H. F. ADICKES, JR.

BINDING POST.

APPLICATION FILED JAN. 16, 1914.

1,122,351.

Patented Dec. 29, 1914.

2 SHEETS—SHEET 1.

Fig. 1.

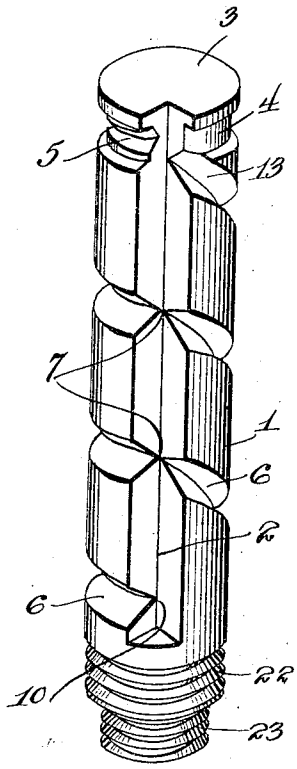


Fig. 2.

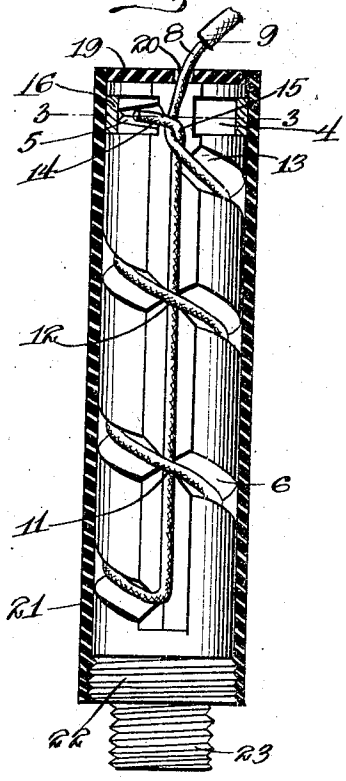


Fig. 3.

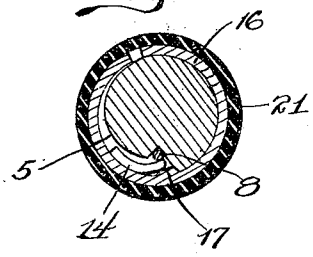
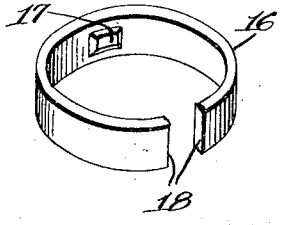


Fig. 4.



Witnesses

W. H. Mulligan.

C. H. Crawford

Inventor

Henning F. Adickes Jr,

By Richard Lewen,

his Attorney

H. F. ADICKES, Jr.

BINDING POST.

APPLICATION FILED JAN. 16, 1914.

1,122,351.

Patented Dec. 29, 1914.

2 SHEETS—SHEET 2.

Fig. 5.

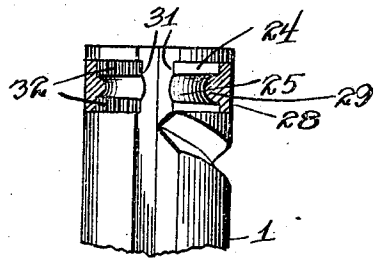


Fig. 6.

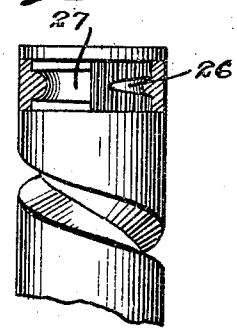


Fig. 7.

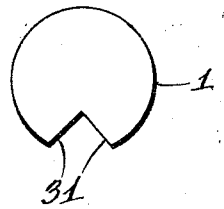


Fig. 8.

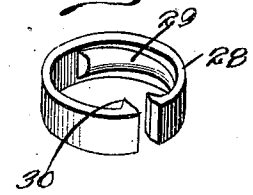
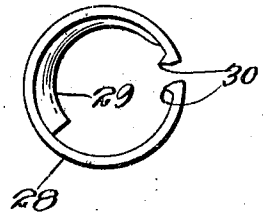


Fig. 9.



Witnesses

W. J. Mulligan

C. A. Crawford

Inventor

Henning F. Adickes, Jr.,

By Richard Allen,

his Attorney

UNITED STATES PATENT OFFICE.

HENNING F. ADICKES, JR., OF BILTMORE, NORTH CAROLINA.

BINDING-POST.

1,122,351. Specification of Letters Patent. Patented Dec. 29, 1914.

Application filed January 16, 1914. Serial No. 812,571.

To all whom it may concern:

Be it known that I, HENNING F. ADICKES, Jr., a citizen of the United States, residing at Biltmore, in the county of Buncombe and State of North Carolina, have invented certain new and useful Improvements in Binding-Posts, of which the following is a specification.

The object of this invention is to provide a binding post construction which is especially adapted to securely hold the wire in electrical contact therewith in cases where the binding post is subjected to constant vibration, such as on an automobile or in many other cases where such a structure is desirable.

It is one of the objects of my invention to peripherally groove a binding post in such a manner that the end of a conductor to be connected with the post may be wound or extended thereabout and therealong in such overlapping relation as to insure a positive electrical contact.

A further object of the invention is to connect the free end of the conductor in such anchored relation with the post as to insure retention of the conductor in its wound relation with respect to the post after connection therewith has been made.

Further object of the invention is to provide a post construction wherein a sleeve insulator may be employed to not only insulate the post but, if desired, to also secure the wire or conductor in the position in which it has been disposed about the post.

Further objects and features of the invention will be more fully described in connection with the accompanying drawings and will be more particularly pointed out and ascertained in and by the appended claims.

In the drawings, Figure 1 is a perspective view of a binding post embodying one form of my invention, and showing the same detached. Fig. 2 is a view in elevation thereof showing the application thereto of a sleeve-like insulator. Fig. 3 is a sectional view on line 3—3 of Fig. 2. Fig. 4 is a perspective view of an improved device for securing the wire in place upon the post. Fig. 5 is a modified form of means for securing the wire, with parts in section and parts in elevation. Fig. 6 is a view similar to Fig. 5 with the post in a slightly different position. Fig. 7 is a top plan view of the post. Fig. 8 is a view in perspective of the fastening device shown in Figs. 5 and 6, looking at one angle; and, Fig. 9 is a perspective of the same device looking down thereon.

Like characters of reference designate similar parts throughout the different figures of the drawings.

As illustrated more particularly in Figs. 1 to 4, 1 designates a binding post of electrically conducting material which is peripherally grooved in a novel manner to receive a wire or conductor which is adapted to be wound in place thereon. As illustrated, I provide a peripheral wire-receiving groove 2 which is shown to extend from a point near the base of the post longitudinally thereof through to the top 3. Immediately below the top 3 I provide an annular fastener-receiving groove 4 which intersects the longitudinal wire-receiving groove 2 and which is provided with a wire terminal-receiving recess 5 which extends to the left of the groove 2 a portion of the way around the post. The post 1 is also provided with a spirally disposed wire-receiving groove 6 which is shown to be of a pitch such as to intersect the longitudinal groove 2 near the ends thereof and at two points, indicated at 7, intermediate the ends of groove 2. In the preferred form of my invention I provide grooves which are substantially V-shaped in cross section or which converge from the periphery of the post to their bases so that irrespective of the size of wire employed, I can, as will presently appear, always obtain an effective electrical contact engagement of the wire with the wall portions of the grooves in the post.

In applying the conductor to the binding post, the wire 8 is skinned for bare contact with the post, the insulation terminating at 9. The wire 8 is first extended downwardly along and in the longitudinal groove 2 to the lower point of intersection 10 of the spiral grooves therewith. At the beginning of the spiral groove 6, the wire 8 is given one turn about the post whereupon it will reach the intersection 7 and at that point it will overlap the wire extending in groove 2, as indicated at 11 so as to firmly hold the wire in the groove 2. At the next complete wind about the post 1 the wire will overlap at 12, thereby forming two points of overlap to retain the wire in groove 2. It will be understood that the wire can be wound as tightly as its nature will permit to prevent injury. The upper terminal 13

of the spiral groove 6, in the form shown in Fig. 1, intersects the longitudinal groove 2 at its upper end and also the annular fastening groove 4. It will be understood that in first applying the wire to the groove 2, a sufficient length of terminal end 14 will be provided so that when the wire has completed its winds throughout the groove 6, it may be disposed under the terminal end 14, as indicated at 15 and there will be a sufficient length of terminal end to extend some distance about and along in the fastening recess 5.

A fastening device is shown in Fig. 4, and indicated at 16, and the same is illustrated in the form of a split ring having a fastening protuberance 17 on its interior at a point substantially opposite the split end 18. The function of the protuberance 17 is to engage the wire lengths at the point of overwind 15 so as to securely hold the terminal end against slipping into a loose position so as not to permit the initially taut wire to become loose about the binding post. I provide a cap 19, which may be secured to the top 3 of the post 1 in any desirable manner and which is formed of insulating material and provided with an opening 20 through which the wire 8 extends outwardly from the post. The post with the wire secured thereabout may be incased by a sleeve 21, of insulating material, and the latter may be interiorly threaded to engage threads 22 below the grooved portion of the post to secure the sleeve in place. The post itself may be provided with a reduced threaded portion 23 adapted to be turned into any part with which the binding post is to have electrical connection.

In Figs. 5 and 6 I have shown the top of the post provided with a groove 24 having a recess 25 therein which is graduated in size, and which, or in other words, the same tapers from a reduced point 26 to a maximum point 27. In this form, the fastening ring 28 is provided with a circumferentially extending protuberance 29 disposed on its interior and extending thereabout a distance substantially equal to that of the recess 25 so that there will be a wedge locking or clamping action of the wire between the protuberance 29 and the groove 25. The terminals of the split ring 28 may be toothed, as indicated at 30, for engagement with wall portions 31 of the groove 24. In order to more effectively anchor the device 28 in position, I may serrate or roughen the wall 24 of the fastening groove, as indicated at 32, and if desired, the ring 28 may be likewise serrated although I have found in practice that the serration of either the ring or the groove will be sufficient to enhance the effectiveness of anchorage. With either the rings 16 or 28, a gradually increasing wedge action of the terminal end of the wire can be effected by rotation of the ring and while I have shown in Fig. 3 a locking engagement at one crossing terminal, it will be seen that if the ring 16 were rotated with the protuberance 17 traveling in a clockwise direction, with respect to Fig. 3, the extreme terminal end would be wedged against the inner wall of the recess 5 and the inner wall of the protuberance 17. It will be seen that if the groove 4 is omitted, with a locking recess 5 extending inwardly from the outermost periphery of the post 1, then the casing 21 itself would wedge the terminal end 14 into a groove 5 and the fastening device 16 could be dispensed with.

While I have herein shown and described one specific form of my invention, I do not wish to be limited thereto except for such limitations as the claims may import.

I claim:—

1. A binding post having a peripheral wire-receiving recess extending longitudinally thereof and a wire-receiving recess extending spirally along said post and intersecting said longitudinal groove at at least one point between the ends thereof and also near the ends of said longitudinal groove for disposing a length of wire wound in said grooves in overlapping relation at one or more points, and means encircling said post at one point of overlap of the wire to secure the same upon the post, substantially as described.

2. A binding post having a peripheral wire-receiving groove extending longitudinally thereof and a wire-receiving groove extending spirally along said post and intersecting said longitudinal groove at at least one point between the ends thereof and also near the ends of said longitudinal groove for disposing wire wound in said grooves and overlapping relation at one or more points, and means for engaging the wire at one point of overlap to secure the wire upon the post, substantially as described.

3. A binding post having a peripheral wire-receiving groove extending longitudinally thereof and a wire-receiving groove extending spirally along said post and intersecting said longitudinal groove at at least one point between the ends of said longitudinal groove and also near the ends thereof for disposing a length of wire wound in said grooves in overlapping relation at one or more points, and a split ring device engaging the wire at one point of overlap and encircling the post to secure the wire in tight relation thereon, substantially as described.

4. A binding post having a plurality of peripherally disposed wire-receiving grooves intersecting at one or more points to dispose

a single length of wire in overlapping relation with itself at one or more points, and means engaging the wire to hold the same taut in said grooves, substantially as described.

5. A binding post having a peripherally disposed wire receiving groove therein communicating with a longitudinal groove at a plurality of points to receive a single length of wire substantially throughout the length of said grooves and means for holding the wire in said grooves, substantially as described.

6. A binding post having a peripherally disposed spiral wire receiving groove arranged in angular relation with respect to a longitudinally disposed groove and communicating therewith to receive a single length of wire, said grooves intersecting each other at a plurality of points to dispose the wire wound therein in overlapping relation at a plurality of points and means for securing the wire in said grooves, substantially as described.

7. A binding post having a plurality of peripheral grooves of V-shaped cross-section disposed in angular relation with respect to each other and communicating with each other at spaced points to provide for winding of a single length of wire in said grooves about said post, said grooves intersecting each other to dispose the wire in overlapping relation at a plurality of points corresponding to the number of points at which the grooves intersect each other, and means engaging the wire at one point of overlap to secure the wire in taut relation about said post, substantially as described.

8. A binding post having a peripherally disposed wire-receiving groove extending thereabout for receiving a length of wire, a fastening groove being peripherally formed in said post and intersecting said wire-receiving groove and having a retaining recess for receiving the terminal end of the wire, and means for wedging the terminal end of the wire in said recess, substantially as described.

9. A binding post having a peripheral wire-receiving groove extending therealong for receiving a length of wire, a fastening groove being peripherally formed in said post and intersecting said wire-receiving groove and having a tapering retaining recess for receiving the terminal end of the wire, and a ring fitting said fastening groove and having a tapering protuberance for wedging the terminal end of the wire into engagement with said tapering recess, substantially as described.

10. A binding post having a peripheral wire-receiving groove extending therealong for receiving a length of wire to be wound about the post, a fastening groove being peripherally formed in said post and intersecting said wire-receiving groove and having a tapering retaining recess for receiving the terminal end of the wire, a split ring having a tapering protuberance for wedging the wire in said tapering recess, and said fastening groove having a roughened surface for engagement with said ring, substantially as described.

11. A binding post having a peripheral wire-receiving groove extending longitudinally of the body portion of the post, a spiral peripheral groove extending the length of said body portion of the post, said grooves communicating at more than one point throughout the length of the post, a split ring carried on the upper end of said post for securing the free end of the wire thereon, means carried by said split ring to engage said free end of the wire and draw the same taut, substantially as described.

12. A binding post having a peripheral wire-receiving groove extending longitudinally thereof and a wire-receiving groove extending spirally along said post and intersecting said longitudinal groove at at least one point between the ends of said longitudinal groove and also near the ends thereof for disposing a length of wire wound in said grooves in over-lapping relation at one or more points, and a split ring device engaging the wire at one point of overlap and encircling the post to secure the wire in snug relation thereon, and ratchet means carried by said split ring and adapted to engage complemental ratchet means upon the upper end of the said post, whereby to secure the said split ring against accidental reverse movement.

In testimony whereof I affix my signature in presence of two witnesses.

HENNING F. ADICKES, JR.

Witnesses:
TUPPUR CAMPBELL,
LEWIS M. BROWN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."