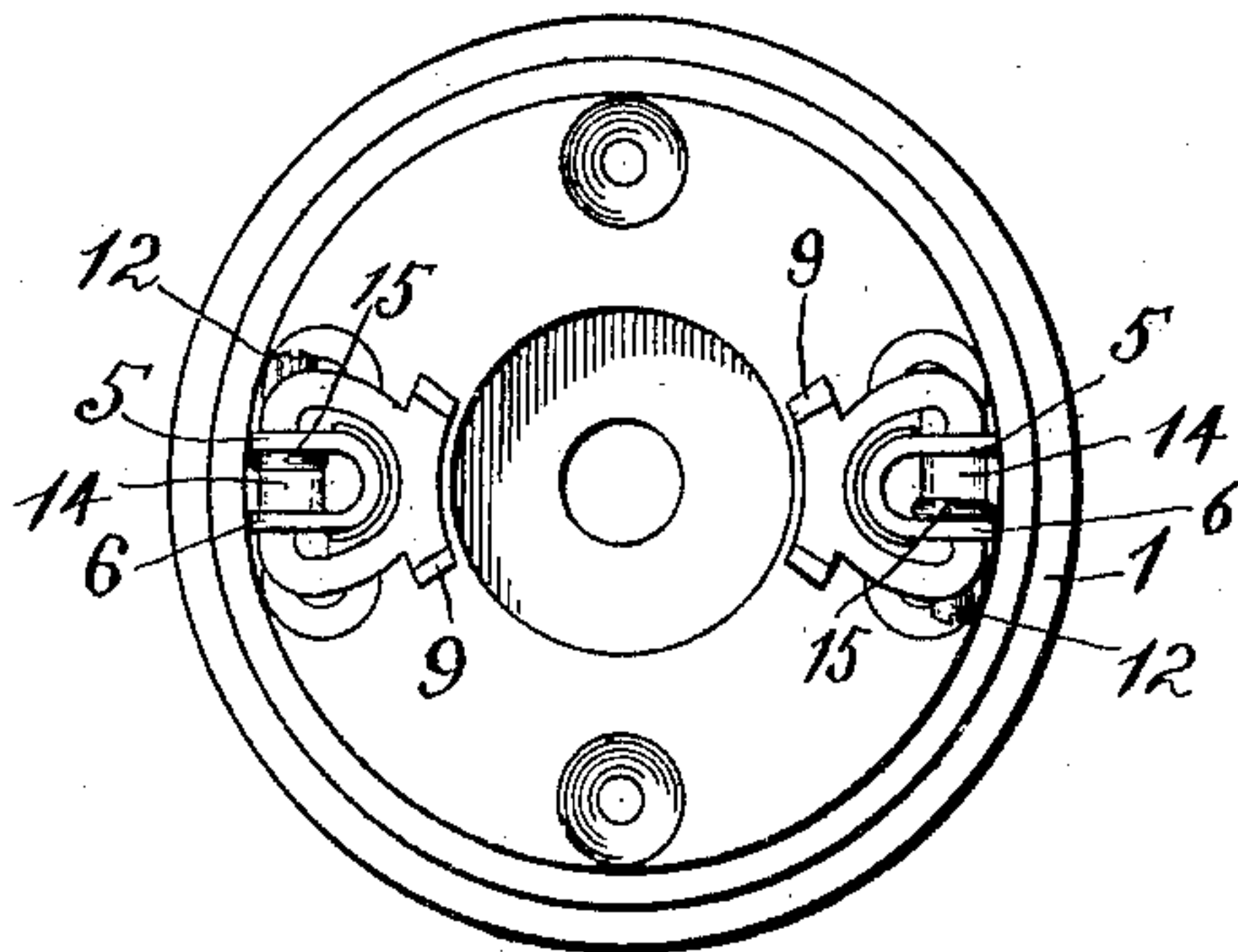


Fig. 4.

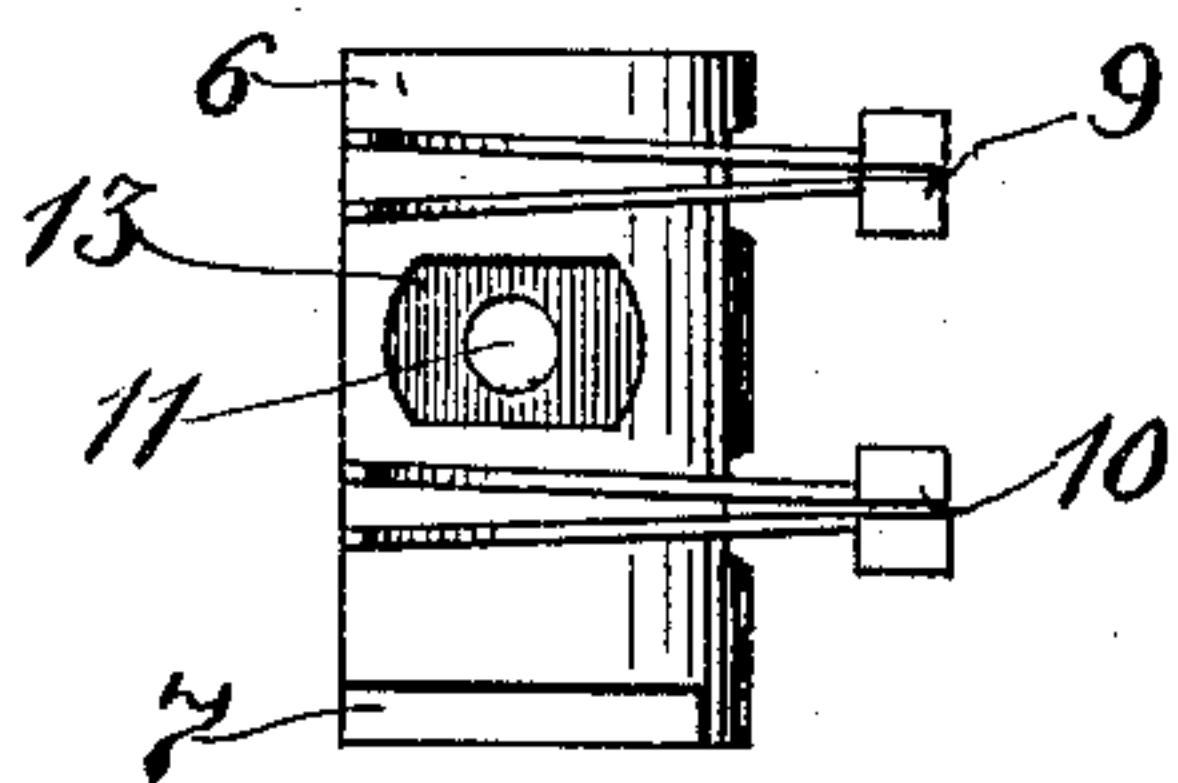


Fig. 3.

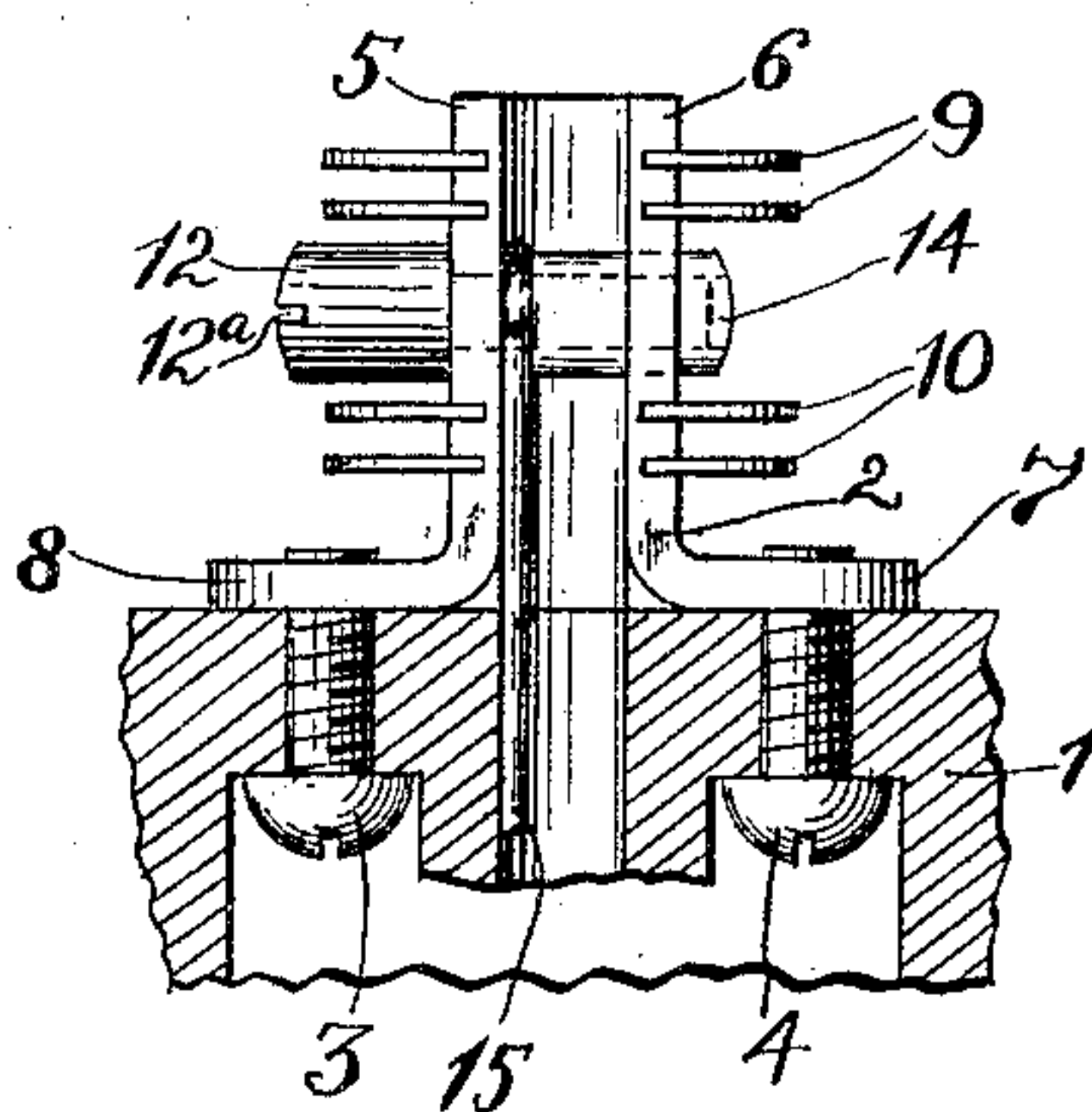
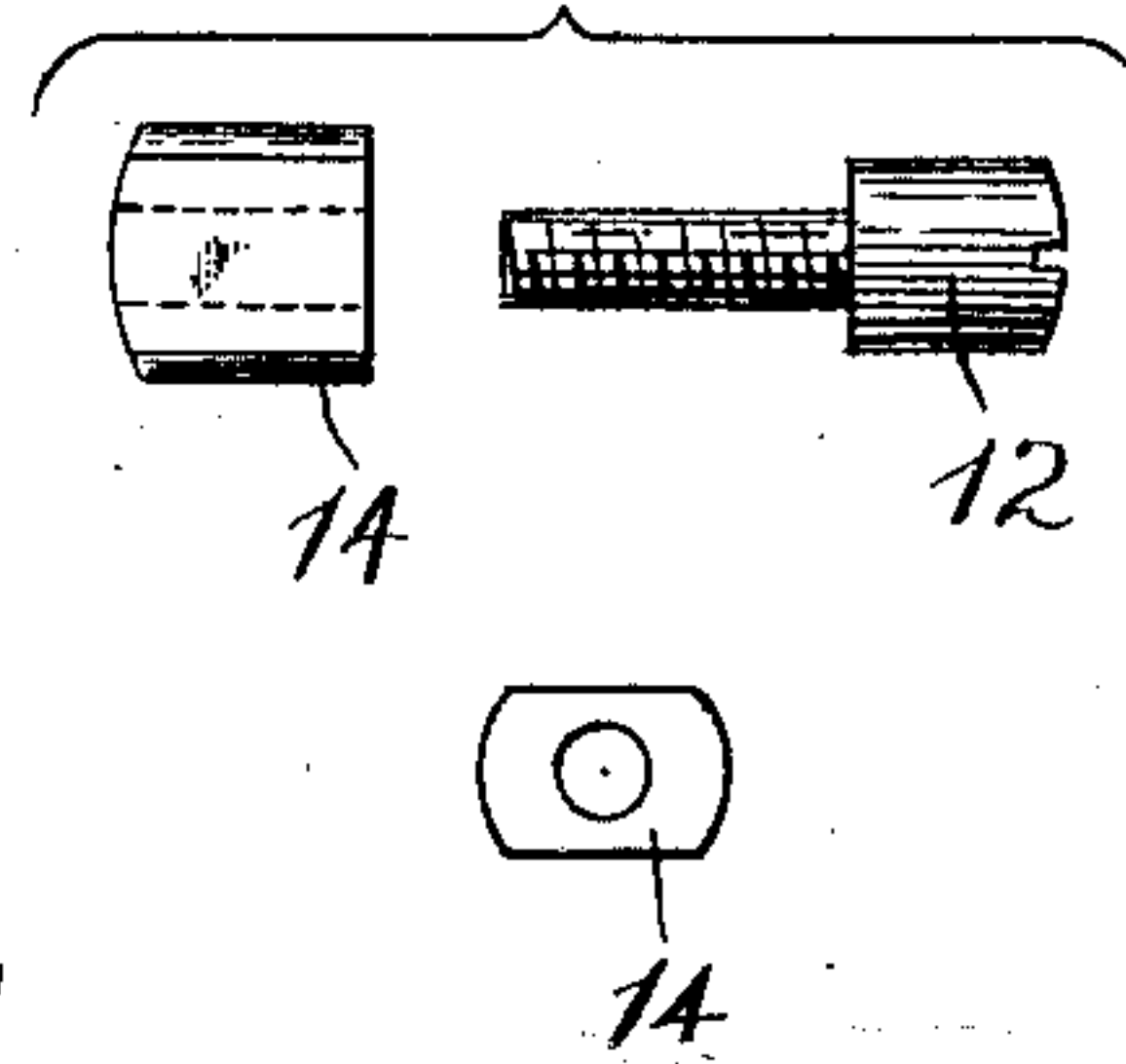


Fig. 5.



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UNITED STATES PATENT OFFICE.

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BINDING-POST.

940,335.

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To all whom it may concern:

Be it known that I, HENRY E. LEPPERT, a citizen of the United States, residing at New Britain, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Binding-Posts, of which the following is a full, clear, and exact description.

My invention relates to improvements in binding posts for switches and the like, and has for its object to provide a binding post having a new form of clamping device, also a binding post in which the clamping device requires little space in one direction.

My invention also has for its object to provide a new form of binding post in which the advantages of a tubular binding post are present, but in which neither the head nor the point of a screw is relied upon to clamp the conductor.

The following is a description of an embodiment of my invention, reference being had to the accompanying drawings, in which,

Figure 1 represent a side elevation of a switch base provided with two binding posts, one of the binding posts being shown in section. Fig. 2 represents a plan view of the switch base and binding posts. Fig. 3 represents an end elevation of one of the posts. Fig. 4 represents a side elevation of the stationary portion of one of the posts, and, Fig. 5 shows details of the parts not shown in Fig. 4.

Referring more particularly to the drawings, 1 is a switch base of porcelain or other similar insulating material.

2 is a stationary member secured to the switch base by screws 3—4, the stationary member having two parallel vertical walls 5—6 and two horizontal securing lugs 7—8.

9—10 are two pairs of spring contacts with which two switch plates may engage, said contacts being secured to and carried by the stationary member. Through a hole 11 in the stationary member a screw 12 passes, the head of the screw having the ordinary slot 12^a and bearing on the outer side of the wall 5. The wall 6 is provided with an opening 13 of irregular shape. Within this opening is a screw threaded nut 14, which engages with the screw threads upon the screw 12. The nut 14 fits the opening 13 and when the screw 12 is turned sufficiently is adapted to engage the inner surface of the wall 5.

15 is a conductor placed between the inner side of the wall 5 and the inner end of the nut 14 and when so located will be clamped against the inner face of the wall 5 by the nut 14 when the screw 12 is tightened. The wall 6 not only prevents the nut 14 from turning, but also to some extent supports the nut and the end of the screw 12 which lies therein, so that the binding post in the embodiment shown, constitutes a stable and strong device. The outer ends of the walls 5 and 6 are disconnected so that the conductor 15 when it is brought up through the binding post can be bent forward so as to be hooked around the shank of the screw 12 by a simple bending action. This enables the conductor to be held by the maximum clamping surface against the inner side of the wall 5 and thus affords a large contact surface as well as a strong connection. The inner ends of the walls 5 and 6 are connected and are also bridged by the contacts 9 and 10.

The embodiment of the invention is not necessarily confined to the precise construction shown and some or all of the advantages may be obtained when it is embodied in somewhat different form. The preferred form, however, is that shown and described.

One of the particular advantages of the particular construction shown is that it enables a large contact surface to be obtained when a screw with a small head is used. In binding posts with two pairs of contacts 9 and 10 such as shown, it has been found that there was not room enough in a commercial switch post to use a binding screw whose head was large enough to safely clamp the conductor beneath it, since the space between the contacts 9 and 10 was not sufficient to permit the use of such a head. I have avoided this difficulty by using a nut to provide the clamping surfaces instead of the head of a screw, making the nut elongated in form and having its smallest dimension the vertical dimension. By this means the space afforded between the contact members 9 and 10 is sufficient for the clamping member and the elongations thereon afford sufficient contact surfaces to secure a safe and ample engagement with the conductor. The head of the screw 12 since it does not clamp the conductor but simply bears against the outer side of the wall 5, can be made small enough to pass between the con-

tacts 9 and 10 without difficulty, and the elongations on the nut being horizontal do not interfere with the contacts.

What I claim is:

- 5 1. In a binding post, the combination of a stationary member having two opposing walls, a screw-threaded member projecting from the inside of one of said walls, a screw-threaded member passing freely through the
10 other wall and adapted to clamp a conductor against the inside of said first mentioned wall, one of said members being free to revolve and the other being fixed against a movement of revolution.
- 15 2. In a binding post, the combination of a stationary member having two opposing walls, a screw-threaded member projecting from the inside of one of said walls and free to revolve relatively thereto, a second screw-
20 threaded member having its inner face between said walls but held from a movement of revolution relatively to said stationary member, said second member being adapted to clamp a conductor against the inner face
25 of said first mentioned wall.
3. In a binding post, the combination of a stationary member having two opposing walls each having an opening, a revoluble screw passing through the opening in one
30 wall, the head of the screw being adapted to engage the outer side of said wall, a screw-threaded member passing through the opening in the other wall and free to move longitudinally therethrough, said member being adapted to clamp a conductor against
35 the inside of said first mentioned wall, the screw-threaded member and the opening

through which it passes being of irregular shapes.

4. In a binding post, the combination of 40 a stationary member having two opposing walls each having an opening, a revoluble screw passing through the opening in one wall, the head of the screw being adapted to engage the outer side of said wall, a screw- 45 threaded member passing through the opening in the other wall and free to move longitudinally therethrough and adapted to clamp a conductor against the inside of said first mentioned wall, the screw-threaded 50 member and the opening through which it passes being of irregular shapes, said screw-threaded member being elongated and having its greatest dimension at an angle to the axis of the stationary member. 55

5. The combination of a stationary member having a vertical wall and horizontal securing lugs, a screw passing through said fixed member and having a slotted head bearing against one side of said wall, a member 60 having screw-threads engaging with the screw-threads of said screw, said member being held from revolution by said stationary member, but free to move laterally thereto so as to clamp a conductor against the 65 other side of said wall, and a base having a perforation parallel to said vertical wall and in line with the space between said wall and said member.

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Witnesses:

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