

(No Model.)

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REGULATOR FOR INCANDESCENT ELECTRIC LAMPS.

No. 572,421.

Patented Dec. 1, 1896.

Fig 1.

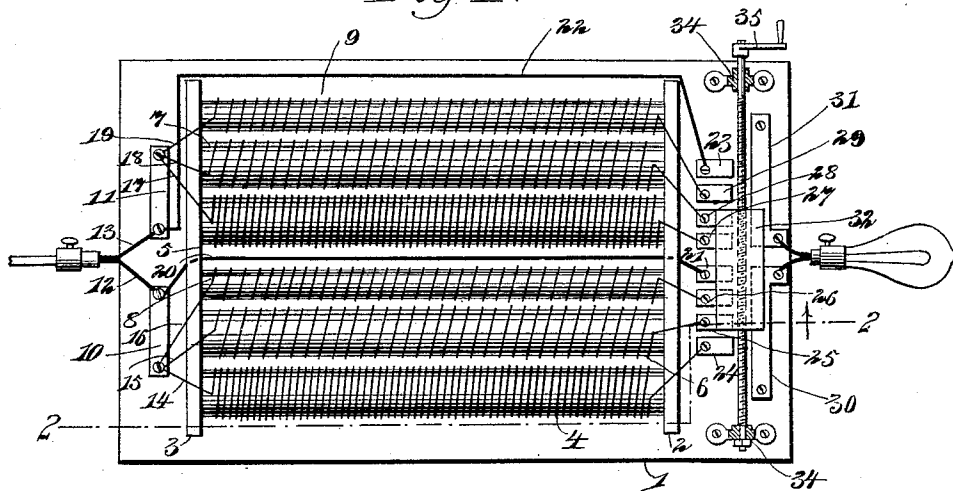


Fig. 2.

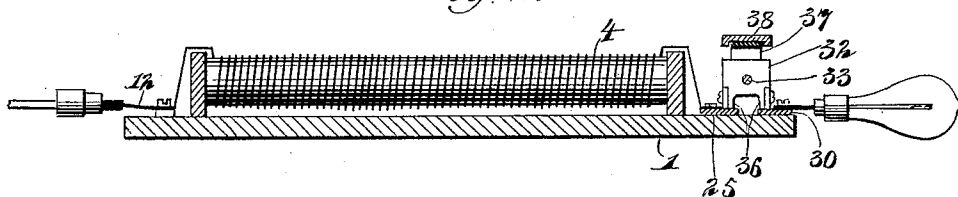


Fig. 3.

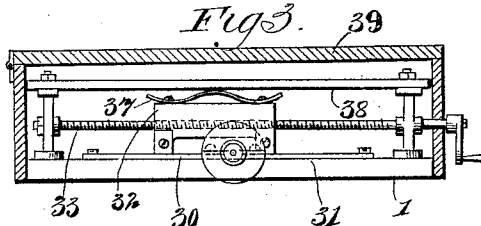
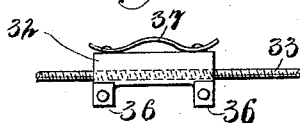
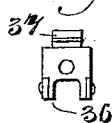


Fig 4.



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Fig. 5.



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REGULATOR FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 572,421, dated December 1, 1896.

Application filed May 29, 1896. Serial No. 593,553. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HAWKER, of Point St. Charles, Montreal, in the Province of Quebec and Dominion of Canada, have invented new and useful Improvements in Regulators for Currents of Incandescent Electric Lamps and other Devices, of which the following is a full, clear, and exact description.

This invention relates to devices for regulating the amount of current flowing through an incandescent electric lamp or other electrical device, whereby the light may be made more or less intense, thus making the device of value in sick-rooms or hospitals or in other places where it may be desired to turn down the light the same as may be done with a gas-light without entirely extinguishing the same.

I will describe a regulator embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a top plan view of a regulator embodying my invention. Fig. 2 is a section on the line 2 2 of Fig. 1. Fig. 3 is a transverse section. Fig. 4 is an elevation of a sliding contact-block, and Fig. 5 is an end view thereof.

Referring to the drawings, 1 designates a suitable base of insulating material having transverse uprights 2 3, which support pairs of resistance-coils, one pair differing in resistance from the other pairs. I have here shown a pair of resistance-coils 4 5, a pair of resistance-coils 6 7, and a pair of resistance-coils 8 9. At one end of the base 1 are secured conductor-plates 10 11, which have connection with the main or line wires 12 13. From the plate 10 a wire 14 connects with the coil 4, a wire 15 connects with the coil 6, and a wire 16 connects with the coil 8. From the plate 11 a wire 17 extends to the coil 5, a wire 18 extends to the coil 7, and a wire 19 extends to the coil 9. From the plate 10 an ordinary lead-wire 20 extends to a contact-plate 21 at the forward end of the base, and from the plate 11 an ordinary lead-wire 22 extends to a contact-plate 23 at said end of the base.

Arranged in line with the contact-plates 21

23 are contact-plates 24, 25, 26, 27, 28, and 29, the plate 24 being in engagement with the resistance-coil 4, the plate 25 in engagement with the resistance-coil 6, the plate 26 in connection with the coil 8, the plate 27 in connection with the coil 5, the plate 28 in connection with the coil 7, and the plate 29 in connection with the coil 9. Forward of the several plates are two long contact-plates 30 and 31, with which connect the wires leading to a lamp.

Adapted to engage with the two plates 30 and 31 and with pairs of the plates connecting with the resistance-coils is an insulating-block 32. The body portion of this block is provided with a longitudinally-extended threaded perforation, through which a screw-rod 33 extends, the said screw-rod having bearings in blocks 34, mounted on the base 1, and one end of this screw-rod is provided with a crank 35. At each of its lower corners the block 32 is provided with a downwardly-extended lug 36, the front one being intended to engage with the plates 30 31 and the rear one to engage with pairs of plates connecting with the resistance-coils.

The contact-block 32 may be provided with a suitable retarding device. As here shown the retarding device consists of a spring 37, secured to the upper side of the block and adapted to bear against a bar 38, secured at its ends to upward extensions of the bearing-blocks 34.

In operation, should a full light be desired, the block 32 will be moved into engagement with the contact-plates 21 and 23, which, as before stated, are in direct communication with the main lead-wires. Should it be desired to slowly lower the light, the block will be slid along to engage with the contact-plates 29 and 26, which comprise the pair operated in connection with a pair of coils 8 and 9. The light may be regulated to still lower intensity by moving the block into engagement with the plates 25 and 28; and to turn it still lower the block will be placed in connection with the plates 24 and 27.

The whole device may be inclosed in a suitable boxing of insulating material, as indicated at 39 in Fig. 3. I have here shown the device as in connection with a single lamp, but it is obvious that the device may be made

of suitable size to operate in connection with a series of lamps, which will make it very useful for regulating the foot-lights on a theater-stage.

5 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A current-regulator for electric lamps and other devices, comprising pairs of resistance-coils, the resistance of one pair of coils being greater than that of another pair of coils, connections between the several coils, conductors adapted for engagement with the main lead-wires, a contact-plate for each of
10 the coils and having connection therewith,
15 the coils and having connection therewith, lamp-circuit plates, and a sliding contact-block adapted for engagement with said lamp-circuit plates and with pairs of plates connected with the resistance-coils, substantially
20 as specified.

2. A current-regulator for electric lamps and other devices, comprising pairs of resistance-coils adapted for connection at one end with the main lead-wires, an independent

contact-plate having connection with each 25 coil, other contact-plates adapted for connection with the main lead-wires, lamp-circuit plates, a contact-block adapted to close the circuit between the lamp-circuit plates and a pair of plates connecting with the coil, and a 30 screw-rod passing through a tapped opening in said contact-block whereby the block may be moved, substantially as specified.

3. A current-regulator for electric lamps and other devices, comprising pairs of resistance-coils, the resistance of one pair differing from that of another, means for connecting the pairs of coils with the main lead-wires, contact-plates having connection with the coils, lamp-circuit plates, a screw-operated 40 block for closing the circuit between pairs of contact-plates and the lamp-circuit plates, and a retarding device on said block, substantially as specified.

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Witnesses:

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