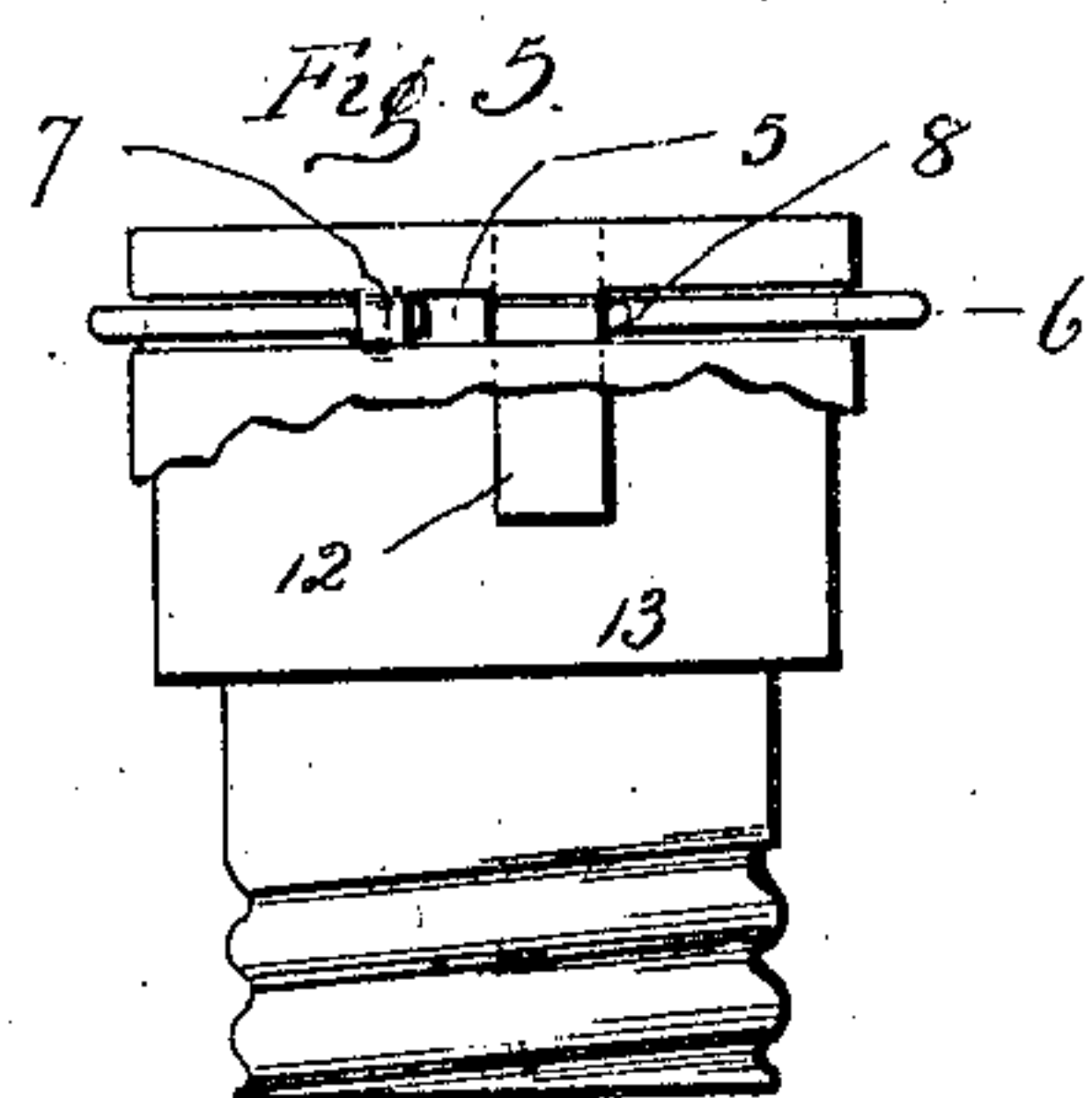
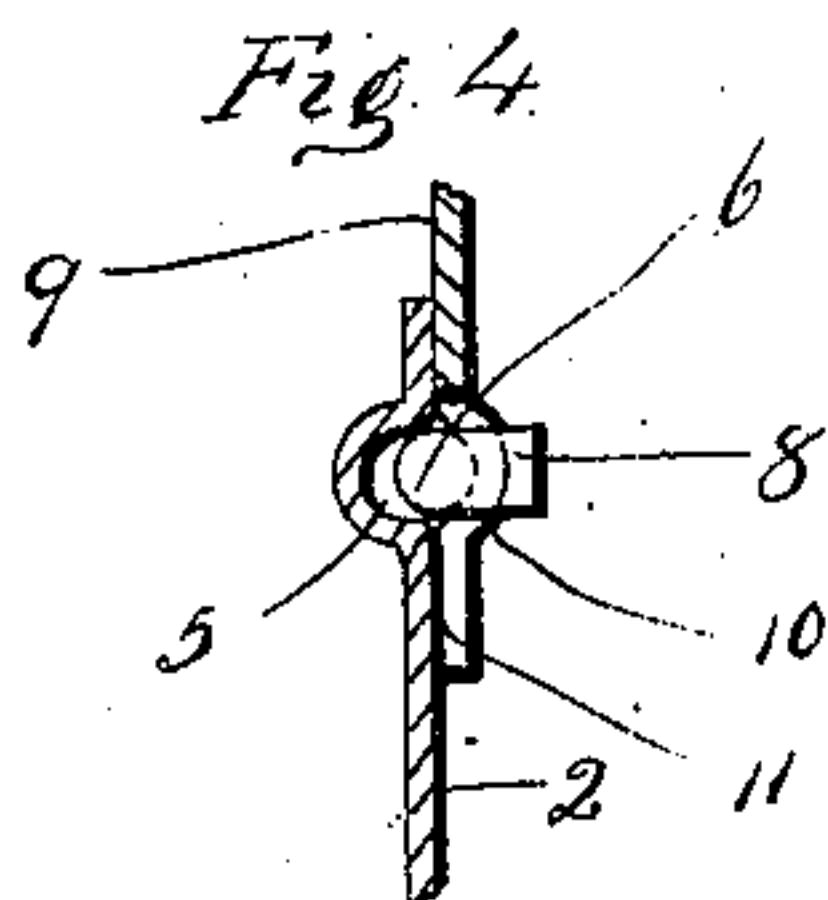
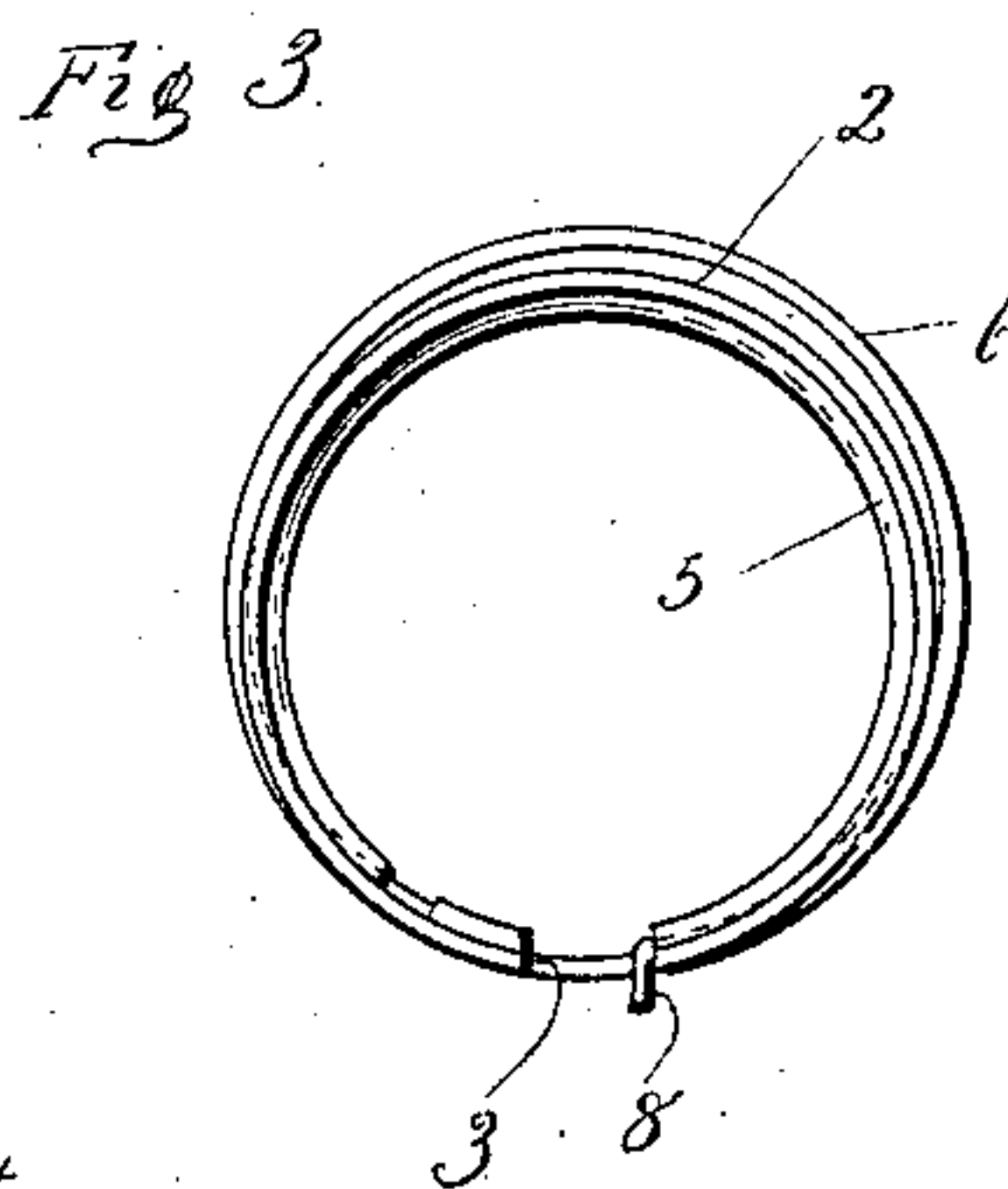
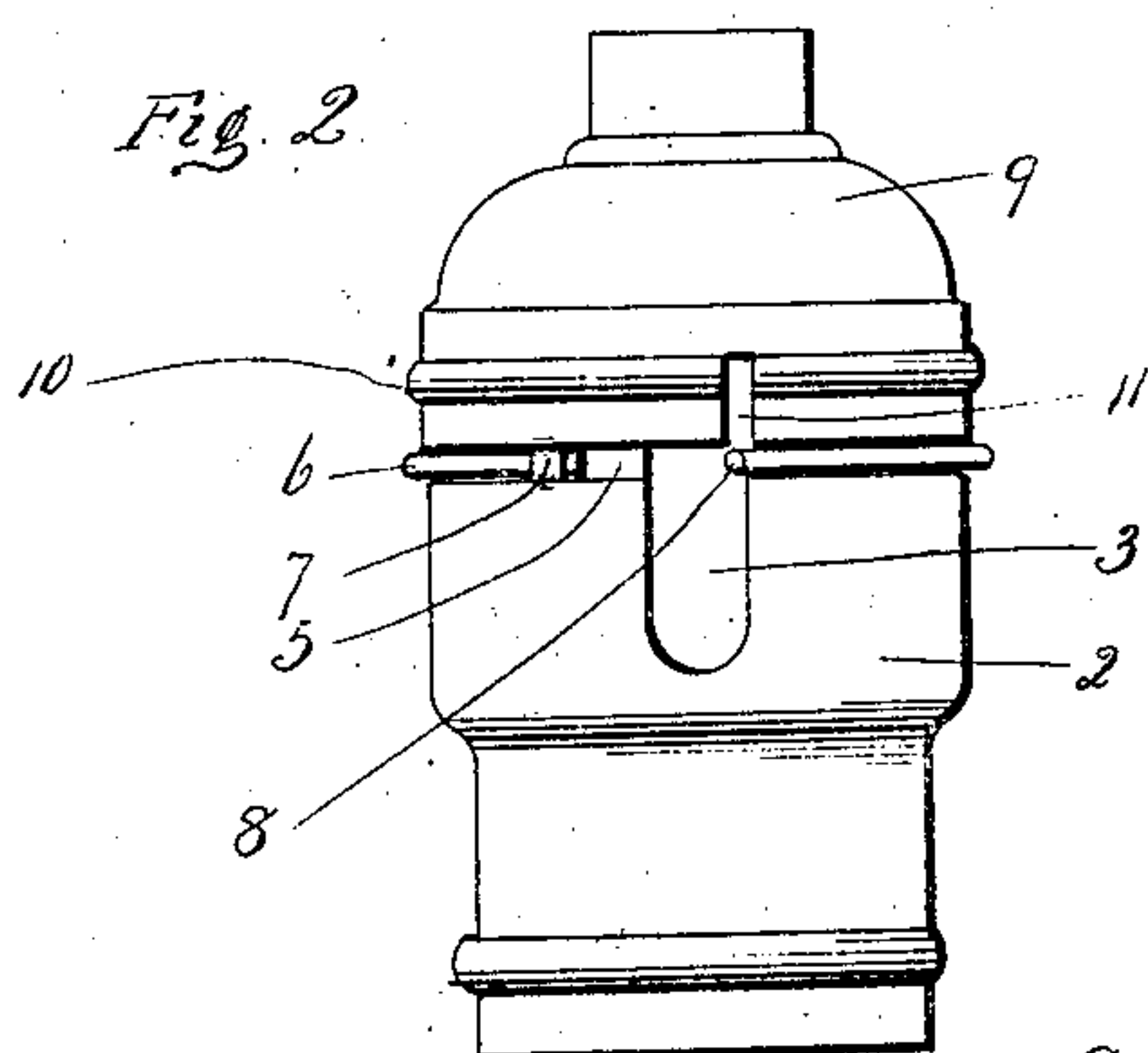
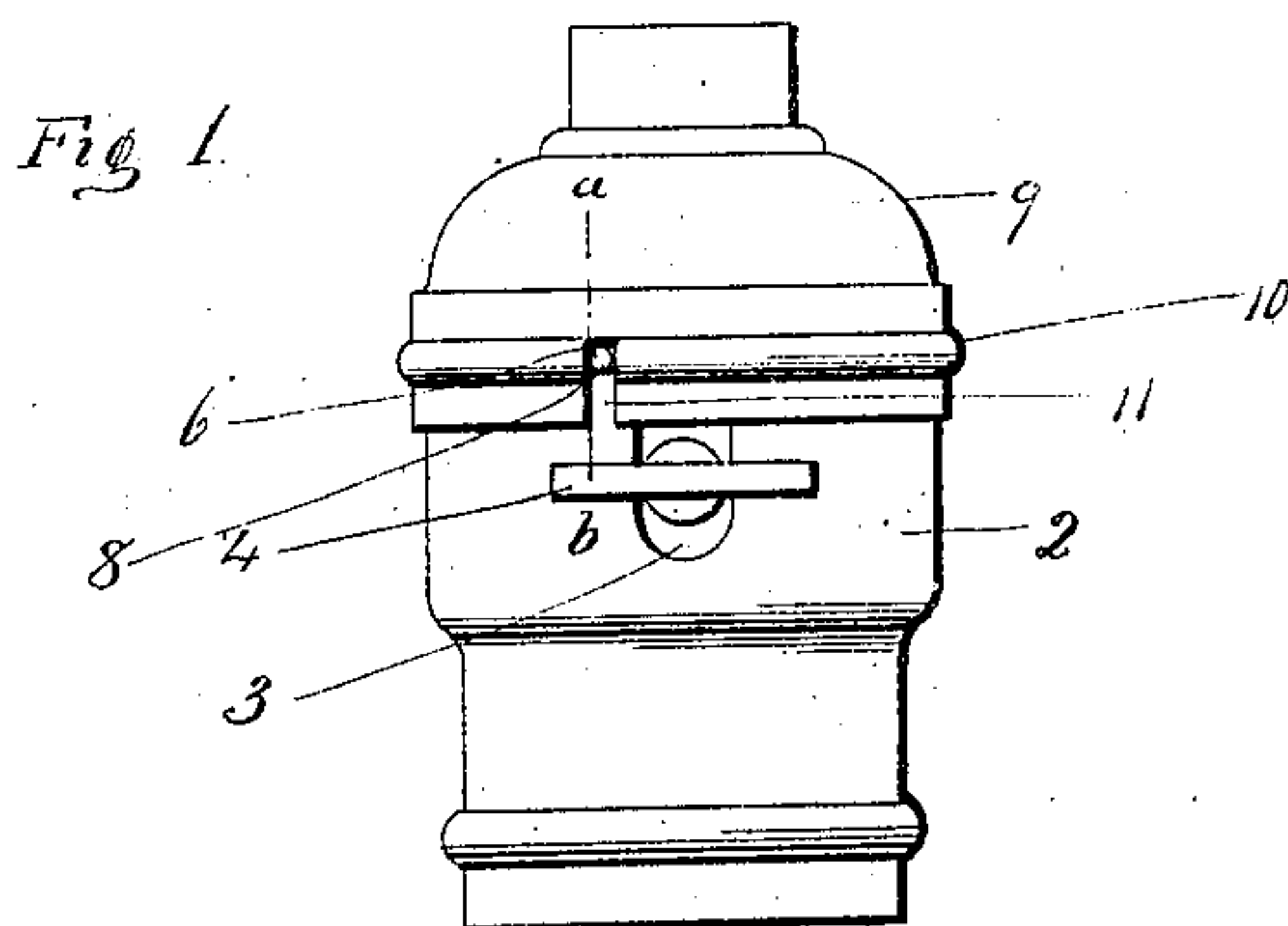


A. L. WILLIAMS.
 INCANDESCENT LAMP SOCKET.
 APPLICATION FILED JAN. 11, 1909.

921,935.

Patented May 18, 1909.



Witnesses
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UNITED STATES PATENT OFFICE.

ARTHUR L. WILLIAMS, OF WATERBURY, CONNECTICUT, ASSIGNOR OF ONE-HALF TO CHARLES DOESCHER, OF WATERBURY, CONNECTICUT.

INCANDESCENT-LAMP SOCKET.

No. 921,935.

Specification of Letters Patent.

Patented May 18, 1909.

Application filed January 11, 1909. Serial No. 471,739.

To all whom it may concern:

Be it known that I, ARTHUR L. WILLIAMS, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Incandescent-Lamp Sockets; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1 a side view of a socket for incandescent lamps constructed in accordance with my invention. Fig. 2 a side view of the shell and cap showing the cap partially removed. Fig. 3 a top or plan view of the shell with the cap removed. Fig. 4 a sectional view on the line *a—b* of Fig. 1. Fig. 5 a broken side view illustrating the keyless socket.

This invention relates to an improvement in incandescent lamp sockets, and particularly to means for securing the shell to the cap, the object being a simple arrangement of parts whereby the cap is firmly locked with the shell, but which permits of ready separation, and the invention consists in the construction hereinafter described and particularly recited in the claims.

In carrying out my invention as herein shown, I employ a shell 2 of substantially usual design formed either with or without a deep notch 3 for a key 4 depending on whether or not a key is employed. Near the upper end of the socket is an annular groove 5, and secured in this groove is a spring ring 6. One end of this spring is fastened to the socket, and this may be done in a variety of ways. As herein shown, slits are made in the groove and the metal between the slits is thrown out to form a bridge 7 beneath which the end of the spring is held. The free end of the spring is turned out to form a finger 8. The cap 9 which is adapted to be attached to the fixture in the usual way is formed near its lower edge with an internal annular groove 10 and with a narrow notch 11 in its lower edge. This notch is provided so that the cap may be set down over the body and have the finger 8 of the spring enter the notch 11.

The cap thus engaging the end of the spring is turned upon the body which coils the spring and draws it into the groove 5 to such an extent that the cap may be passed down onto the socket. When it is in place the cap or socket is released and the spring will rotate one with relation to the other so that the spring will again expand and enter the groove in the cap, and thereby unites the cap and shell. To separate the cap from the shell, the two are turned with relation to each other so as to compress the spring which permits the cap and body to be readily separated. The locking function therefore takes place automatically; the parts are conveniently interlocked and when in place firmly held, yet permitted to be readily separated. In key sockets the key prevents the porcelain block in the shell from turning; but in keyless sockets some means must be provided to prevent this turning, and this I accomplish by cutting away a portion of the groove 5 as indicated in Fig. 5, to form a clearance for the lug 12 formed on the porcelain block 13. When in position the block is held against turning by the engagement of the sides of the lug with the sides of the groove in the body.

I claim:—

1. An incandescent lamp socket comprising a shell formed near its upper end with an annular groove, a ring-like spring having one end secured in said groove and formed at its opposite end with an outwardly projecting finger, combined with a cap having an annular groove, and a notch in its lower edge, which notch is adapted to engage with the outwardly turned end of the spring which spring is adapted to stand between the grooves in the shell and cap, whereby the shell and cap are interlocked, substantially as described.

2. An incandescent lamp socket comprising a shell formed near its upper end with an annular groove, a ring-like spring having one end secured to the shell in said groove, the other end of the spring formed with an outwardly projecting finger a portion of said groove cut away, a block within the shell formed with a lug entering the cut-away portion of the groove, whereby the block is held against turning, a cap formed with an annu-

lar groove, and a notch in its lower end, said notch adapted to engage with the finger at the end of said spring whereby said spring may be contracted to permit the cap to be
5 passed over or removed from the top of the shell and interlocked therewith by said spring, substantially as described.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

ARTHUR L. WILLIAMS.

Witnesses:

LOUIS A. EITEL,
WILLIAM T. LEGGETT.