

(No Model.)

F. VOIGT.
LAMP SOCKET.

No. 463,763.

Patented Nov. 24, 1891.

FIG. 1.

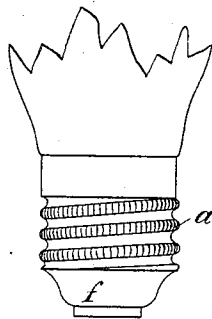


FIG. 2.

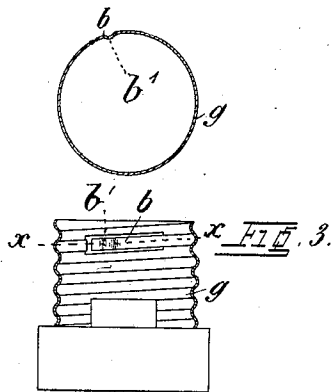


FIG. 6.

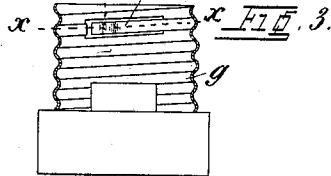
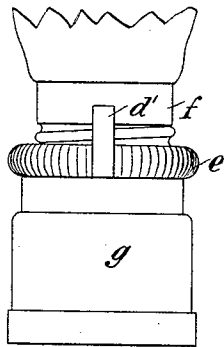


FIG. 4.

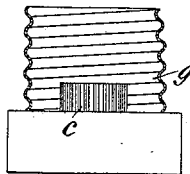


FIG. 5.

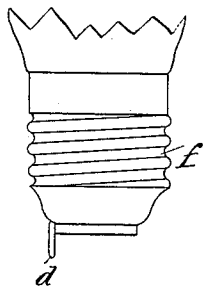
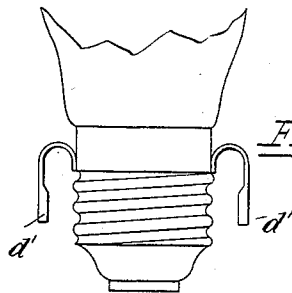


FIG. 7.



Witnesses:

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UNITED STATES PATENT OFFICE.

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LAMP-SOCKET.

SPECIFICATION forming part of Letters Patent No. 463,763, dated November 24, 1891.

Application filed November 18, 1890. Serial No. 371,800. (No model.) Patented in Germany July 19, 1890, No. 55,527; in England September 15, 1890, No. 14,536; in Belgium September 15, 1890, No. 91,993; in France September 15, 1890, No. 208,251, and in Italy September 30, 1890, XXIV, 28,255, LV, 335.

To all whom it may concern:

Be it known that I, FERDINAND VOIGT, engineer, a subject of the Emperor of Germany, residing at Bockenheim, near Frankfort-on-the-
5 Main, in the Empire of Germany, have invented certain new and useful improvements relating to means for connecting glow-lamps to their holders and for connecting together the parts of other electrical apparatus, (for
10 which I have obtained Letters Patent in Great Britain, No. 14,536, dated September 15, 1890; in Belgium, No. 91,993, dated September 15, 1890; in Italy, Vol. 24, No. 28,255, Vol. 55, No. 335, dated September 30, 1890;
15 in France, No. 208,251, dated September 15, 1890, and in Germany, No. 55,527, dated July 19, 1890;) and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others
20 skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

25 The invention relates to electric contacts, and has for its object to provide means for interlocking the contacting parts, especially the foot of an electric incandescent lamp and its safety plug or cap, which are usually
30 screwed together, and which are liable to unscrew from various causes, more especially when the lamp is subjected to vibration.

To these ends the invention consists in the combination, with these electric contacts, of a
35 locking device adapted to interlock said contacts and prevent their accidental relative displacement, as will be fully described hereinafter in conjunction with the accompanying drawings.

40 Although my invention comprehends a locking device by means of which the electric contacts referred to may be rigidly locked together, so as to prevent any motion of either of the parts without removing or disconnecting
45 the locking device, yet in practice it is desirable, and I prefer, to so construct the locking device that the parts will be held against accidental displacement, but may be revolved one upon or within the other by the

application of a power greater than that which
50 in use may operate to move said parts. The means employed to this end may be variously modified without departing from the nature of my invention, as will hereinafter appear.

In the drawings, Figure 1 shows in elevation
55 the foot of an electric incandescent lamp. Fig. 2 is a section of the safety plug or cap taken on line *xx* of Fig. 3, which is a vertical sectional elevation of said plug or cap. Figs.
60 4 and 5 are views, similar to Figs. 3 and 1, respectively, illustrating a modification in the construction of the interlocking device; and Figs. 6 and 7 are elevations illustrating the
65 application of my invention to the Edison incandescent electric lamp.

It has hereinbefore been stated that my invention comprehends a locking device that will so interlock the parts *f* and *g* as to be im-
70 movable unless the interlocking means are disconnected or removed. This may be effected in various ways, as by a screw extending through said parts, or a pin, or by means of a spring-latch having a stud fitting into a
75 hole formed in both parts and in register with each other; but, as stated, I prefer to so arrange the interlocking devices as that the
parts may be revolved one upon or within the other by the application of sufficient power.

Referring to Figs. 1, 2, and 3, the salient
80 portion or thread of the male screw on the lamp-foot *f* is milled, as shown at *a*, and, as shown in Figs. 2 and 3, the sunken portion or thread of the female screw in the plug or
85 cap *g* has a portion cut out to form an elastic tongue *b*, the free end of which is provided with a more or less wedge-shaped portion or
tooth *b'*, adapted to engage the grooves in the face of the thread on the lamp-foot.

It will be seen that by the means described
90 the parts *f* and *g* will be locked by the spring-lock *b* against accidental rotation; but that by the application of sufficient power the plug or cap *g* can be revolved on the foot *f* of the
95 lamp for the purpose of screwing said cap to or unscrewing it from said foot *f*.

In Fig. 4 I have shown the plug or cap *g* as provided with a small locking-cylinder *c*, arranged axially therein, the periphery of which

cylinder is also milled or corrugated, an elastic or spring-locking dog or arm *d* being secured to the lower end of the foot *f* of the lamp in a position to engage the corrugated or toothed periphery of the locking-cylinder.

In Figs. 6 and 7, which illustrate my invention in its application to the Edison incandescent lamp, the ring *e*, which is usually made of an insulating material, has its periphery milled or corrugated, or provided with teeth, and to the foot *f* of the lamp is secured a spring locking-dog *d'*, or a plurality of such, adapted to engage the grooves in the ring.

Having thus described my invention, what I claim is—

1. In electric screw-contacts, the combination, with one of the elements of the contact having a serrated or toothed thread, of the co-operating element provided with a slot and an elastic or yielding locking-dog projecting through said slot and engaging the said serrated thread, said dog operating to

lock the elements against accidental rotation in either direction, but yielding and relieving said elements when either of them is forcibly revolved, for the purpose set forth.

2. In electric screw-contacts in which both elements are constructed of sheet metal, the combination, with one of the elements having a serrated or toothed thread, of the other element provided with an elastic or yielding locking-tooth engaging the serrations in the thread of the co-operating elements and operating to lock both elements against accidental rotation in either direction, but yielding and releasing said element when either one of them is forcibly revolved, for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FERDINAND VOIGT.

Witnesses:

ALVESTO S. HOGUE,
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