

No. 631,173.

Patented Aug. 15, 1899.

D. McGLONE.

ATTACHING PLUG FOR FLEXIBLE WIRE CONNECTIONS.

(Application filed Mar. 7, 1899.)

(No Model.)

FIG. 1.

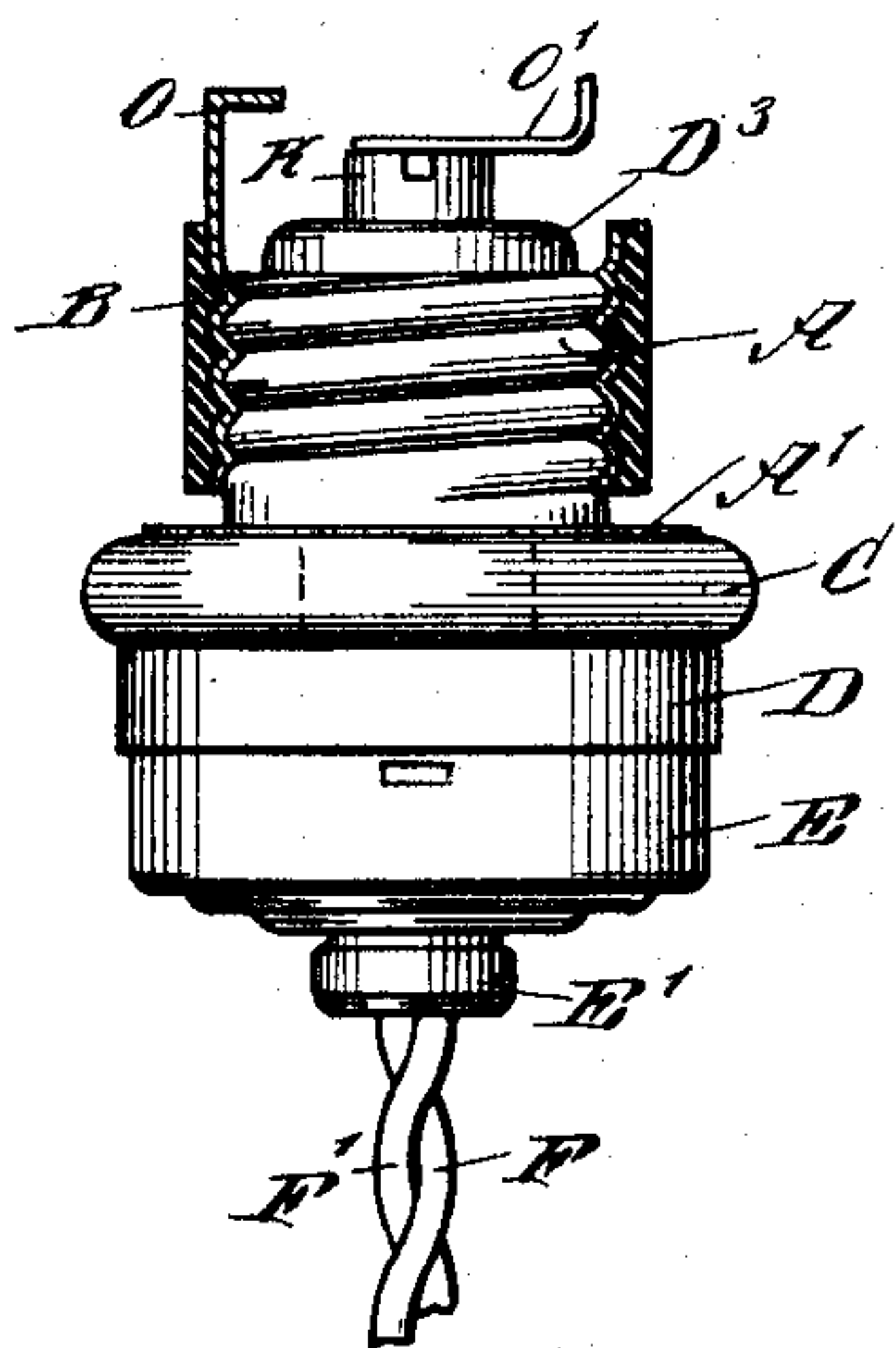


FIG. 2.

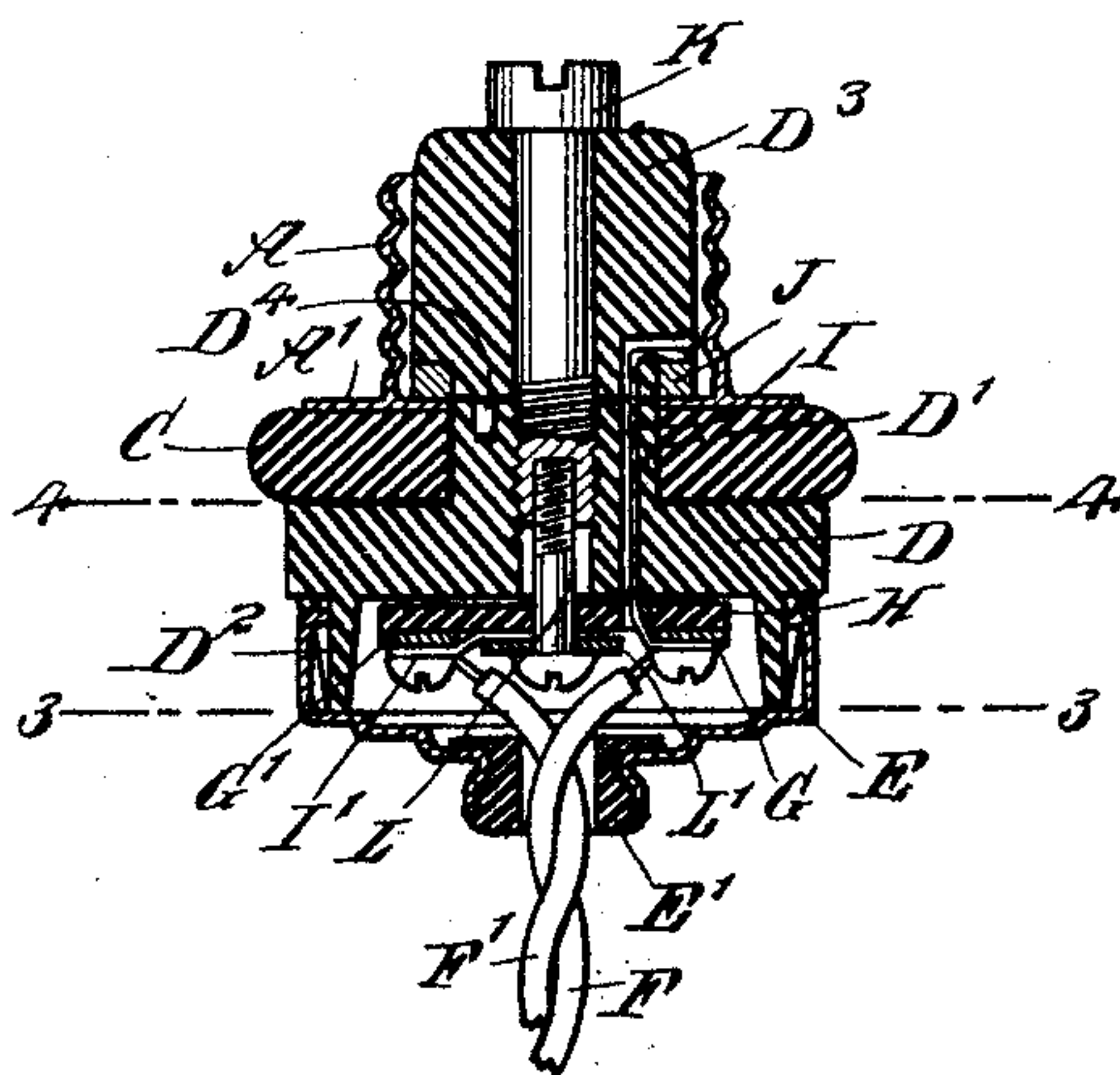


FIG. 3.

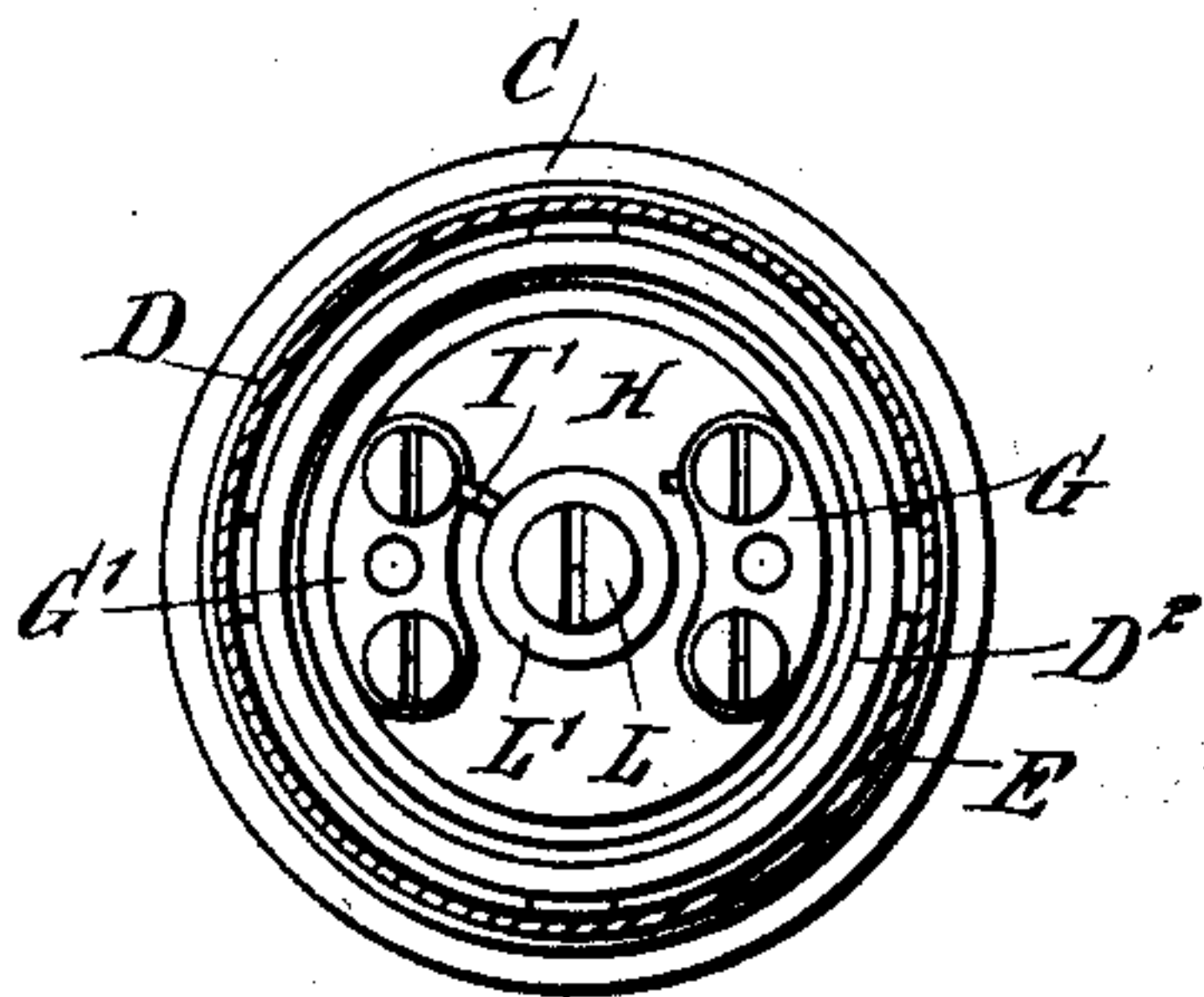
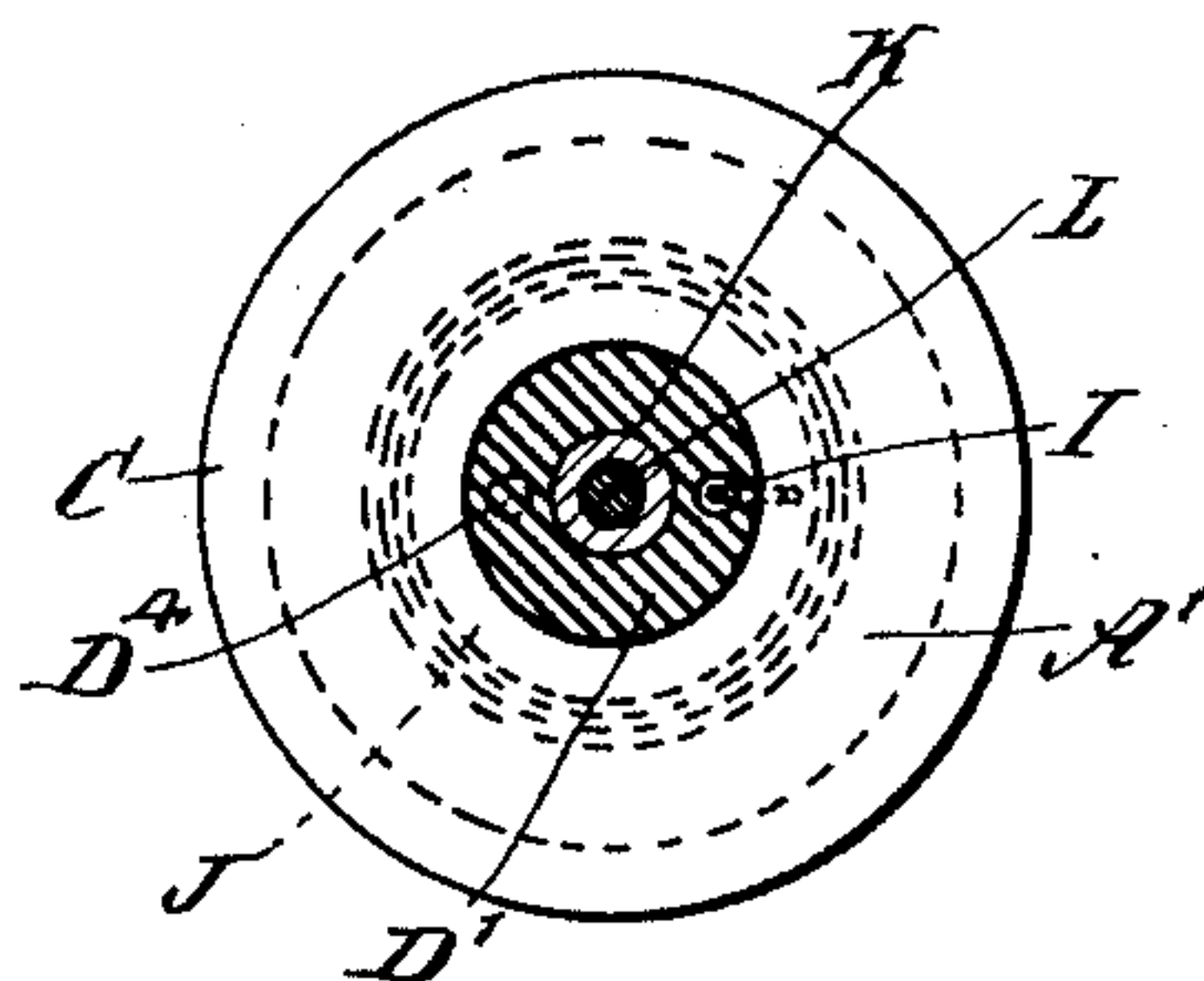


FIG. 4.



WITNESSES:

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ATTACHING-PLUG FOR FLEXIBLE-WIRE CONNECTIONS.

SPECIFICATION forming part of Letters Patent No. 631,173, dated August 15, 1899.

Application filed March 7, 1899. Serial No. 708,137. (No model.)

To all whom it may concern:

Be it known that I, DANIEL McGLONE, of the city of New York, (Long Island City,) borough of Queens, in the county of Queens and State of New York, have invented a new and Improved Attaching-Plug for Flexible-Wire Connections, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved attaching-plug for flexible-wire connections and which is simple and durable in construction and arranged to permit of readily and conveniently screwing the plug into the supporting-fixture or moving the electric lamp or other electrical device about without twisting the wires, and thereby injuring the same and causing a bad electric connection and final breaking or complete interruption of the circuit.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the improvement as applied and with the supporting-fixture in section. Fig. 2 is a sectional plan view of the improvement. Fig. 3 is a sectional front elevation of the same on the line 3 3 in Fig. 2, and Fig. 4 is a similar view of the same on the line 4 4 in Fig. 2.

The improved device is provided with a metallic screw-plug A, adapted to screw into a metallic supporting-fixture B for making connection with the line-terminals, as hereinafter more fully described. The metallic screw-plug A is provided with a flange A', secured to a head C, made of an insulating material and in which is mounted to turn the reduced portion D' of a flexible-wire carrier D, likewise made of non-conducting material, and having an annular flange D² at its outer end, engaged by a cap E, formed with a central insulated eye E', through which pass the flexible wires F F' to the chamber formed by the flange D² and the cap E.

The inner ends of the flexible wires F F' connect with contact-plates G G', held on the

face of a disk H, of insulating material, and held against the head D. The contact-plate G is connected by a wire I with a ring conductor J, secured on extension D³, attached to the reduced portion D' of the flexible-wire carrier D, as is plainly shown in Fig. 2, the wire I extending through an opening in the carrier D, the reduced portion D', and the extension D³, so as to be completely insulated from the metallic plug A. The ring conductor J abuts against the inner portion of the flange A', as is plainly shown in Fig. 2, so as to make electrical contact with the plug A. The other contact-plate G', previously mentioned, is connected by a wire I', preferably made of a fusible material, with a washer L', held on a screw L, extending through the disk H and screwing in the inner end of a screw-rod K, extending centrally through the extension D³ and the reduced portion D' of the head D, so as to securely fasten the two parts of the head together. A dowel-pin D⁴ in the extension D³ engages a recess in the reduced portion D', so as to prevent said extension from turning on the reduced portion D'.

When the plug A is screwed into the supporting-fixture B, then the contact is made by the plug A with the line-terminal O and by the head of the screw-rod K with the other line-terminal O'. The electric current can now pass from the terminal O by way of the plug A, flange A', ring J, wire I, and contact-plate G to the flexible-wire connection F, and the electric current from the terminal O' can pass through the screw-rod K, screw L, washer L', wire I', and contact-plate G' to the other flexible-wire connection F' to complete the circuit.

It will be seen that by the arrangement described the plug A is freely turned on the flexible-wire carrier D, so that when the plug A is screwed into the supporting-fixture B the wire carrier D remains stationary, and consequently the line-wires F F' are not twisted, and thereby broken or otherwise injured, so that a proper connection is at all times made without danger of interruption or breaking of the circuit.

When the plug A has been screwed into its supporting-fixture, the flexible-wire carrier D is free to turn in the plug, and consequently

the electric lamp or other device connected with the wires F F' when moved about does not cause a twisting of said wires.

Having thus fully described my invention,
5 I claim as new and desire to secure by Letters Patent—

1. An attaching-plug, comprising a metallic plug arranged for attachment to the supporting-fixture connected with one of the line-
10 terminals, and a carrier of insulating material mounted to turn on said plug, and carrying two circuit-conductors for the wires, one conductor being in contact with said plug and the other being arranged for contact with the
15 other line-terminal, substantially as shown and described.

2. An attaching-plug for flexible-wire connections, comprising a metallic screw-plug for screwing in a supporting-fixture, a wire-
20 carrier mounted to turn on said screw-plug and insulated therefrom, a conductor on said carrier and in electrical contact with said screw-plug, and a second conductor on said carrier and insulated from the first-named
25 conductor and said screw-plug, substantially as shown and described.

3. An attaching-plug for flexible-wire connections, comprising a metallic screw-plug having a head of insulating material, and
30 adapted to screw into the supporting-fixture with which one of the line-terminals is connected, a wire-carrier of insulating material, and mounted to turn in said head, a ring con-

ductor carried by said wire-carrier, and in contact with said metallic screw-plug, and a
35 screw-rod conductor on said carrier, and insulated from said ring conductor, said ring conductor and said screw conductor being arranged for connection with the flexible-wire connections, and said screw-rod conductor
40 being also arranged for connection with the other line-terminal, substantially as shown and described.

4. An attaching-plug for flexible-wire connections, comprising a metallic screw-plug
45 having a head of insulating material, and adapted to screw into the supporting-fixture with which one of the line-terminals is connected, a wire-carrier of insulating material, and mounted to turn in said head, a ring con-
50 ductor carried by said wire-carrier, and in contact with said metallic screw-plug, and a screw-rod conductor on said carrier, and insulated from said ring conductor, said ring
55 conductor and said screw-rod conductor being arranged for connection with the flexible-wire connections, said screw-rod conductor being also arranged for connection with the other line-terminal, and said wire-carrier being made in two parts fastened together by
60 said screw-rod conductor, substantially as shown and described.

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