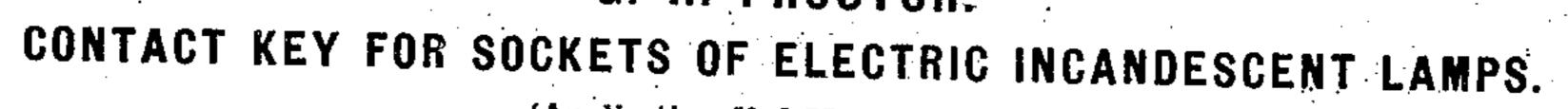
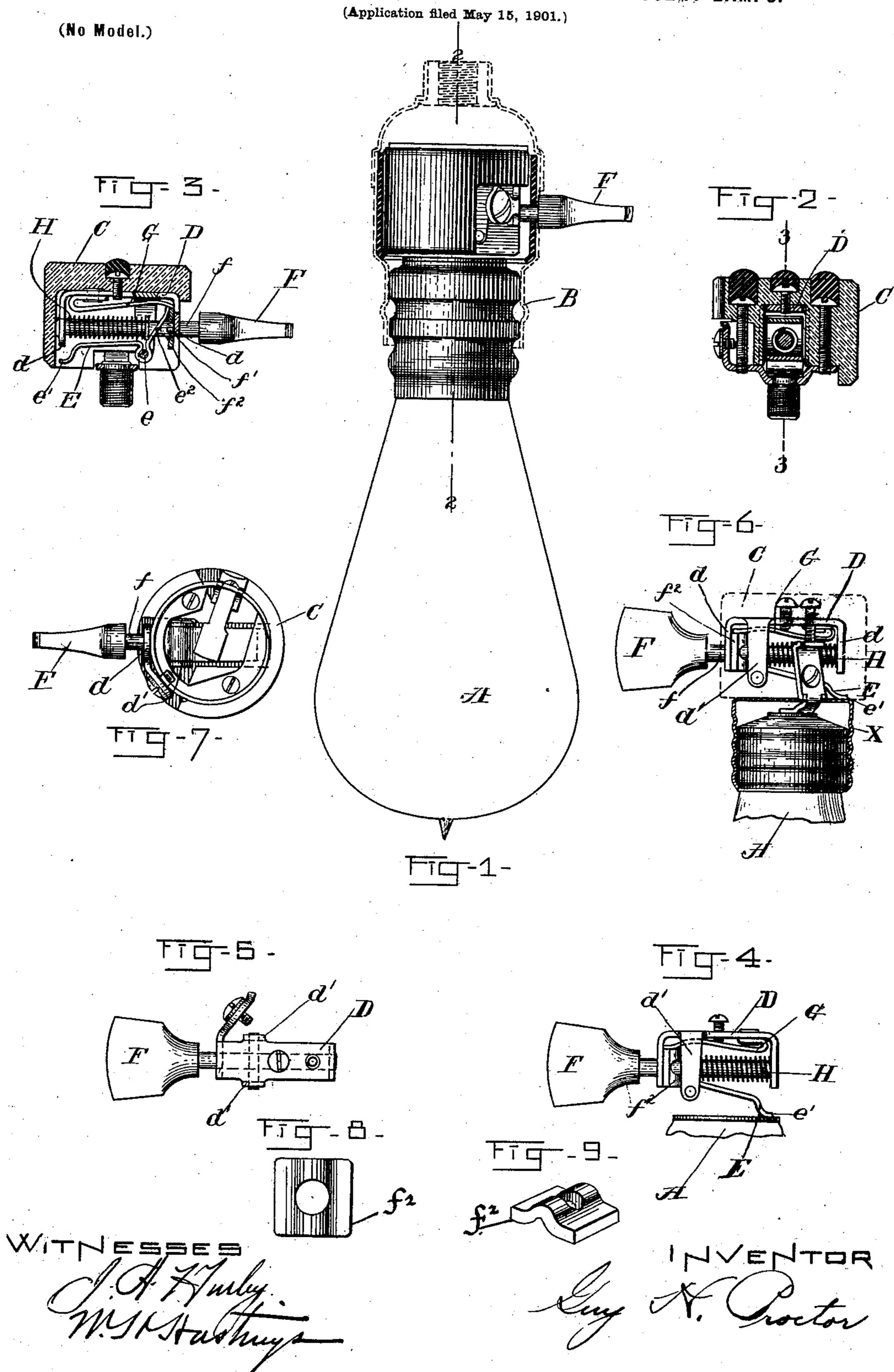
G. H. PROCTOR.





United States Patent Office.

GUY H. PROCTOR, OF SOMERVILLE, MASSACHUSETTS.

CONTACT-KEY FOR SOCKETS OF ELECTRIC INCANDESCENT LAMPS.

SPECIFICATION forming part of Letters Patent No. 685,295, dated October 29, 1901.

Application filed May 15, 1901. Serial No. 60,310. (No model.)

To all whom it may concern:

Be it known that I, GUY H. PROCTOR, a citizen of the United States, and a resident of Somerville, Middlesex county, Massachusetts, 5 have invented a new and useful Improvement in Contact-Keys for Sockets of Electric Incandescent Lamps, of which the following is a specification.

The object of my invention is an improved to contact-key for turning on and off the electric

current.

My invention consists in a device new in the construction of its parts and as a whole for turning on and off the electric current in 15 incandescent-lamp sockets.

My invention will be plain from the draw-

ings, in which—

Figure 1 is a side view of a lamp and socket of the Thomson-Houston variety, showing a 20 part of my invention. Fig. 2 is a section on line 22 of Fig. 1. Fig. 3 is a section on the line 3 3 of Fig. 2. Fig. 4 is a side view of my invention, showing the spring in contact with the lamp of Fig. 1. Fig. 5 is a plan view of 25 my invention. Fig. 6 is a side view of my invention applied in an Edison socket, the socket being shown in section. Fig. 7 is an underneath plan of my invention applied to an Edison socket, as shown in Fig. 6. Figs. 30 8 and 9 are details showing the wedge-piece f^2 , hereinafter described.

Similar letters throughout the drawings ap-

ply to similar parts.

I will now explain the drawings.

35 A is an incandescent lamp. The lamp may be of the Edison, Thomson-Houston, Westinghouse, or other variety.

> B is the shell of lamp A. C is the insulating-block.

D is a supporting piece or standard having | the upturned ends or ears d d to support the | sockets are too well-known to require further key-shaft and the upturned ears d' \bar{d}' to support the contact-spring.

E is the contact-spring, bent so as to jour-45 nal about the pivot e, supported in the ears d' d', and having the end e', which is the contact end, and substantially at right angles to that the end e^2 , by which it is operated.

F is the key-handle, and f its shaft, sup-50 ported in the ends d d. Upon the shaft f

perforated wedge f^2 , through which the keyshaft passes. The wedge f^2 is adapted to bear against the end e^2 of the spring E.

G is a spring adapted to steady the wedge 55

 f^2 in either of its two positions.

H is a coiled spring bearing against the end

 e^2 of the contact-spring E.

I will now explain the operation of my key. Referring to Fig. 3, it will be seen that the 60 end e' of the contact-making spring E is not in electrical contact with the lamp. Upon now turning the handle F either to the right or left the projection or cam f' will force the wedge-piece f^2 forward along the rod f and 65 press its apex against the arm e^2 of the contact-spring E, thus causing a rocking motion, causing the end e' to come in contact with the lamp. This movement has also compressed slightly the coiled spring H. Upon 70 turning the handle another quarter of a turn either backward or forward the apex of the wedge f' will be withdrawn from the arm e^2 and the coiled spring H will force the arm e^2 back into the position shown in Fig. 3 and of 75 course withdraw the end e' from contact with the lamp. It will be seen that a quarterturn in either direction from the position shown in Fig. 3 will make the contact, and after that is made a quarter-turn in either 80 direction will interrupt the contact between the end of the spring e' and the lamp.

My invention is as applicable to a Thomson-Houston socket as to an Edison socket, as will be seen by comparison of the draw- 85 ings, the only difference being that in the one case the contact will be made with the Edison shell X, as shown in Fig. 6, and in the case of the Thomson-Houston contact will be made with the lamp-base itself, as shown in 90 Fig. 4. The parts of both varieties of lamp-

description.

Having described my invention, what I claim is—

In an electric incandescent-lamp socket, a making and breaking device composed of the standard D having the ears d d to support the key-shaft, and the ears d' d' to support the pivot for the holding-spring, the contact- 100 spring E having the ends e', e^2 and the pivot is a rigid cam or projection f' and the loose e therefor, the key F, the key-shaft f, pin or

projection f' for moving the wedge-piece f^2 loosely on the key-shaft and serving to compress the coiled spring and also to move the contact-spring E to cause its end e' to make and break contact, holding-spring G for holding the wedge-piece in its various positions, and coiled spring H for restoring the contact-spring and wedge-piece to position when the

circuit is to be broken; substantially as described.

In witness whereof I hereunto set my hand this 14th day of May, 1901.

GUY H. PROCTOR.

In presence of— W. H. HASTINGS, J. H. HURLEY.