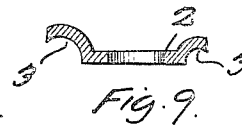
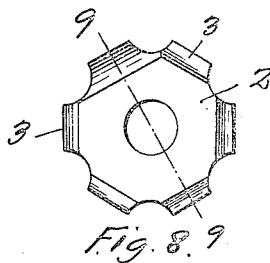
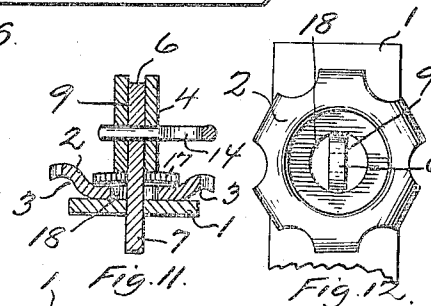
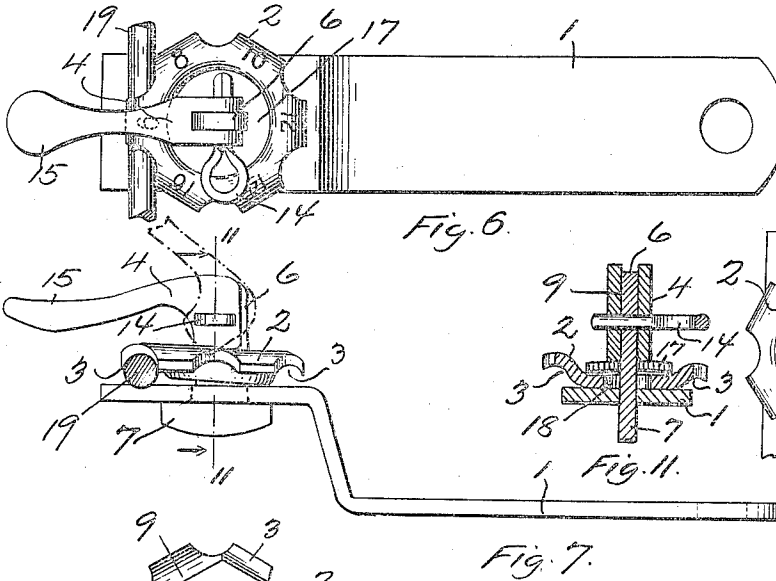
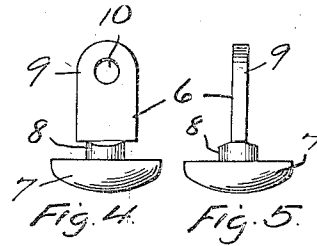
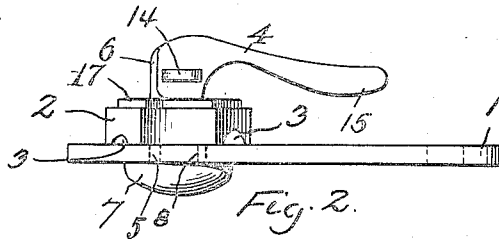
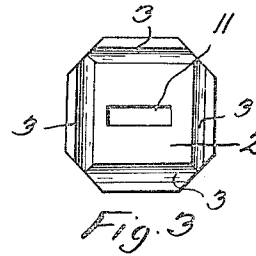
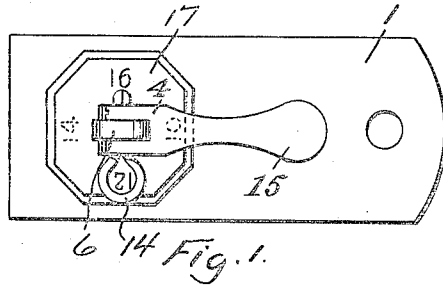


P. E. WIBERG.
 BINDING POST.
 APPLICATION FILED FEB. 5, 1912.

1,044,717.

Patented Nov. 19, 1912.



WITNESSES:

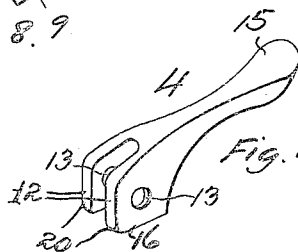
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UNITED STATES PATENT OFFICE.

PETER E. WIBERG, OF GLEN RIDGE, NEW JERSEY.

BINDING-POST.

1,044,717.

Specification of Letters Patent.

Patented Nov. 19, 1912.

Application filed February 5, 1912: Serial No. 675,514.

To all whom it may concern:

Be it known that I, PETER E. WIBERG, a citizen of the United States, and a resident of Glen Ridge, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Binding-Posts, of which the following is a specification.

The present invention relates to means for clamping wires of different diameters, which means we have comprehended under the general term of "binding posts," and has for its object the production of a simple, inexpensive and efficient device for clamping wires, wherever such clamping may be required.

Broadly the invention consists of a supporting member, a clamping member having a plurality of wire grooves adapted for the reception of wires of different diameters, together with means for adjustably mounting said clamping member on the supporting member, and means for locking the clamping member against the inserted wire and supporting member in any adjusted position.

Preferably the clamping member is circumferentially adjustable with respect to the supporting member, with an upright as a center. And this upright preferably extends from the supporting member and carries the means for locking the clamping member against the wire and supporting member. In the preferred embodiment the locking means consists of a cam mounted on the upright.

Other features will appear as the specification proceeds.

In the accompanying drawings the invention is embedded in several concrete and preferred forms, but changes of construction may of course be made from the forms disclosed, without departing from the legitimate and intended scope of the invention as set forth in the appended claims.

In the said drawings: Figure 1 is a top plan view of an assembled device embodying the invention. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a detail view of the underside of the clamping member used in the construction of Figs. 1 and 2. Figs. 4 and 5 are respectively side and end views of the upright used in the construction of Figs. 1 and 2. Fig. 6 is a top plan view of an assembled device embodying a modified form of the invention. Fig. 7 is a side

elevation of Fig. 6. Fig. 8 is a detail view of the underside of the clamping member used in the construction of Figs. 6 and 7. Fig. 9 is a sectional view on the line 9—9 of Fig. 8. Fig. 10 is a detail perspective view of the cam used in connection with both forms of the invention. Fig. 11 is a sectional view on the line 11—11 of Fig. 7. Fig. 12 is a view similar to Fig. 6, but partly broken away and with the cam and other parts removed.

Similar characters of reference indicate corresponding parts in the different views.

1 indicates the supporting member which may be of any suitable construction, and consisting in Figs. 1 and 2 of a flat piece or current conducting material, and in Figs. 6 and 7 of a bent piece of similar material.

2 denotes the clamping member, shown as a hexagonal disk with undercut grooves 3 of different diameters in Figs. 1, 2 and 3, and in Figs. 6, 7, 11 and 12, as a circular cup-shaped member having curved lips which form grooves 3 of different diameters.

4 indicates the cam for locking the clamping member against the wire and supporting member.

In Figs. 1 to 5 inclusive, the supporting member is provided with an elongated slot 5 through which extends the upright having at its lower end an abutment 7 engaging with the underside of the supporting member 1. Near the abutment 7, the upright 6 is provided with a circular portion 8, the remainder of the said upright being flat as at 9 and of greater width than the portion 8. At its upper end the upright is provided with an eye 10. The clamping member 2 is provided with an elongated slot 11 by means of which it is mounted on the upright. The cam 4 is provided with a bifurcated end 12 having eyes 13 and is adapted to be mounted on the upright by means of the cotter pin 14. The cam 4 further has a handle portion 15 by means of which it is manipulated and a cam surface 16. If desired, a washer as 17 may further be mounted on the upright 6, in the present instance in such a manner that it rotates with the clamping member.

It will be apparent that, when pressure against the clamping member 2 (or washer 17) is released, the clamping member may be rotatively adjusted with respect to the supporting member, so as to bring any desired wire groove into the proper position

for engaging with the wire to be inserted. To aid the operator, the clamping member 2 (or washer 17) may be provided with indicating means, such as the numerals shown in Figs. 1 and 6, which denote the size of wire, which the groove, underneath the numeral, is adapted to receive. In the form described the upright 6 will rotate with the clamping member, by reason of the rounded portion 8, and the center of rotation is therefore the center of the upright.

When the wire has been inserted, the cam 4 is turned into the position shown in Fig. 2, thereby locking the clamping member against the wire and against the supporting member.

In the modification shown in Figs. 6 to 9 and 11 to 12, the construction differs but slightly from what has previously been described. It may be remarked, however, that the upright is not provided with a rounded portion like 8 in Figs. 4 and 5. Instead the said upright 6 is mounted non-rotatively on the supporting member, but the clamping member 2 is provided with an opening 18 of a diameter equal to the width of the upright 6 (see Figs. 11 and 12) so that when pressure is released by the cam, the clamping member 2 may be rotated independently of the upright. It will be noted, however, that the said upright still forms the center of rotation for the said clamping member as before. The washer 17 is likewise made non-rotatable as it fits the upright 6 snugly (see Fig. 11) so that when the clamping member is adjusted it rotates between the supporting member 1 and the washer 17 with the upright as a center.

In Figs. 6 and 7 a piece of wire 19 is shown inserted in one of the grooves to more clearly illustrate the action of the device.

In order to secure an absolutely firm grip upon the wire, the parts are preferably so arranged that the forward or clamping edge of the clamping member will be raised somewhat by the wire so as to leave only the rearward edge of the clamping member in engagement with the supporting member, substantially in the manner shown in Fig. 7. The cam engages the clamping member at a point between the point of its contact with the supporting member and the point of contact with the wire, the rear edge of the clamping member thus serving as a fulcrum and the cam acting in the nature of a toggle lever to force the clamping member into binding engagement with the wire.

Some provision is necessary to insure that the cam shall stay locked in its clamping position when once so set. This is accomplished in the present instance by arranging the high point of the cam (the toe 20

of the cam) so that in the clamping position this high point will lie forward of the axis on which the cam is pivoted and will thereby serve as a stop to prevent accidental reverse movement of the cam. This principle will be clearly understood from Fig. 7, for there it will be seen that once the cam is moved from the dotted to the full line position, the high point of the cam will, after it has swung past the dead center, (the axis of the cam) lie forward of the axis of the cam and thereby hold it against accidental retrograde movement. To assist in locking the cam in place and also to take up for any possible wear of the parts, the washer 17 is preferably made of spring metal. This may be accomplished by making the washer of convex shape as indicated in Fig. 11. This spring washer will yield as the high point of the cam is being urged past the dead-center, and will then by reason of its resiliency, expand after the dead-center is passed, to assist in holding the cam in its clamping position.

What is claimed, is:

1. A binding post comprising: a supporting member, a clamping member having a plurality of wire grooves adapted for the reception of wires of different diameter, means adjustably mounting said clamping member on the supporting member, and means for locking the clamping member against the inserted wire and supporting member in any adjusted position.

2. A binding post comprising: a supporting member, a clamping member having a plurality of wire grooves adapted for the reception of wires of different diameter, means adjustably mounting said clamping member on the supporting member, and a cam for locking the clamping member against the inserted wire and supporting member in any adjusted position.

3. A binding post comprising: a supporting member, a clamping member having a plurality of wire grooves adapted for the reception of wires of different diameter, means for rotatably mounting said clamping member on the supporting member, and a cam pivoted at right angles to the rotatable clamping member for locking the clamping member against the inserted wire and supporting member in any adjusted position.

4. A binding post comprising: a supporting member, an upright extending up from said supporting member, a clamping member having a plurality of wire grooves for the reception of wires of different diameter, mounted to be circumferentially adjusted with respect to the supporting member with the upright as a center, and a cam mounted on the upright for locking the clamping member against the inserted wire and supporting member in any adjusted position.

5. A binding post comprising: a support-

ing member, an upright extending up through said supporting member, a clamping member having a plurality of wire grooves for the reception of wires of different diameters mounted to be circumferentially adjusted with respect to the supporting member with the upright as a center, and a cam mounted on the upright for locking the clamping member against the inserted wire and supporting member in any adjusted position.

6. A binding post comprising: a supporting member, an upright extending up from said supporting member, a clamping member having a plurality of wire grooves for the reception of wires of different diameter mounted to be circumferentially adjusted with respect to the supporting member with the upright as a center, and means mounted on the upright for locking the clamping member against the inserted wire and supporting member in any adjusted position.

7. A binding post comprising: a supporting member, an upright extending up through said supporting member, a clamping member having a plurality of wire grooves for the reception of wires of different diameters mounted to be circumferentially adjusted with respect to the supporting member with the upright as a center, and means mounted on the upright for locking the clamping member against the inserted wire and supporting member in any adjusted position.

8. In a binding post, a supporting member upon which the wire to be secured is rested, a clamping member engaging the wire with its forward portion and engaging with the supporting member at its rearward portion, and a locking device bearing upon the clamping member at a point between the points of its contact with the wire and with the supporting member for forcing the clamping member into gripping engagement with the wire.

9. In a binding post, a supporting member upon which the wire to be secured is rested, a clamping member cooperating with the supporting member, engaging the wire with its forward portion and contacting with the supporting member only at its

rearward portion, and a cam engaging the clamping member at a point between its point of contact with the supporting member and its point of contact with the wire, for forcing said clamping member into gripping engagement with the wire.

10. In a binding post, a supporting member upon which the wire to be secured is rested, a clamping member cooperating with the supporting member, engaging the wire with its forward portion and contacting with the supporting member only at its rearward portion, and a pivoted cam engaging the clamping member at a point intermediate its points of contact with the supporting member and the wire, said cam having a toe forming the high part of the cam, which, when the cam is in holding position, will occupy a position forward of the axis of the cam to thereby prevent retrograde movement of the cam.

11. In a binding post, the combination with a supporting member upon which the wire to be secured is rested, an upright secured to the supporting member, a clamping member engaged upon the upright, a cam pivoted on the upright for forcing the clamping member toward the wire, and a spring washer interposed between the clamping member and the cam.

12. In a binding post, the combination with a supporting member upon which the wire to be secured is rested; an upright connected with the supporting member, a clamping member engaged upon the upright, engaging the wire at its forward portion and contacting with the supporting member only at its rearward portion, a cam pivoted upon the upright, a spring washer interposed between the clamping member and the cam, the said cam exerting its force upon the clamping member at a point intermediate the points of contact with the wire and with the supporting member.

Signed at New York in the county of New York and State of New York this first day of February, A. D., 1912.

PETER E. WIBERG.

Witnesses:

LAURA E. SMITH,
A. V. BEEKEN.