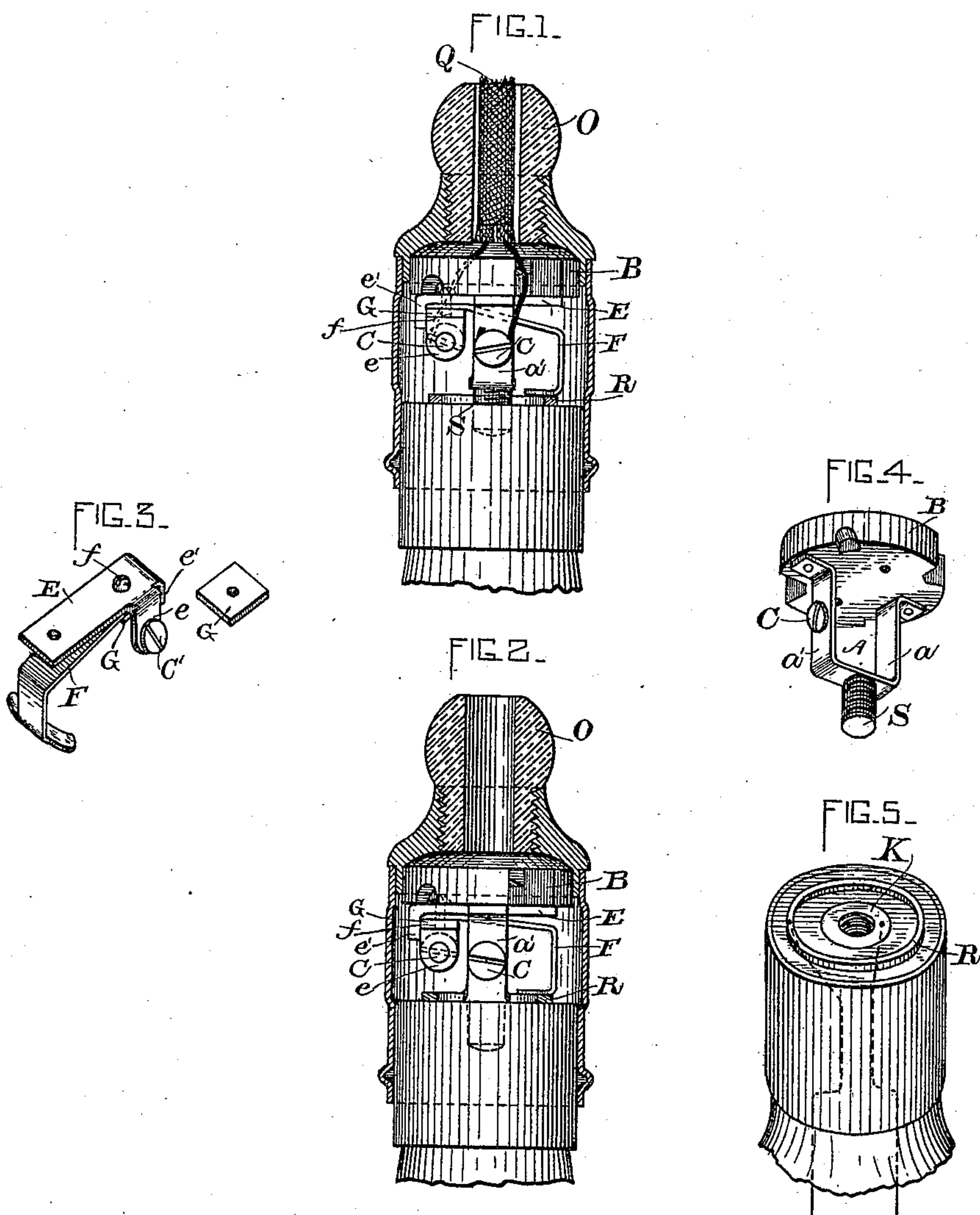


(No Model.)

G. H. ALTON.
SOCKET FOR INCANDESCENT LAMPS.

No. 450,605.

Patented Apr. 21, 1891.



WITNESSES.

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UNITED STATES PATENT OFFICE.

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SOCKET FOR INCANDESCENT LAMPS.

SPECIFICATION forming part of Letters Patent No. 450,605, dated April 21, 1891.

Application filed October 22, 1890. Serial No. 368,919. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. ALTON, a citizen of the United States, residing at Lynn, county of Essex, and State of Massachusetts, have invented a certain new and useful Improvement in Sockets for Incandescent Lamps, of which the following is a specification.

My present invention has to do with an incandescent-lamp socket; and it comprises certain features of construction outlined herein-after in the claims; the purpose of which is to provide a form of socket having few parts, which can be easily and cheaply manufactured, and which at the same time will preserve a good electrical connection between the terminals in the socket and lamp-collar, respectively.

In the accompanying drawings, illustrating my improvements, Figure 1 is a vertical section taken through the socket, and showing also the lamp-collar. Fig. 2 is a similar view illustrating the lamp-collar fastened to the socket in its proper operative position. Figs. 3 and 4 are details of the socket-terminals, and Fig. 5 illustrates in perspective the lamp-collar.

The socket comprises a form or holder of any desired construction, as at O in Fig. 1, where the wires leading to the lamp are also shown made up in a flexible cord Q, as is customary. The holder has an insulating base-piece B, made of fiber, glass, or other insulating material. To this base a U-shaped terminal A, Fig. 4, is attached, which has two side arms a a' , separated by a considerable space, and the screw portion S at the bottom of the U, which is adapted to enter a screw-threaded bushing K in the lamp-collar. One of the circuit-wires will be connected to this U-shaped terminal by a screw or clamp C. On the bottom of the insulating-base is riveted a metal re-enforcing plate E, Fig. 3, having two clips or flanges e e' bent over, as shown. The second socket-terminal consists of a plate-spring F, of phosphor-bronze or other suitable metal, which at its inner end is fastened to the re-enforcing plate by a screw or rivet f , which also passes through a nut G, clamping this end of the spring. The terminal F extends down between the arms

a a' , so as to preserve a maximum insulation distance between the two branches of the circuit, and its free end, which is bent back, as shown, makes a rubbing contact with the contact-ring R, Fig. 5, upon the lamp-collar, which puts the spring under slight tension when the lamp is in place. The return-wire is connected to the ear e by the screw C', and when the lamp is in position (shown in Fig. 2) the circuit through the burner is complete, as will be readily understood.

With a lamp-socket of this construction the lamp will not readily work loose by reason of any vibrations, and therefore a good contact will be maintained. There is also secured a wide separation of the metal parts of the socket relatively to the space occupied, so that short-circuiting within the socket is not apt to occur. The terminals being all of a simple form can be readily stamped out of metal and the different parts easily assembled, so that the socket can be manufactured at a comparatively low cost.

What I claim as new, and desire to secure by Letters Patent, is—

1. A lamp-socket comprising an insulating-base, the U-shaped terminal attached thereto and adapted to be screwed into the collar of the lamp, thereby making connection with one lamp-terminal, and the spring-terminal permanently fixed to the base at one end and having a free end which is pressed into engagement with the second lamp-terminal upon screwing the lamp to the socket.

2. A lamp-socket having an insulating-base, the U-shaped terminal having side arms fastened to the base, and the spring-terminal permanently fixed at one end to the base and extending between the arms of the U-shaped terminal at substantially a maximum insulation distance therefrom, said terminals being adapted to engage corresponding terminals upon the lamp when the latter is screwed to the socket, as described.

3. A lamp-socket having an insulating-base, the U-shaped terminal attached thereto and provided with a central screw portion S, the re-enforcing plate E, attached to the base, and the spring-terminal fixed to the plate and extending between the arms of the first-named terminal.

4. The combination of the lamp-collar having the screw-threaded bushing and contact-ring, with the socket comprising the U-shaped terminal and screw adapted to enter
5 said socket, and the plate-spring terminal permanently fixed to the base and having a free end engaging the contact-ring, as described.

In testimony whereof I have hereunto set my hand this 18th day of October, 1890.

GEORGE H. ALTON.

Witnesses:

JOHN W. GIBBONEY,
WILLIAM O. WAKEFIELD.