

No. 656,158.

Patented Aug. 21, 1900.

C. F. ASH.

CONFINER OF WIRES FOR ELECTRICAL CONNECTIONS.

(Application filed Dec. 11, 1899.)

(No Model.)

Fig. 1.

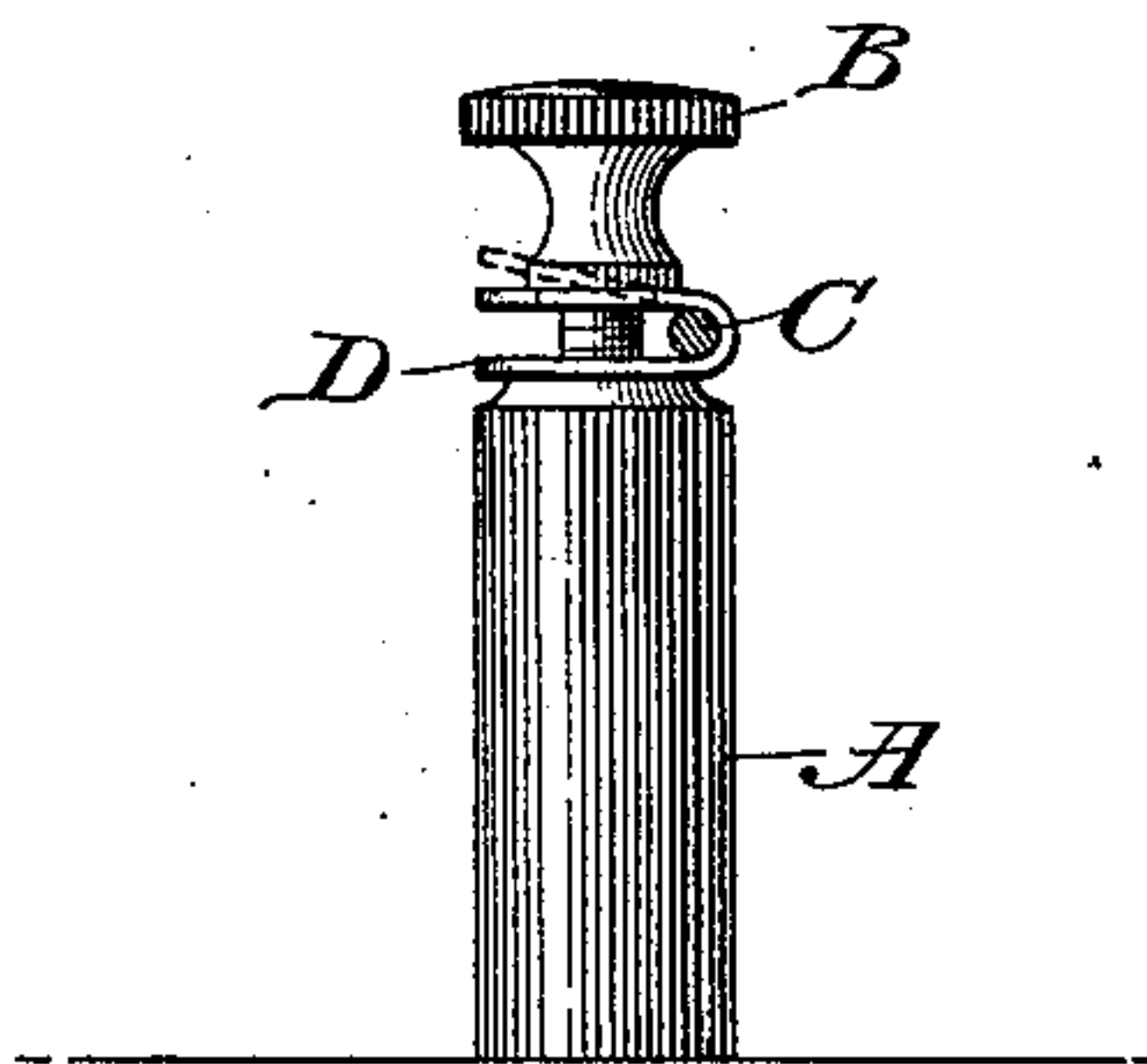


Fig. 2.

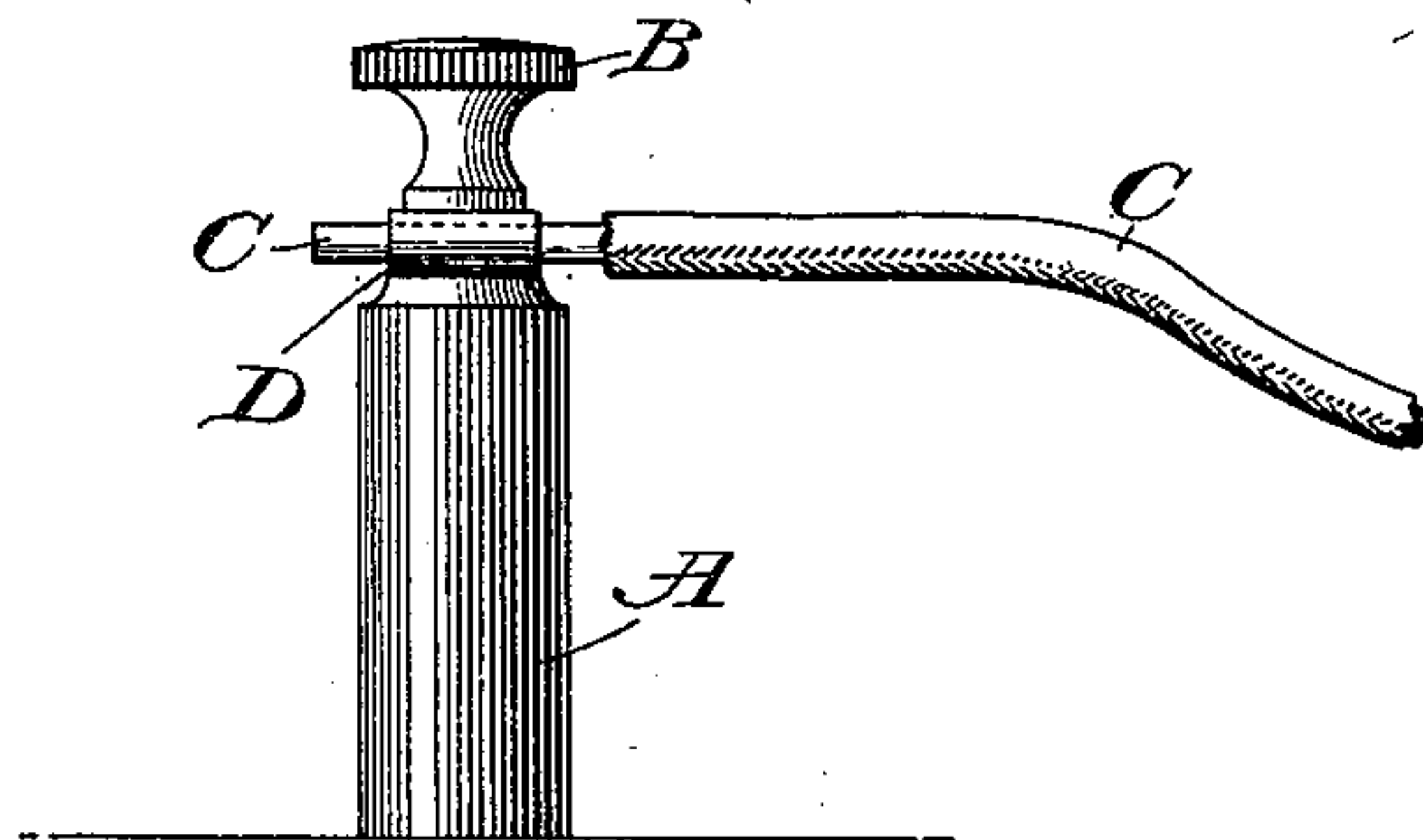


Fig. 3.



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CONFINER OF WIRES FOR ELECTRICAL CONNECTIONS.

SPECIFICATION forming part of Letters Patent No. 656,158, dated August 21, 1900.

Application filed December 11, 1899. Serial No. 739,870. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. ASH, a citizen of the United States, and a resident of No. 158 Park Place, in the borough of Brooklyn, city of New York, county of Kings, and State of New York, have invented a new and useful Improvement in Confiners of Wires for Electrical Connections, applicable to practically all apparatus or devices at which connection is made between an electric wire and another part of the electrical system, whatever it may be, of which the following is a specification.

The invention consists in the combination, with the parts at which the connection is made, of a curved or hook-shaped device which is preferably but not necessarily made of resilient metal, so formed and combined with the other parts that it serves as a guide and confiner for the end of the electric wire, so that it is easier to properly engage the wire with the conducting-surfaces of the binding-post or other device used for making the connection than heretofore, and it also confines the wire so that it will not be displaced during the operation of tightening the thumb-screw of the binding-post or equivalent parts, whatever they may be, employed for effecting the connection.

Referring to the drawings hereof, Figure 1 illustrates an elevation of an ordinary binding-post, partly in section, showing a side view of the invention. Fig. 2 illustrates in elevation a rear view of that which is shown in Fig. 1. Fig. 3 illustrates in perspective the guide and confiner detached.

A illustrates an ordinary binding-post, and B the ordinary thumb-screw, which, as usual, is tapped into the top of the post A.

C is the wire, and D the confiner and guide which forms the subject of this invention. It is composed of a strip of metal, which is preferably a good conductor of electricity, bent upon itself, as shown. In one of the ends there is made a hole *a*, which coincides substantially with the size of the threaded spindle of the thumb-screw. In the opposite end *b* there is another hole or opening, which is preferably slotted, as shown in Fig. 3, so that the spindle of the thumb-screw may be more easily adjusted in the threaded hole in the post or similar part, since thereby it will not

bind against the sides of the hole *b* if it should be a little out of alinement with the threaded hole *a*.

I prefer that the lower section of this device, in which is the hole *a*, should be soldered or otherwise fastened to the binding-post or other appropriate part of the apparatus, so that it may never be displaced, and that it may be always properly presented for easy engagement with the wire.

I prefer that this guide and confiner shall be made of resilient metal, so that when the thumb-screw or other equivalent part is unscrewed or loosened the free end of the guide and confiner will spring outwardly, thus releasing the wire, rendering its removal and reinsertion more convenient and easy. This operation of the device is illustrated in dotted lines in Fig. 1.

The operation is obvious. When it is desired to make a connection, taking the instance of an ordinary binding-post as an example, the thumb-screw is loosened, whereupon the confiner, owing to its elasticity, opens outwardly, and the end of the wire is then, owing to the large size of the opening or space afforded by the springing apart of the guide, very easily inserted within the loop and between it and the threaded spindle of the binding-post. The "confiner," as its name implies, prevents the end of the wire from being displaced or twisted out from between the contact-surfaces by the act of rotating the screw, and after it is once inserted in the loop of the retainer no further care is necessary. It simply remains then to screw down the thumb-screw, whereupon the free end of the confiner will be bent downwardly and forced into close contact with the wire, as shown. It frequently happens that the space where the contact must be made is very contracted. If so, the thumb-screw may be entirely unscrewed and removed from the device, and then the end of the wire can be bent in the form of a hook, in which event the hooked wire may be very easily and quickly hooked within the other hook of the confiner and guide, and it will be held in position by the loop at the rear thereof without the exercise of any care to prevent displacement, all that is necessary being to maintain a slight pull on the wire to insure the continued en-

gagement of the two hooks. The thumb-screw will then be again inserted and tightened.

I wish it to be understood that I do not limit myself to the use of resilient metal as the material from which to make the guide and confiner, because, although I prefer it, substantially the same advantage will be secured by the employment of substantially non-resilient material, such as lead.

As before stated, the invention is adapted to employment at a great many places in electrical apparatus other than binding-posts. I use that as an illustration merely of one use to which the device may be put.

It is obvious also that the shape of the device and the form in which it is bent may be greatly changed from that shown and still the essentials of the invention be employed—as, for instance, for certain uses I prefer that the bend in the strip, if it be bent, shall be V-shaped instead of U-shaped, as shown, because thereby a somewhat-closer contact may be secured. All that is necessary is that it shall be so formed and combined with the other parts as that it shall act as a confiner to prevent the wire being pushed aside by the act of screwing the thumb-screw down upon it and as a guide also for the wire, whereby ease and certainty in making the connection are attained.

Having described my invention, I claim—

1. A wire-confiner for electrical contacts consisting of a piece of resilient metal bent into the desired form, one end of which is permanently attached to the binding-post or similar part of the apparatus adjacent to the point of contact, the other end being adapted to automatically open for the release of the wire

and to be closed upon the wire by the pressure of the thumb-screw or similar device, for the purposes set forth.

2. A wire-confiner for electrical contacts consisting of a piece of conductive metal rigidly attached to the binding-post or similar part of the apparatus at or near the points of contact, within which the end of the wire may be caught and prevented from dislodgment during the act of manipulating the thumb-screw, and which is adapted to be pressed upon the wire by the pressure of the thumb-screw, for the purposes set forth.

3. A wire-confiner for electrical contacts consisting of a strip of conductive material bent into the form of a hook, one prong whereof is attached at or near the points of contact, the other part being adapted to independent movement whereby the wire may be hooked over said part during the act of making the connection and held against displacement when the thumb-screw or similar part is manipulated, for the purposes set forth.

4. A wire confiner and guide for electrical contacts consisting of a strip of conductive material bent into hook-like form, one prong of which is rigidly attached to the binding-post or similar part of the apparatus, the other free end whereof is slotted to permit free passage through it of the threaded stem of the thumb-screw, for the purposes set forth.

Signed at New York, in the county of New York and State of New York, this 7th day of December, A. D. 1899.

CHAS. F. ASH.

Witnesses:

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