A. L. KREEFT.

ELECTRIC BINDING POST.

APPLICATION FILED MAY 4, 1914.

1,204,457.

Patented Nov. 14, 1916.

FIG. 1

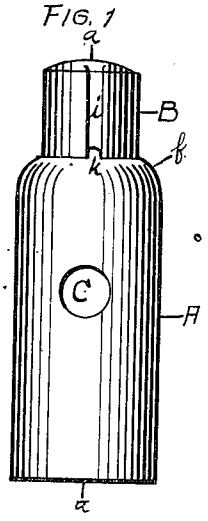


FIG. 2

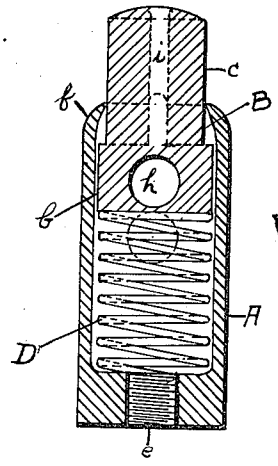


FIG. 3

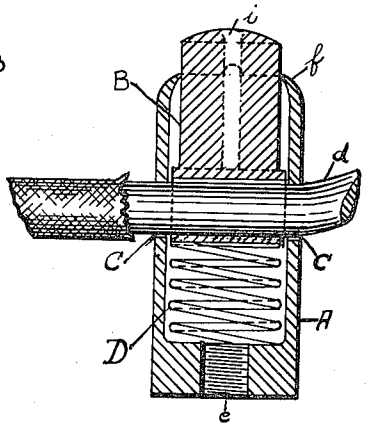


FIG. 4

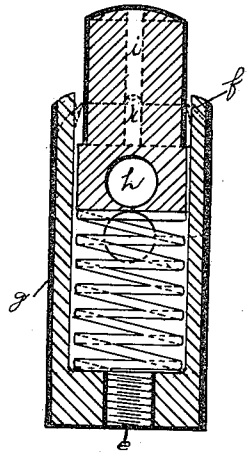
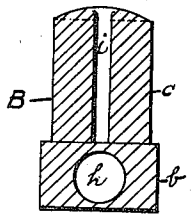


FIG. 5



WITNESSES

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ELECTRIC BINDING-POST.

1,204,457. Specification of Letters Patent. Patented Nov. 14, 1916.

Application filed May 4, 1914. Serial No. 836,090.

To all whom it may concern:

Be it known that I, ARCHIBALD LEWIS KREEFT, a citizen of the United States, and a resident of the town of West Orange, in the county of Essex, State of New Jersey, have invented certain new and useful Improvements in Electric Binding-Posts Used for Electrical Connections.

The object of my invention is to provide a convenient and ready means of holding a wire in electrical connection with an adjacent metal part, and comprises the use of continuous spring pressure upon the wire instead of screws for such purpose.

The following is a description of the design and construction of my new device, reference being had to the accompanying drawings.

Figure 1 is an outside elevation of my binding post; Fig. 2 is a longitudinal cross section of the same; Fig. 3 is a longitudinal section taken at *a*—*a* of Fig. 1, showing wire in place; Fig. 4 is a modified form with insulating sleeves; Fig. 5 is a detached view of the plunger.

Referring to Fig. 1, the body or main piece of the binding post is indicated by the letter A, which may be made of brass, copper or other metal and in any desired form, such as round, square, or hexagonal. In the drawings I have shown the preferred form which is round. At B, is shown a plunger mounted loosely inside the body A, as shown in Fig. 2, and adapted to slide therein. This plunger can be made of brass, copper or other metal and in various forms such as round, square, or hexagonal. The outer casing or body A is pierced on opposite sides thereof with holes or openings C, C, to receive a bare wire. These holes C, C, are made in various sizes or diameters to accommodate the size and the carrying capacity of the wire to be used therewith. The lower part *b* of the plunger B, rests on a strong spiral spring D, which fits in the lower portion of the casing A, and rests on the bottom thereof. The lower part of the plunger is preferably made of a larger diameter than the top *c* which passes out of the upper end of the casing for ready manipulation when it is desired to connect or disconnect a wire. At the base of the casing is shown a tapped hole *e* which is threaded and intended to receive a screw to make the mechanical and electrical connection between the apparatus delivering or receiving the current and the binding post. Other convenient means may be used instead of this tapped hole to make such connections. It will be understood that the base of the casing A, at *a*, is to be entirely closed except where pierced at *e*, for the reception of a screw, so that when the binding post is in position on the screw there is no aperture through the bottom to the interior chamber of the casing to admit dust or grease. The lower part *b* of the plunger is transversely bored with a hole *h* which is the same diameter as the holes C in the casing or body A.

Referring to Fig. 2 it will be seen that while the spring D is normal the hole *h* does not coincide with the holes C, C, but when a downward pressure is exerted on the plunger it compresses the spring and brings the holes in the plunger and casing in alinement. This permits of the end of a bare wire *d* being readily inserted through the holes C, C, and hole *h*, so it passes through the entire device as shown at Fig. 3. When pressure is released from the plunger the wire is held in contact with the plunger and both sides of the casing by the action of the spring. With this method of making contact it is impossible to pull the wire out with any reasonable amount of force. After the plunger and spring are assembled in the casing the top of the case is peened over or pressed together as shown at *f* thus making the whole binding post self contained with no loose parts such as a screw to be mounted or adjusted when making electrical connections, the actuating spring in such construction being housed in the casing and protected from dirt.

In Fig. 4 is shown a longitudinal section of binding post showing an insulation or covering *g* of rubber, fiber or other material. When the plunger and the interior of the casing are circular in form a slot or a longinal groove *i* may be made in the upper part *c* of the plunger and a projection *k* on the casing to slide therein so as to assure the registering of the hole *h* with the openings in the casing.

This post can be used for various classes of service and is adapted for general use where a quick and positive electrical connection is desired.

What I claim as my invention and desire to secure by Letters Patent is:

An electric binding post composed of

three elements which are held together after assembling as described, comprising a hollow shell, a spiral spring contained therein which rests upon the interior bottom thereof, a plunger resting on the spring and terminating in an exterior end of reduced diameter, said casing being peened around the reduced diameter of the plunger after introduction of the other two elements to confine them therein, said plunger and casing being pierced with registering holes which form an open passage way through both, when the plunger is pressed down which passage is closed when pressure is removed, substantially as and for the purposes shown and described.

ARCHIBALD LEWIS KREEFT.

Witnesses:

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WILLIAM L. RAMAGE.