

No. 648,517.

Patented May 1, 1900.

K. OCHS.

ELECTRICAL GLOW LIGHT WITH ILLUMINATING BODY OF SECOND CLASS CONDUCTOR.

(Application filed Sept. 16, 1899.)

(No Model.)

Fig 1.

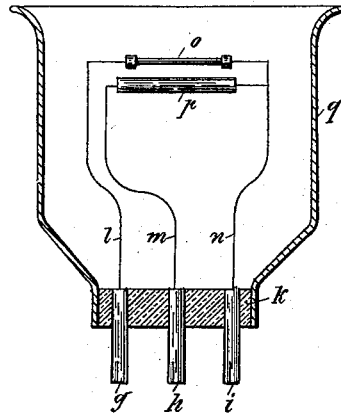
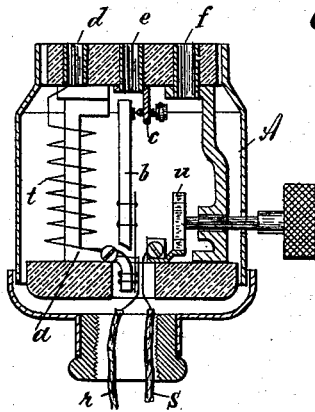


Fig. 2.



Witnesses
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KARL OCHS, OF BERLIN, GERMANY.

ELECTRICAL GLOW-LIGHT WITH ILLUMINATING-BODY OF SECOND-CLASS CONDUCTOR.

SPECIFICATION forming part of Letters Patent No. 648,517, dated May 1, 1900.

Application filed September 16, 1899. Serial No. 730,664. (No model.)

To all whom it may concern:

Be it known that I, KARL OCHS, a subject of the Emperor of Germany, residing at Berlin, Germany, have invented certain new and useful Improvements in Electrical Glow-Lights with Illuminating-Bodies of Second-Class Conductors, of which the following is a specification.

This invention relates to improvements in electric lamps with illuminating bodies or filaments composed of second-class conductors, (electrolytes.)

The lamp consists of a base which carries the illuminating-body and a lamp-holder in the form of a switch-lamp holder for receiving the base.

In the accompanying drawings, Figure 1 is a transverse vertical section through the lamp proper, and Fig. 2 is a transverse vertical section through the socket.

In the drawings, *a* is an electromagnet in the base *A*, having a spring-armature *b*, the deflection of which is limited by means of the set-screw *c*. The spring-contact pins *g h i* of the lamp-base *k* correspond to the tubular openings *d e f*, which they enter. The base *k* also carries the conducting-wires *l m n*, running to the illuminating-body *o* and to the heating-body *p*, as well as a globe *q*. Of the current-conducting wires or leads *r s* the one, *r*, runs to the coil *t* of the electromagnet *a* and its armature *b*. The other, *s*, runs to the switch *u* and thence to the contact *f*.

When the lamp is put into the circuit by turning the switch, the current passes from the wire *r* through the armature *b* to the contact set-screw *c* over contacts *e h* to the main conductor *m* and the heating-body *p*, whence it returns through *n i f u* to *s* for the illuminating and heating bodies. When the illuminating body or filament *o* has become a conductor in consequence of its being heated by the heating-conductor, the current passes through the coil *t* of the electromagnet *a* and through *d g l o* to the common return-wire *n*. The armature *b* is now attracted and the heating-current interrupted at the screw *c*. The spring sliding contacts *d e f g h i* may be replaced according to circumstances by other known contact arrangements, such as those of the Edison or Swan system.

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

1. In a lamp of the character described, the combination of three leading-in wires and a glower and a heater, one leading-in wire being common to the glower and heater and the other two being connected to the glower and heater respectively, combined with a socket with three contacts coöperating with the leading-in wires, a hand-switch for the common leading-in wire and an automatic interrupter for the leading-in wire in circuit with the heating device.

2. In a lamp of the character described, the combination of three leading-in wires and a glower and a heater, one leading-in wire being common to the glower and heater and the other two connected to the glower and heater respectively, combined with a socket with three contacts coöperating with the leading-in wires, a hand-switch for the common leading-in wire and an electromagnet in circuit with the glower and governing means for interrupting the circuit of the heating device.

3. In a lamp of the character described, the combination of a heating-circuit, a lighting-circuit comprised in part by a conductor of the second class, said lighting and heating circuits being supplied with current from a common source, and a socket provided with automatic means for depriving the heating-circuit of current and means for depriving the lighting-circuit of current to extinguish the lamp.

4. In a lamp of the character described, the combination of a heating-circuit, a lighting-circuit comprised in part by an illuminating-body, the said heating-circuit being adapted to heat the said illuminating-body and a socket provided with separate means for depriving the heating and lighting circuits of current, substantially as described.

5. In a lamp of the character described, combination of a glower and a heater therefor, and a socket provided with electromagnetic means for depriving the heater of current and means for depriving the glower of current to extinguish the light.

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Witnesses:

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