

No. 827,310.

PATENTED JULY 31, 1906.

C. F. HOWES.
SWIVELING CURRENT TAP AND LAMP SOCKET.

APPLICATION FILED MAR. 29, 1905.

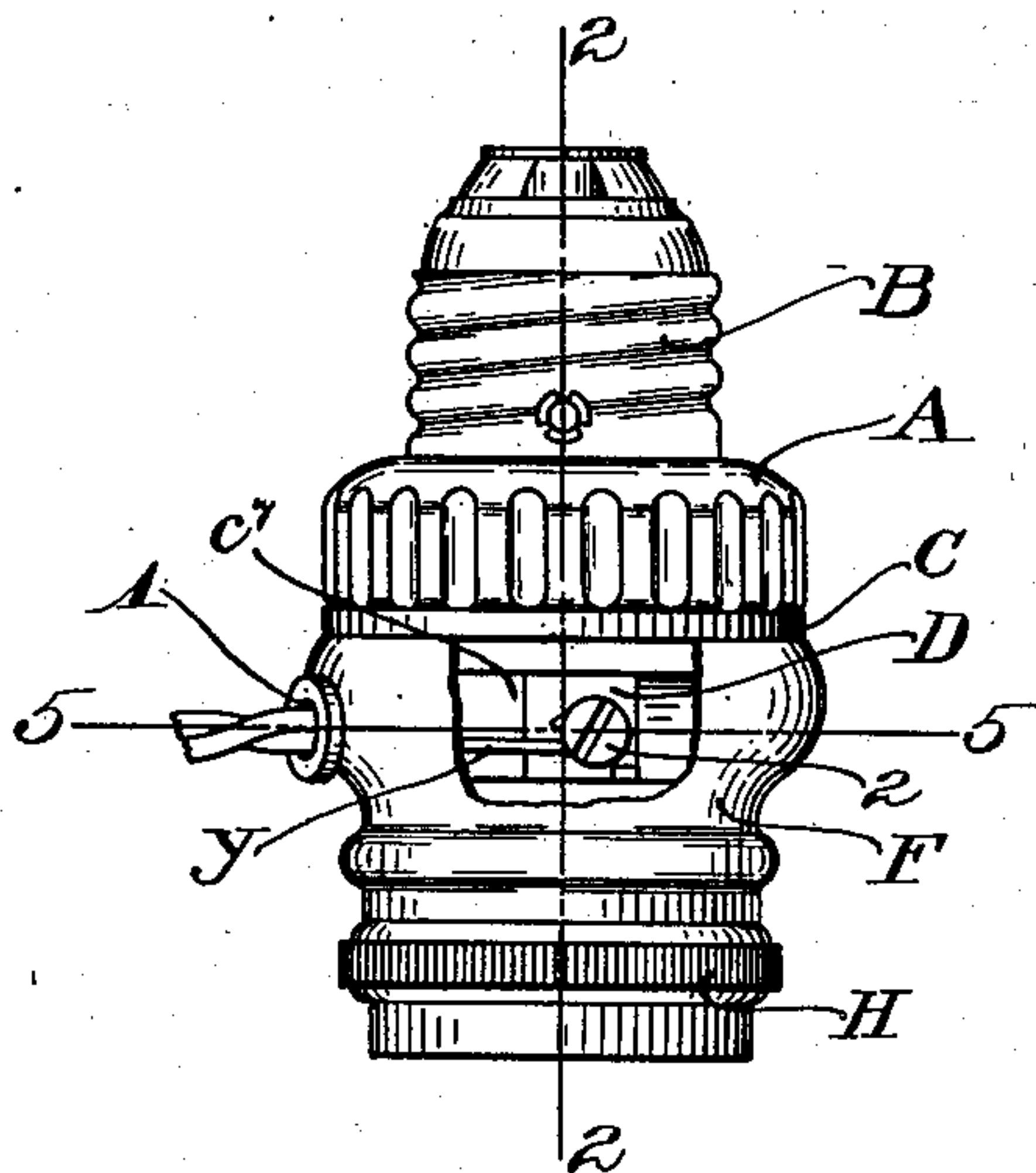


Fig. 1.

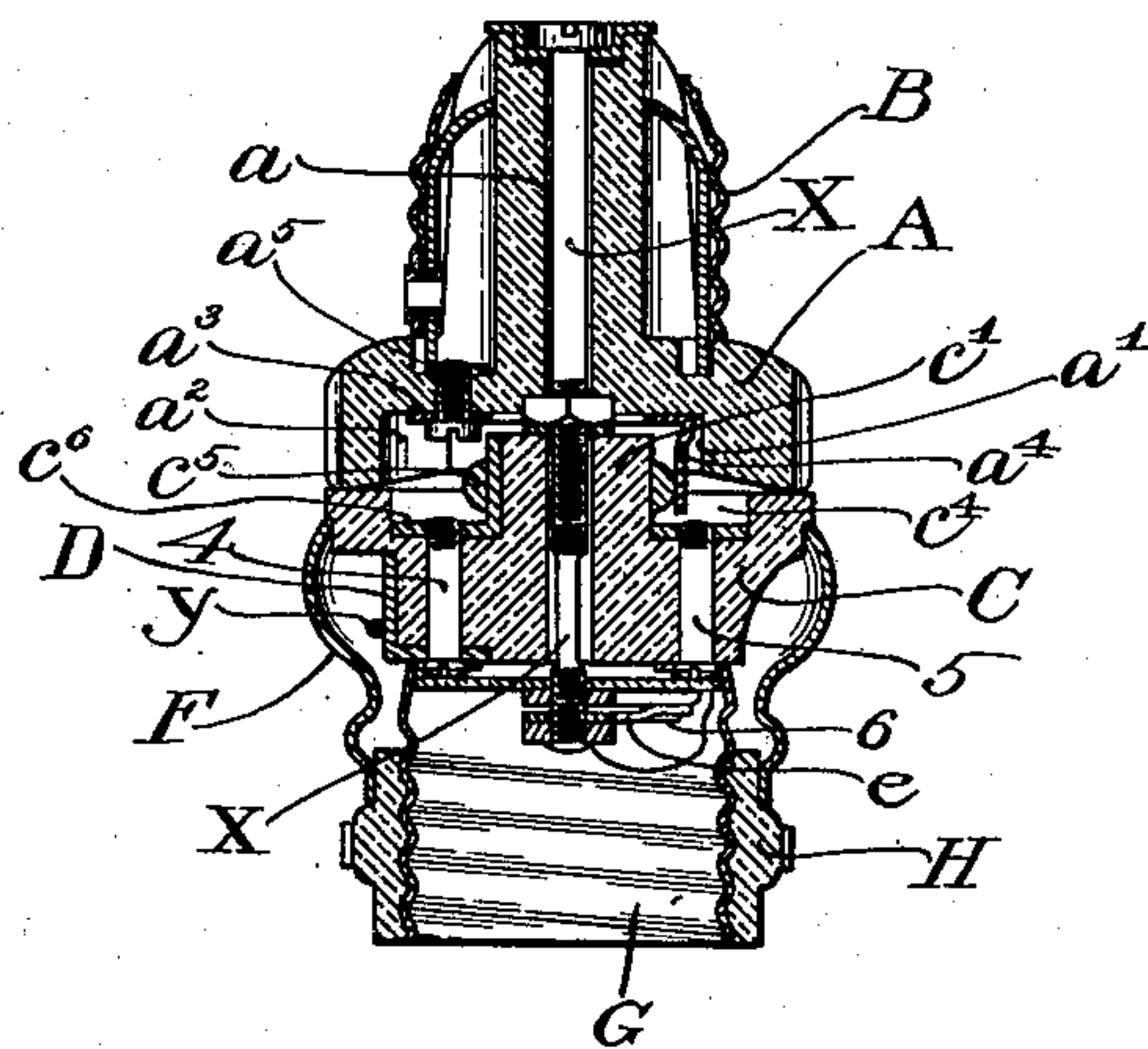


Fig. 2.

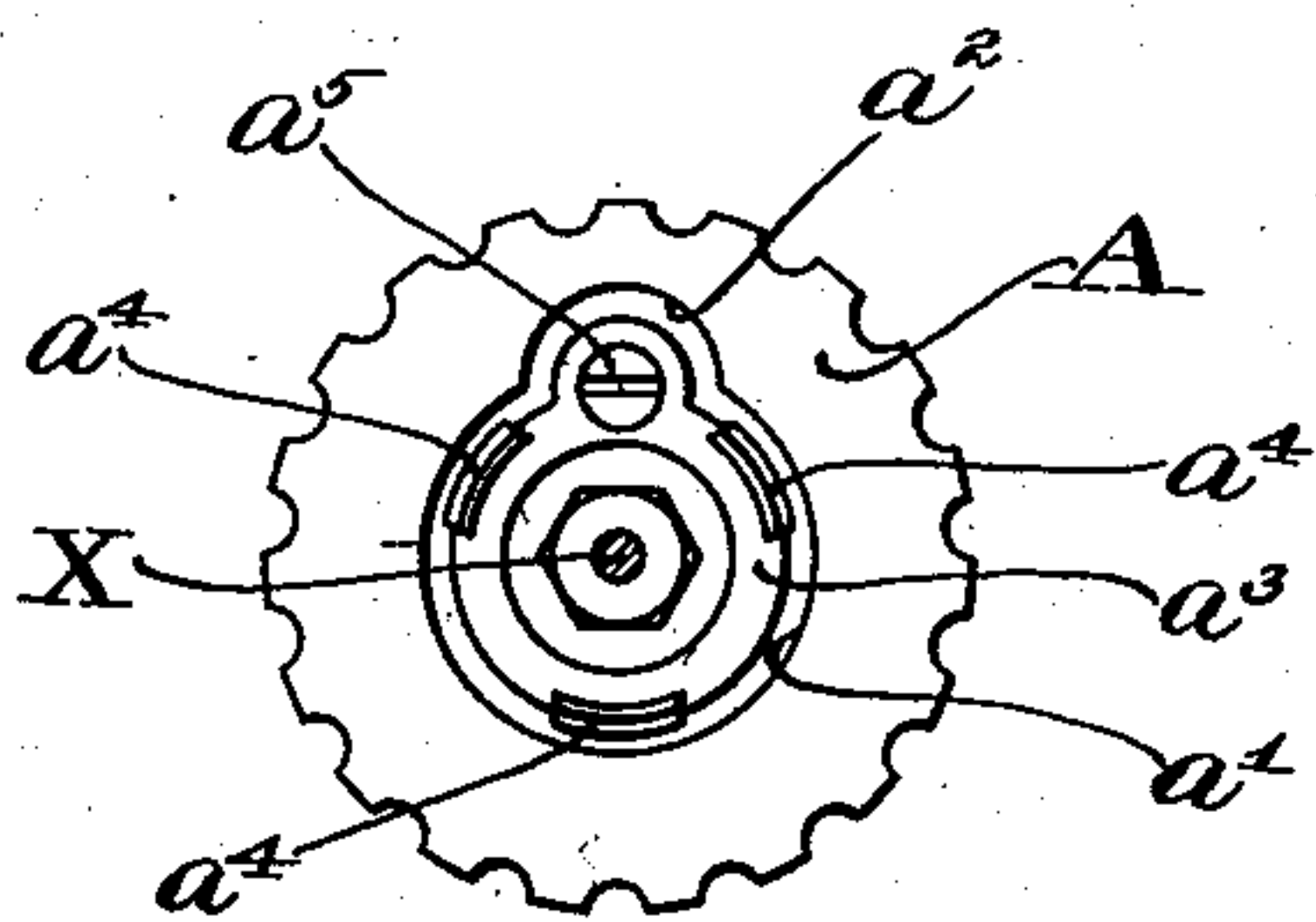


Fig. 3.

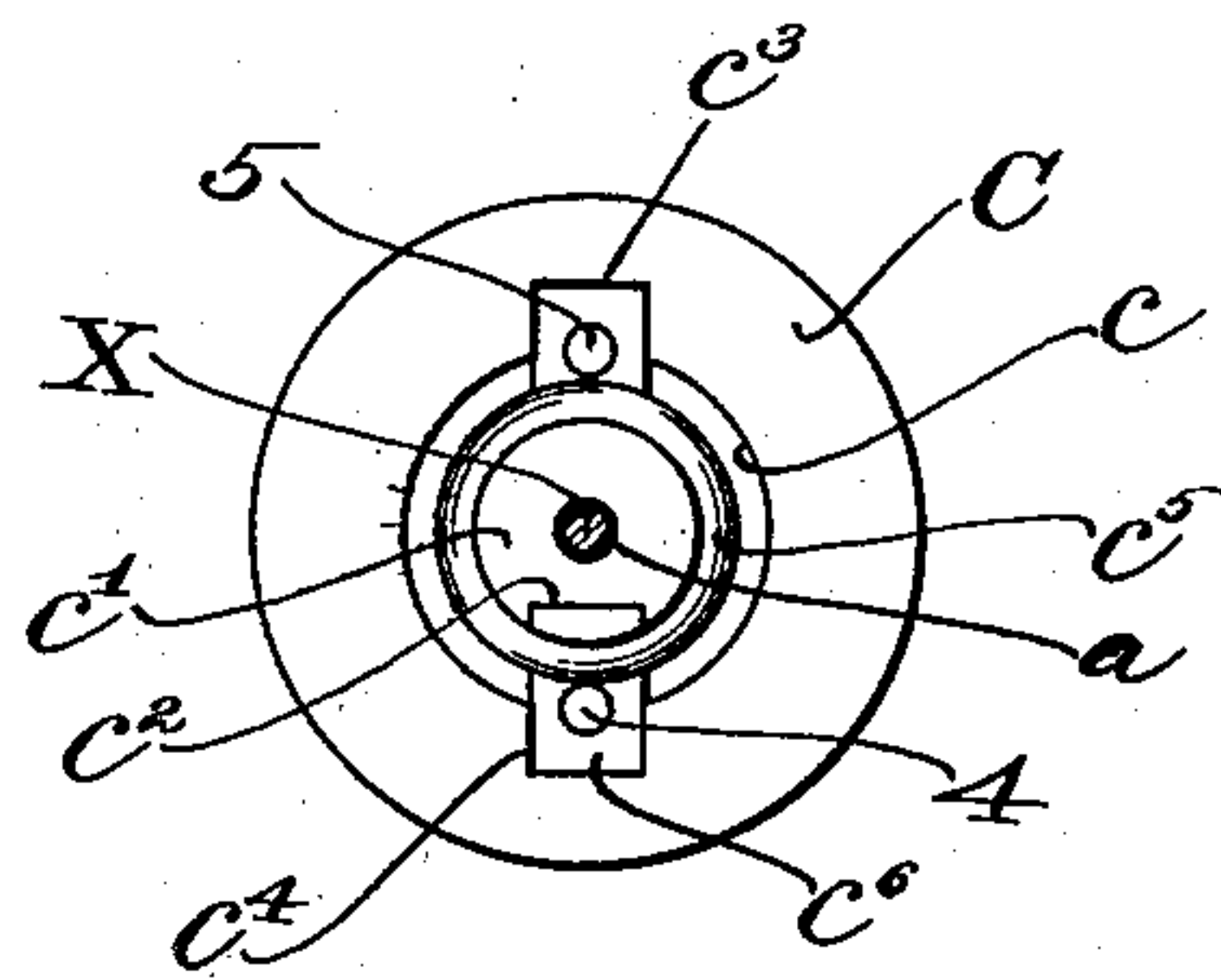


Fig. 4.

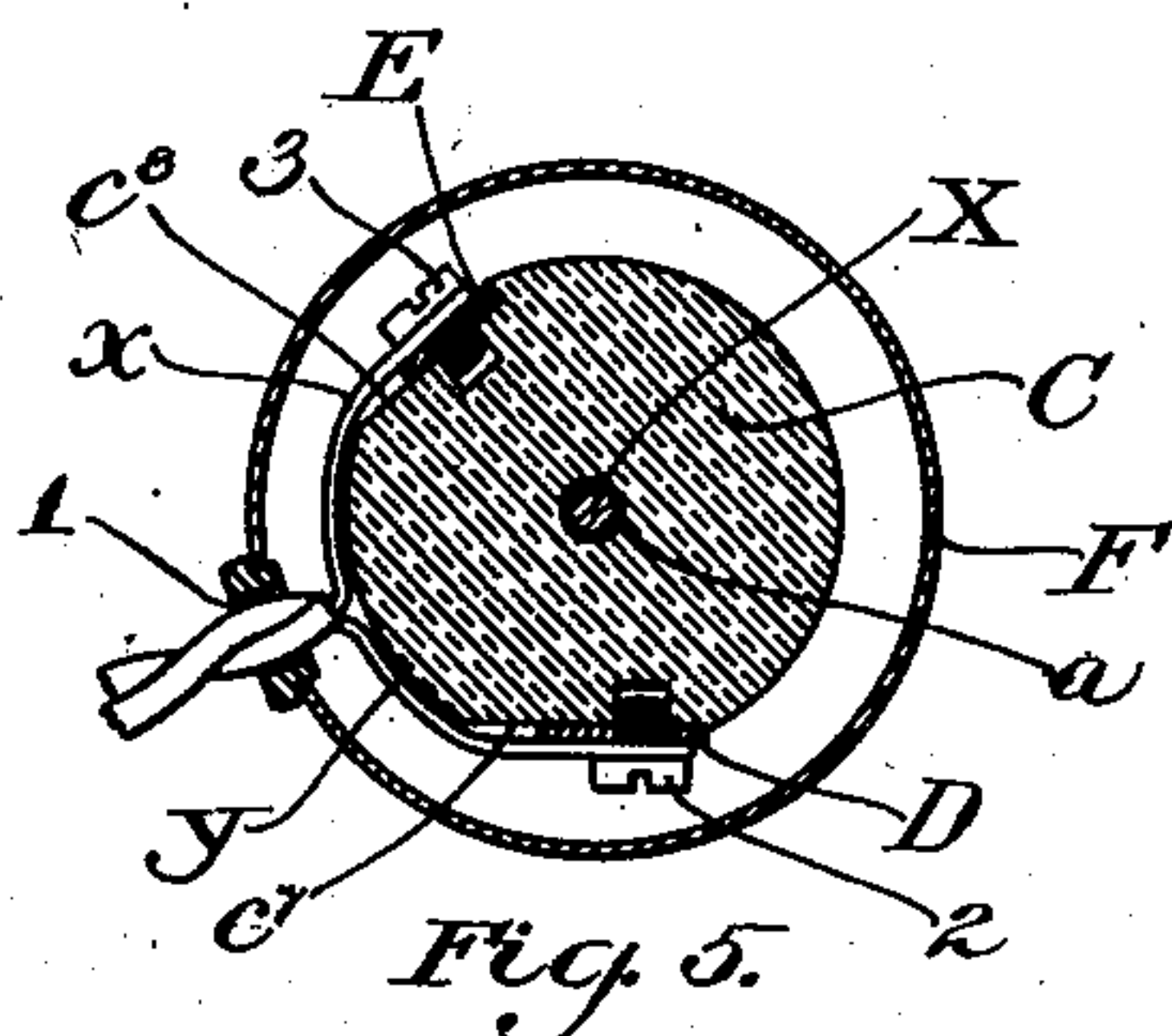


Fig. 5.

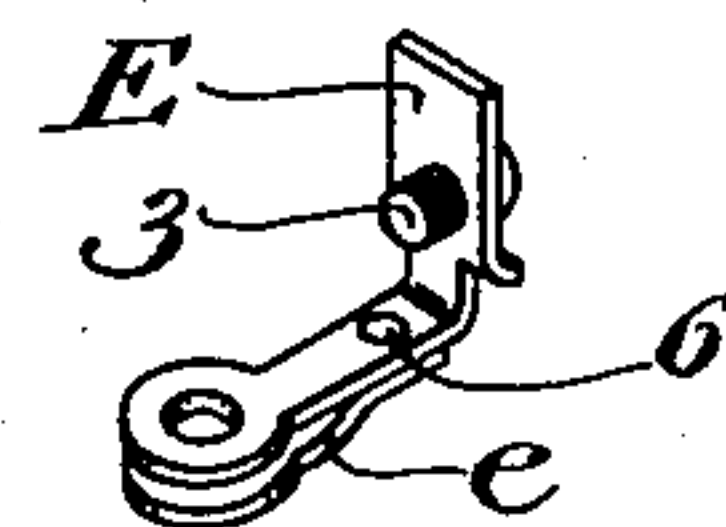


Fig. 6.

Witnesses:

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UNITED STATES PATENT OFFICE.

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SWIVELING CURRENT-TAP AND LAMP-SOCKET.

No. 827,310.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed March 29, 1905. Serial No. 252,678.

To all whom it may concern:

Be it known that I, CHARLES F. HOWES, a citizen of the United States, residing at Cambridge, county of Middlesex, State of Massachusetts, have invented a new and useful Swiveling Current-Tap and Lamp-Socket, of which the following is a specification.

My invention relates to swiveling attachment-plugs and to incandescent-lamp sockets and to current-taps.

My invention consists in a device as a whole composed of a swiveling attachment-plug, an incandescent-lamp socket or a socket for any other device, and a current-tap connecting with distant devices—such as incandescent lamps, fans, small motors, &c—and in certain subcombinations therein and will be understood by reference to the illustrative accompanying drawings, in which—
Figure 1 is a front elevation, partially broken away to show one of the binding-screws. Fig. 2 is a section on line 2 2 of Fig. 1 looking toward the left. Fig. 3 is an underneath plan view of the swivel-block and its attached parts. Fig. 4 is a plan view of the base and its attached parts. Fig. 5 is a transverse section on line 5 5 of Fig. 1. Fig. 6 is a detail.

My invention is shown in the drawings for use with an Edison form of contact connection; but it will be evident to those skilled in the art how to make the slight change for a Thomson-Houston or, if desired, a Westinghouse socket.

Referring to the drawings, A is one member of the swivel-block, preferably of porcelain, having a center hole *a*, through which passes the conductor X, whose top connects electrically with the coming-in wire and also acts as a holding-screw, fastening the two together, and is in electrical connection with binding-bracket E.

B is the outside screw-shell for insertion in the fixture and connecting with wire *y* through *a*⁵ *a*³ *a*⁴ *c*⁵ *c*⁶ 4 D and binding-screw 2 on the base of the socket-shell.

C is the other member of the swivel-block, forming also the insulating-base of the socket-shell, and is also perforated at *a* for the conductor X and has on its base the circular cut-away portion *c*, from which projects the hub *c'*, having the cut-away portion *c*², and said base has also the cut-away portion *c*⁴, in which is the angle-arm *c*⁶, and the cut-away

portion *c*³, in which is a square plate for the fastening-screw 5 for screw-shell G.

Around the hub *c'* is mounted the contact ring *c*⁵, having the angle-arm *c*⁶, by which connection is made through the screw 4 with the contact-bracket D to the circuit-wire *y*. The base C has, preferably, the cut-away portion *c*⁷, in which is the metallic contact and binding-bracket D, through which passes the binding-screw 2, and the cut-away portion *c*⁸, in which is placed the metallic contact and binding-bracket E, which, as best shown in Fig. 6, is bent at right angles into an arm perforated for the passage of the rod X and is made with the second arm *e* pivoted to the main arm at 6 in order to secure a resilient contact. Through the bracket E passes the binding-screw 3.

The swivel-block member A, as shown in Fig. 3, has the depression *a'* extending into the depression *a*². In the depression *a'* lies the contact-ring *a*³, from which rise the three contact-prongs *a*⁴, said ring being held in place by the screw *a*⁵, which connects with the outside screw-shell B of the member A.

F is the socket-shell, and G is the screw-shell, mounted upon the insulating-base C.

H is an insulating-ring holding in place the shell F.

The two circuit-wires *x y* pass through a hole or a slot 1 in socket-shell F to connect with any distant lamp, fan, motor, &c. (Not shown.)

The operation of my apparatus is as follows: The screw-shell B is inserted in the socket of an ordinary incandescent-lamp fixture, and an incandescent lamp is inserted in the other screw-shell G, said lamp being lighted in the ordinary way. The operation of the current-tap is that the wires *x y* pass to a distant incandescent lamp, fan, motor, or other electrical device, which is provided with a switch, whereby said second device may be itself cut out of circuit or both it and the incandescent lamp inserted at G may be used at the same time.

Having described my invention, I do not limit myself to the threefold device precisely as depicted, because various merely mechanical modifications in some or all of the constituent parts may be easily made; but

What I claim is—

1. In a swiveling current-tap and lamp-socket, the combination of a swivel-block

composed of two centrally-perforated members, the upper having a projection for the fixture screw-shell and a recess underneath; the lower supporting the lamp-socket shell and having a projection entering the recess of the upper member; a conducting-rod passing through said swivel-block, forming part of the electric circuit, and holding said members in swiveling relationship; continuously-coacting electrical contacts respectively upon the hub and within the recess of said members, and two or more circuit-wires electrically connected with the central conductor and with said screw-shells; substantially as described.

2. In a swiveling current-tap and lamp-socket, the combination of a swivel-block composed of two centrally-perforated members, the upper having a projection for the fixture screw-shell and a recess in its under portion, the lower member supporting the lamp-socket shell and having a projection upon its opposite face to enter the recess of the upper member; a screw-shell mounted upon the upper member for insertion in the fixture; a lamp-socket shell mounted on the lower member for reception of the lamp; a conducting-rod passing through said members, connecting with the incoming wire and forming a part of the circuit by connecting with the outgoing circuit-wire; continuously-coacting electrical contacts mounted respectively upon said projection of the lower member and within said recess of the upper member; a binding-screw connecting with said electrical contacts within the swivel-block, and a binding-screw also in electrical contact with said circuit and with a wire leading to a distant device; substantially as described.

3. In a swiveling current-tap and lamp-socket, the combination of a swivel-block composed of two centrally-perforated members, the upper member having a projection for the fixture screw-shell and a recess in its under portion to receive electrical contacts, the lower member supporting the lamp-socket shell and having a projection upon its opposite face to support electrical contacts and to enter the recess of the upper member; a screw-shell mounted upon the upper member for insertion in the fixture; a lamp-socket shell mounted on the lower member for reception of the socket; a conducting-rod passing through said members, connecting with the incoming wire and forming a part of the circuit by connecting with the outgoing circuit-wire; continuously-coacting electrical contacts respectively mounted upon said projection of the lower member and within the recess of the upper member; a circuit-wire binding-screw connecting with said electrical contacts within the swivel-block, and a circuit-wire binding-screw, also in contact with said circuit, and with a wire leading to a distant device; an exterior metal shell for said

lower member and an insulating-shell between it and the said lamp-socket shell, both cut away for the passage of said circuit-wires to a distant device; substantially as described.

4. In a swiveling current-tap and lamp-socket, the combination of a swivel-block composed of an upper member perforated through its center, adapted to support the fixture screw-shell, and recessed underneath, and a lower member similarly perforated supporting the lamp-socket, and provided with a projecting hub to fit into the recess of the upper member; a fixture screw-shell upon the upper member; a lamp-socket screw-shell mounted upon the face of the lower member; a conducting-rod connecting with the incoming wire, passing through said swivel-block, and adapted to hold its members in swiveling contact; coacting electrical contacts connected with said rod and composed of a ring and depending prongs in the recess of the upper member, and a ring gearing with said prongs on the projecting hub of the lower member; a binding-screw electrically connecting said central rod and with a circuit-wire leading to a distant device; substantially as described.

5. In a swiveling current-tap and lamp-socket, the combination of a swivel-block composed of an upper member perforated through its center and adapted to support the fixture screw-shell and cut away underneath, and a lower member similarly perforated and provided with a projecting hub to fit into the recess of the upper member; a fixture screw-shell upon the upper member; a lamp-socket screw-shell mounted upon the face of the lower member; a conducting-rod connecting with the incoming wire and passing through said swivel-block and adapted to hold its members in swiveling contact; coacting electrical contacts composed of a ring and depending prongs in the recess of the upper member, and a ring gearing with said prongs on the projecting hub of the lower member; binding-screws connecting said central rod with the regular lamp-socket screw-shell and with a circuit-wire leading to a distant device; a circuit-bracket, angled and supplied with a resilient arm, and encircling said conducting-rod, and in electrical connection with one of said binding-screws; a metallic shell and an insulating-shell between the same and said socket-shell, the two latter properly cut away to admit the passage of the circuit-wires leading to the distant device; substantially as described.

In witness whereof I hereunto subscribe my name this 25th day of March, 1905.

CHARLES F. HOWES.

In presence of—

CHARLES W. WILKINS,
ALBERT D. MULLEN.