

(No Model.)

S. P. HULL & J. DU BOIS.
CONNECTOR FOR ELECTRICAL CONDUCTING WIRES.

No. 586,665.

Patented July 20, 1897.

Fig. 1.

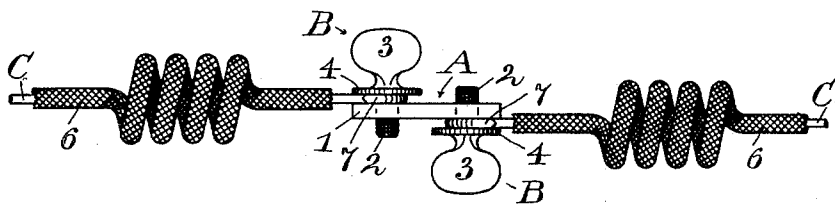


Fig. 2.

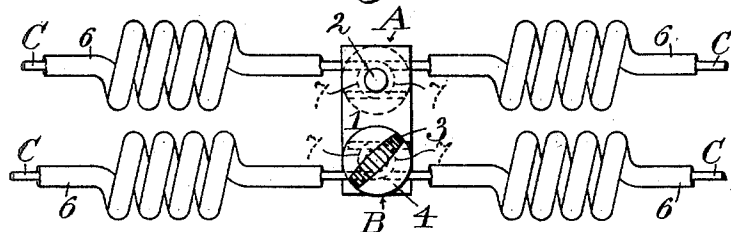
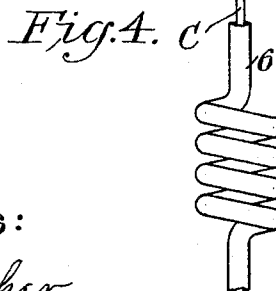
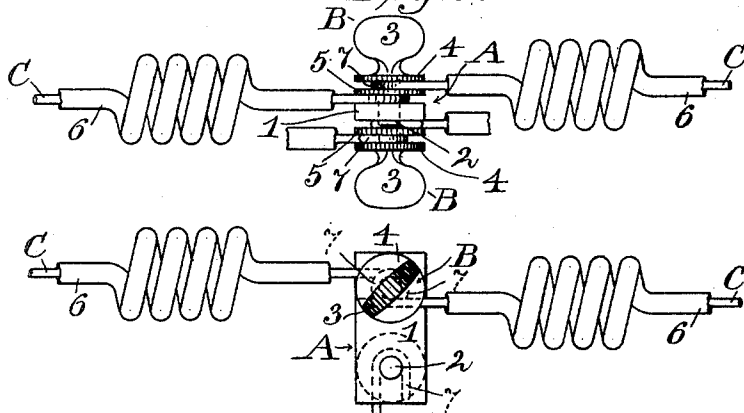


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

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CONNECTOR FOR ELECTRICAL CONDUCTING-WIRES.

SPECIFICATION forming part of Letters Patent No. 586,665, dated July 20, 1897.

Application filed November 25, 1896. Serial No. 613,426. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL P. HULL, of Poughkeepsie, in the county of Dutchess, and JULIAN DU BOIS, of Albany, in the county of Albany, State of New York, have invented new and useful Improvements in Connectors for Electrical Conducting-Wires, of which the following is a specification.

As heretofore practiced connectors for electrical conducting-wires have usually consisted of a metallic tube, either direct or branched, wherein the conducting-wires were inserted in their bore, and binding-screws were arranged perpendicularly to the bore of said tube, so that their inner ends would bear upon said wires to form an electrical contact of the wires with the connector, but owing to the slight and imperfect electrical contact of the parts and the liability of damage to the wires by the binding-screws that class of connectors has proved to be unsatisfactory.

The object of our invention is to provide a connector which possesses the following advantages over the class of connectors above referred to: first, greater surface of contact of the conducting-wires with the connector; second, accessibility of the parts for inspection; third, accessibility for cleaning the parts; fourth, non-liability to injure the conducting-wires, and, fifth, adaptability for connecting two, three, or more wires with a single connector, which is always left free to partake of any swaying movement of the conducting-wires, and its use is not limited to lines of conducting-wires within a building, but it is adapted for connecting lines of conducting-wires that are unsupported by adjacent objects.

In the accompanying drawings, which form part of this specification and are herein referred to, Figure 1 is a side elevation of our connector as applied to a single line of conducting-wires; Fig. 2, a plan view of our connector as applied to two lines of conducting-wires running in the same direction; Fig. 3, a side elevation of Fig. 2, and Fig. 4 a plan view of our connector as applied to a direct and a lateral line of conducting-wires.

As illustrated in the drawings, A designates our connector, which consists of a plate 1 of metal that is a conductor of electricity, pref-

erably made in an oblong form and having near each of its ends a hole tapped for receiving a binding-screw; B, binding-screws composed of metal that possesses conductivity for electricity. Each of said binding-screws is formed with a stem 2, that is screw-threaded to take into the holes of the plate 1, and each is provided with a head 3, which may have the usual form of the head of a thumb-screw, as shown in the drawings, a circular milled head or one of any preferred form of head. The lower end of the latter should terminate in a flange 4 or flat surface that is preferably formed with a diameter equal to the plate 1, so as to obtain a large surface for contact with the conducting-wires.

Preferably the binding-screws B are arranged to screw into the plate 1 from the opposite faces of the latter, as shown in Fig. 1, but a similar effect may be obtained when said binding-screws are screwed into the plate 1 from the same face. When the connector A is used for connecting several conducting-wires, as shown in Figs. 2, 3, and 4, the binding-screws B can be provided with metallic washers 5, having electrical conductivity, and one of said washers is interposed between adjacent conducting-wires, as shown in Fig. 3, and thereby a greater surface of contact is obtained for said wires.

C designates the conducting-wire, which, as shown in the drawings, is preferably provided with an insulating-covering 6, which should be removed from the ends of the wire to leave them bright and naked to obtain a more perfect electrical contact between said wires and the connector. Preferably the end of each conducting-wire should be formed to a hook 7, as indicated by dotted lines in Figs. 2 and 4, which will pass around the stem 2 of the corresponding binding-screw B to obtain a greater surface of electrical contact with the connector than can be obtained by the use of a straight portion of the conducting-wire.

Our invention is adapted for connecting together wires, whether of the same size or those that vary in size from each other, so as to leave the connector free to sway with any swinging motion of the wires.

What we claim as our invention, and desire

to secure by Letters Patent of the United States, is—

1. A connector for electrical conducting-wires, consisting of a plate, 1, possessing electrical conductivity, and binding-screws, 3, arranged at opposite ends of said plate and each having a flat circumferential flange, 4, at the inner end of its head; said connector being arranged to swing freely with any
10 swaying movement of said wires, as specified.

2. In a connector for electrical conducting-wires, the combination of a metallic plate, 1, that has electrical conductivity and is only fastened to said conducting-wires, binding-screws, 3, fitted to screw into the opposite
15 ends of said plate, and metallic washers, 5, which engage on the stems of said screws and effect a separation of different conducting-wires; said connector being adapted to swing

with a swaying movement of the conducting-wires, as specified. 20

3. The combination, with a connector, A, provided with binding-screws, 3, which have at their inner end a flat circumferential flange, 4, adapted to form an electrical contact with a conducting-wire, of electrical conducting-wires, C, which are each provided with a hook, 7, that is adapted to engage with the stem of a binding-screw and be clamped to the plate of said connector; whereby conducting-wires which differ in size can be electrically connected together, as specified. 25 30

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Witnesses:

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