No. 895,714. PATENTED AUG. 11, 1908.

G. BABCOCK & J. REUTER.

BINDING POST.

APPLICATION FILED JUNE 25, 1906.

Fig. 1.

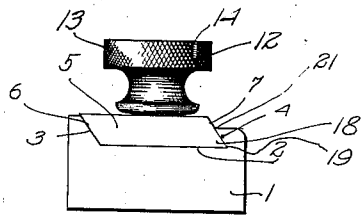


Fig. 7.

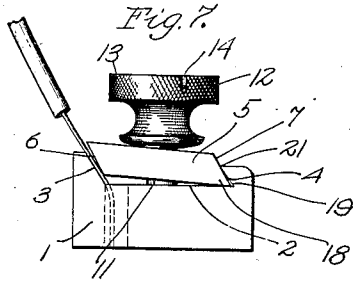


Fig. 2.

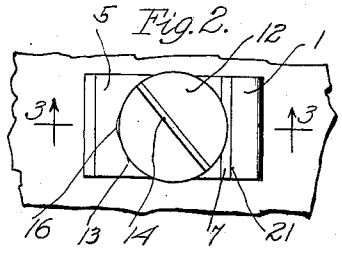


Fig. 6.

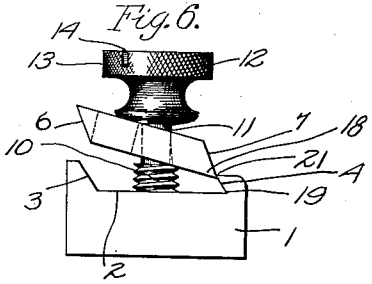


Fig. 3.

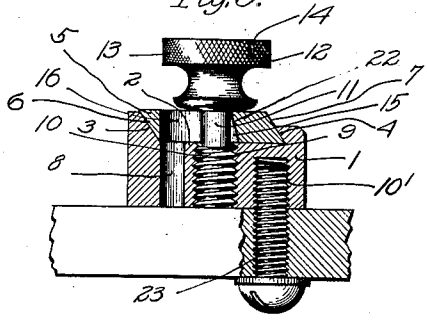


Fig. 9.

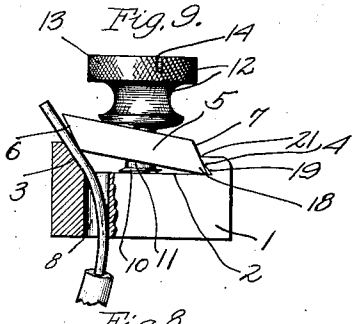
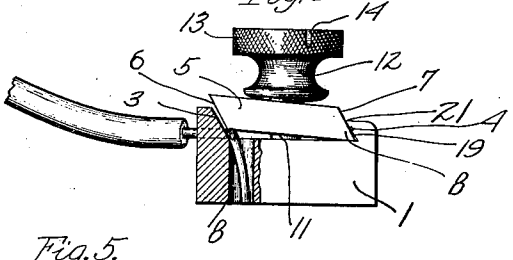


Fig. 8



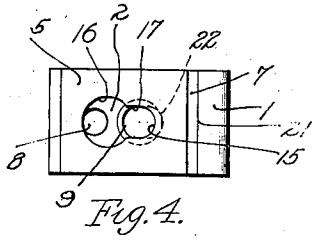
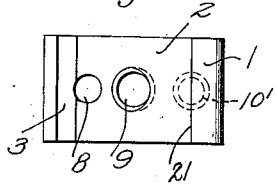


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

GARRISON BABCOCK AND JOSEF REUTER, OF ROCHESTER, NEW YORK, ASSIGNORS TO MERTON E. LEWIS, OF ROCHESTER, NEW YORK.

BINDING-POST.

No. 895,714. Specification of Letters Patent. Patented Aug. 11, 1908.

Application filed June 25, 1906. Serial No. 323,212.

To all whom it may concern:

Be it known that we, GARRISON BABCOCK and JOSEF REUTER, citizens of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Binding-Posts, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

Our invention relates to electrical binding posts and contemplates novel features of construction thereof.

In binding posts now in use the wire must be inserted from the side or bottom or must be wound about a screw or under a washer.

One of the main features of our invention is that the wires may be inserted from the top and the clamping screw also engaged from the top, making our invention of great use and adaptability where it is used at the bottom of boxes or in narrow and confined places. Combined with this feature is the other feature of having the clamping washer or plate raised when the screw is loosened to clear the opening or jaw for receiving the wire to be clamped.

Our binding post is also adapted to receive wires from the sides and from the bottom and in whatever manner it is used the wire to be clamped is readily inserted and clamped without much labor, the greatest feature being, as before stated, that the wire to be clamped may be inserted from the same direction that the screw driver or tool is directed to tighten the screw.

Our invention will be best understood by reference to the accompanying drawing, in which

Figure 1 is a side view of the binding post in its closed condition, there being no wire clamped therein. Fig. 2 is a top view of Fig. 1. Fig. 3 is a vertical sectional view taken on line 3—3 of Fig. 2. Fig. 4 is a top view with the screw head removed. Fig. 5 is a top view with the screw and clamping plate removed. Fig. 6 is a side view showing the screw and clamping plate raised, the binding post being ready to receive a wire. Fig. 7 shows the plate clamped by the screw against the wire. Fig. 8 is a view like Fig. 7 showing the wire inserted from the side, and Fig. 9 is a view like Fig. 7 showing the wire inserted from the bottom.

The screw consists of the base block 1 having the groove 2 at its upper side, the side walls 3 and 4 of the groove being inclined at about an angle of 60 degrees, as shown. A clamping plate 5 has end faces 6 and 7 inclined at the same angle as the faces 3 and 4 of the base member. Passing through the base either vertically or at an angle is the hole 8 for receiving a wire to be clamped, this hole extending from the base of the inclined face 3. Extending through the center of the base is the threaded opening 9 for receiving the threaded end 10 of the clamping screw which has a reduced neck portion 11 terminating in the head 12 which head, as shown, may have the knurled surface 13 and the screw driver slot 14 or this head may be in the form of a nut to be turned by the wrench or pliers. The clamping plate has the smaller opening 15 of the same diameter as the reduced neck portion of the screw and has a larger opening 16 for receiving the threaded portion of the screw, these openings being connected by the channel 17.

When the binding post is assembled the threaded screw end passes through the larger opening 16 and the reduced neck brought into the smaller opening 15 whereupon the threaded end is engaged in the threaded opening 10 of the base. The end 18 of the plate then engages in the pocket 19 formed below the overhanging face 4, this forming a sort of hinge arrangement and as the screw is raised and lowered the plate swings about this hinge to carry the clamping face 6 toward and away from the clamping face 3 on the base, the edge 21 always engaging the face 7 of the plate to keep the plate in alinement and prevent turning thereof with the screw. The plate, of course, is raised upon raising of the screw by virtue of the engagement of the lower opening 15 with the reduced neck portion over the threaded portion of larger diameter, and to allow swinging of the plate the side 22 of the opening 15 is inclined as shown.

The binding post may be secured to a support in any convenient manner as by means of a screw 23 engaging through the supporting member and threading into the lower end of the opening 10′ in the base. The wire to be clamped may be inserted from the top between the clamping faces 3 and 6 and into the opening 8 whereupon tightening of the screw will bring the plate against the wire

which will be securely clamped between the faces 3 and 6, the wire and turning instrument being parallel which enables connection with the post to be very readily made where the space is limited or where the post is at the bottom of a deep and narrow box. Before connection is made, of course, the screw is drawn upwardly to spread the plate from the base and to allow the wire to be readily inserted into the opening 8.

Fig. 8 shows the wire inserted from the side, the wire end being laid below the plate and the screw then tightened to clamp the plate against the wire. In this connection the wire and turning tool may also be parallel as the end of the wire can first be bent at a right angle and thus readily inserted into the binding post from the side.

Fig. 9 shows the arrangement of connection from the bottom, the wire end extending through the opening 8 and upwardly between the clamp faces 3 and 6 and with the screws then tightened the wire will be securely clamped. Other ways of securing a wire or wires in the binding post are readily apparent and changes and modifications in the construction and arrangement of the parts may also be made without departing from the spirit of our invention. We do not wish therefore to be limited to the constructions and arrangements herein shown, but

We claim as new and desire to secure by Letters Patent:

1. In an electrical terminal or binding post, the combination with a base member having an inclined clamping face at one end and a pivot slot at the other end at the top thereof, a clamping plate having a clamping face for engaging the clamping face of the base member and having a pivot edge for engaging in said pivot slot, and a clamping screw for swinging the plate about its pivot.

2. In an electrical terminal or binding post, the combination with a base member having an inclined clamping face at one end and a pivot slot at the other end at the top thereof, a clamping plate having a clamping face for engaging the clamping face of the base member and having a pivot edge for engaging in said pivot slot, and a clamping screw on which the clamping plate is mounted, withdrawal of the screw causing the clamping plate to be swung about its pivot to allow insertion of a conductor and tightening of the screw causing the plate to be swung to clamp the conductor against the base member.

3. In an electrical terminal or binding post, the combination with a base member, of a clamping screw engaging therewith, a clamping plate mounted on the screw, said clamping plate having a straight pivot edge, and an extension from the base member engaging about the pivot edge to cause the plate to swing as the screw is raised or lowered, said extension also preventing turning of the plate as the screw is turned.

4. In an electrical binding or terminal post, the combination with a base member, of a clamping screw having threaded engagement therewith, said clamping screw having a reduced neck portion between the threaded end and the head portion thereof, a clamping plate mounted and confined on the reduced neck portion, an extension from the base member engaging about one edge of the clamping plate to cause said clamping plate to swing about said edge as the screw is turned, and an opening through the base member below the swinging end of the clamping plate for receiving a wire to be clamped.

5. In an electrical terminal or binding post, the combination with a base member, of a clamping screw having threaded engagement therewith and having a reduced neck portion between the threaded end and the head thereof, a clamping plate having a larger opening for receiving the threaded end of the screw and a smaller opening communicating with the larger opening for receiving the reduced neck portion of the screw, an extension from the base member engaging about one end of the clamping plate to hold said plate with the smaller opening in engagement with the reduced neck portion and for causing the plate to swing about said edge as the screw is raised and lowered to clamp a wire between the other edge of the plate and the base member.

In witness whereof, we hereunto subscribe our names this 21st day of June A. D., 1906.

GARRISON BABCOCK.
JOSEF REUTER.

Witnesses:
GEO. WM. DICKERSON,
GEO. S. MCMILLAN.