

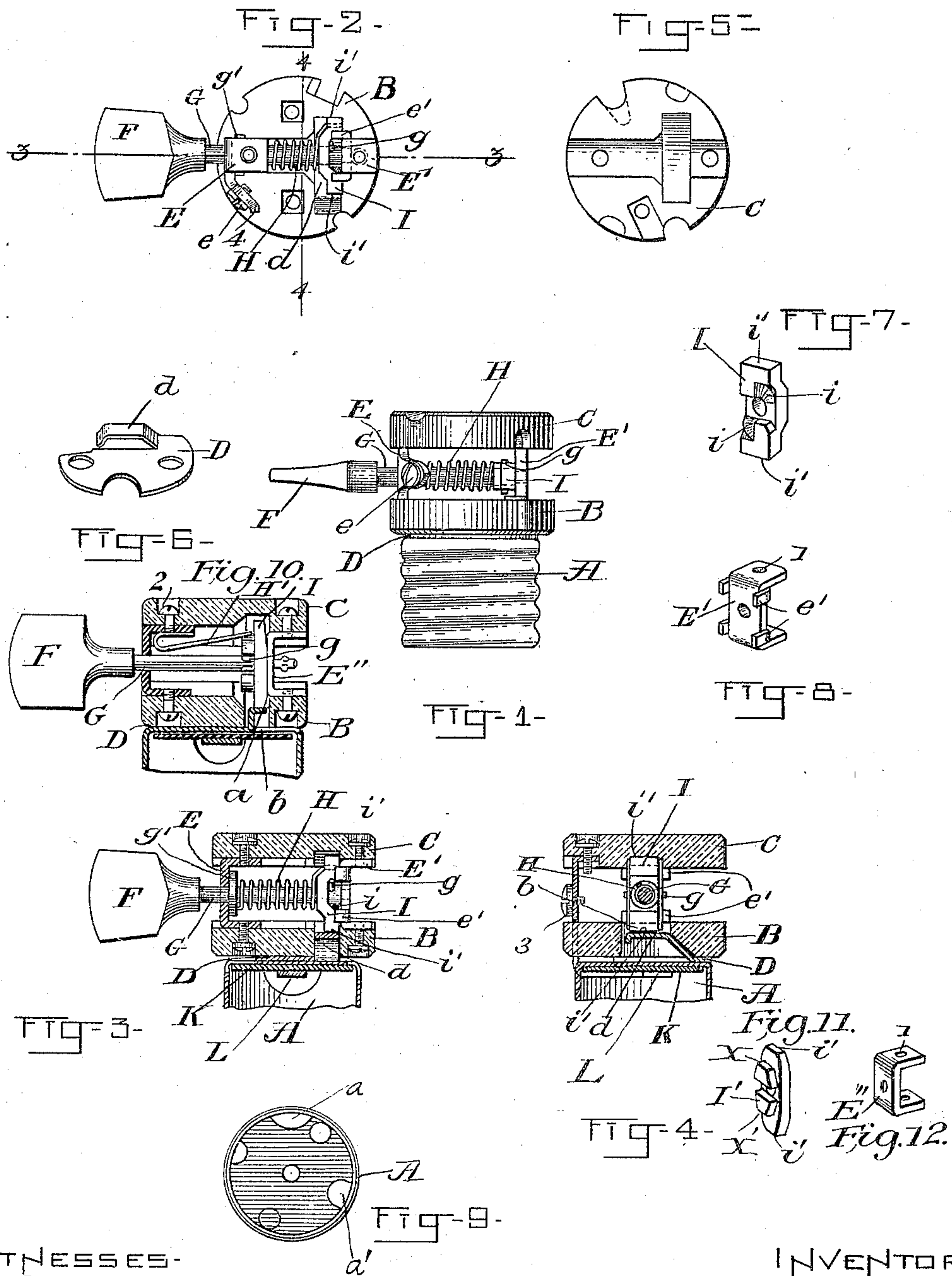
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PATENTED APR. 14, 1903.

G. H. PROCTOR.
ELECTRIC INCANDESCENT LAMP SOCKET.

APPLICATION FILED FEB. 3, 1902.

NO MODEL.



WITNESSES-

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ELECTRIC-INCANDESCENT-LAMP SOCKET.

SPECIFICATION forming part of Letters Patent No. 725,133, dated April 14, 1903.

Application filed February 3, 1902. Serial No. 92,244. (No model.)

To all whom it may concern:

Be it known that I, GUY H. PROCTOR, a citizen of the United States, residing at Somerville, in the county of Middlesex, State of Massachusetts, have invented a new and useful Improvement in Electric-Incandescent-Lamp Sockets, of which the following is a specification.

My invention consists in a new form of snap circuit-controller and of a combination of this with two disks and with the circuit connections, shell, and other parts of such lamps.

Referring to the drawings, Figure 1 is a view of the socket and shell. Fig. 2 is a top plan with disk C removed. Fig. 3 is a section on 3 3 of Fig. 2. Fig. 4 is a section on 4 4 of Fig. 2. Fig. 5 is a plan of the inner surface of disk C. Fig. 10 is a section in part, showing a modification. Fig. 6, 7, 8, 9, 11, and 12 are details of spring-plate, contact-piece, standard-support, and bottom of the shell, respectively.

Referring to said drawings, A is the shell, which differs from the usual shell in having a bottom part in place of a mere flange, *a* being a slot for contact L, and *a'* a slot for a screw *l* for holding the upper disk to standard E', as shown in Fig. 9.

B is the lower disk, formed with an opening *b* for depression *d* of spring-plate D, and C the upper disk.

D is the spring-plate, and *d* the depressed spring portion of said plate.

E E' are two supporting-standards, and *e* the circuit screw connection on standard E, and *e' e'* are lugs or projections on standard E'.

F is the hub-handle, and G the shaft connected therewith, having a pin *g* thereon and also a collar *g'* to hold said shaft in place against the stress of the spring H encircling the same. I is the circuit-closing piece loosely mounted on said shaft and having one end of the spring H connected to it, the other end of said spring being connected to the shaft. This circuit-closing piece I has two bevels *i i* on opposite sides of the same, Fig. 7, against which the pin or shoulder *g* on the shaft bears in rotating, while *i' i'* are the circuit-closing tips of the piece I.

K is an insulating-plate, of mica or similar substance.

A simpler modification of shaft, spring, and circuit-closing piece is shown in Figs. 10, 11, and 12, in which the collar *g'* is omitted and flat spring H' replaces spiral spring H, being attached to standard E by screw 2 and its free end always bearing against shoulders X X' of circuit-closing piece I', and standard E² replaces E', or, in other words, the standard is made without the lugs *e'* of Fig. 8.

It will be seen that upon inserting the ordinary lamp connection will be made with its base and the center-spring connection L, which extends to binding-screw 3 for one wire. The other wire is attached at binding-screw *e*, Fig. 2, to an arm, Fig. 4, on standard E. Thus the circuit when the current is turned on is through binding-screw *e*, arm 4, standard E, shaft G, tip *i'* of contact-piece, spring-plate D, shell A to the screw-shell of the usual lamp, and through the lamp-filament to center contact L. The contact is made and broken between the tips of the contact-piece and the depressed portion *d* of the spring-plate D.

The operation of my apparatus will be plain from the drawings and the above description. Assuming the circuit to be broken between the depressed spring part *d* of the spring-plate D and the tips of the circuit-closing piece I, it will be seen that rotating the shaft G by the hub-handle F will cause the pin *g* upon the shaft to bear against one or the other bevels *i* upon the circuit-closing piece I, thereby crowding the same against the stress of the spring H out, so as to enable it to pass a lug or projection *e'* upon the standard E', and thereupon to be snapped by the stress of the spring H, so as to bring one of the tips *i'* of said circuit-closing piece into contact with the depressed spring portion *d* of the spring-plate D, thereby establishing the circuit. A further quarter-rotation of said hub and handle will snap the circuit-closing piece I out of contact with said depressed spring portion *d*. If the simpler modification of Figs. 10, 11, and 12 be used, the only difference will be that rotating shaft

G will cause contact-piece I', Fig. 11, to snap from a horizontal into its vertical position, as shown in Fig. 10, against the stress of spring H', thus bringing a tip *i'* of the contact-piece into connection with the depressed portion *d* of the spring-plate D.

Having described my invention, what I claim is—

1. An electric-incandescent-lamp socket composed of the following parts: a socket-shell with bottom A, a lower disk B supporting said shell, an upper disk C, a spring-plate D having a depressed spring portion *d*, two supporting-standards E E', said standard E being provided with a circuit screw connection *e* and said standard E' being provided with lugs *e' e'*; a contact L with circuit screw connection 3, a handle connected with a shaft carrying a pin, adapted to move a circuit-closing piece, and a collar, a circuit-closing piece I formed with bevels *i i* and tips *i' i'*, a coiled spring H connecting said shaft and said circuit-closing piece, and an insulating-piece K.

2. In an incandescent-lamp socket a snap circuit-controlling device composed of two standards E E', said standard E' being provided with two lugs or projections *e' e'*, and said standard E being provided with a bearing for one circuit-connecting screw; a contact L with circuit screw connection 3, a hub-handle F, a shaft G, a pin *g* on said shaft and a collar *g'* also thereon; a circuit-closing piece I loosely on said shaft and constructed with the opposite beveled portions thereof *i i* and with two contact-tips thereof *i' i'*, and a spring H connected to said circuit-closing piece I and said shaft G; substantially as described and shown.

3. An incandescent-lamp socket composed

of a socket-shell, an insulating-disk supporting said shell and formed with an opening for a spring-plate, a second insulating-disk, two standards connecting said disks, a handle, shaft and contact-piece on said shaft constituting a circuit-breaker supported by said standards, a spring-plate adapted to be supported upon the disk supporting the shell and in electrical connection with said shell and having a depressed portion adapted for make and break of the contact with said circuit-piece, a center contact supported on one of the insulating-disks; circuit screw connection on one of said standards and a second circuit screw connection upon said contact, and an insulator between said spring-plate and center contact, all substantially as described and shown.

4. In an incandescent-lamp socket, the combination of an insulating-disk, a second insulating-disk having an opening for permitting contact of a circuit-breaker with a contact-spring, means for holding the two disks together, a revolving circuit-breaker supported between said disks, a contact-plate with a depressed portion and supported on the shell-supporting disk and said depression projecting through its opening; and a second contact-piece supported by one of said disks and bent over the center of the shell-supporting disk, and an insulator between said center contact-piece and said contact-plate, substantially as described.

In witness whereof I hereunto set my hand this 31st day of January, 1902.

GUY H. PROCTOR.

Witnesses:

FRED C. CHAMBERLIN,
JAMES A. HURLEY.