(No Model.) 2 Sheets—Sheet 1.

W. H. CONNELL.

SUPPORT FOR ELECTRIC LIGHTS.

No. 518,713. Patented Apr. 24, 1894.

Fig. 1.

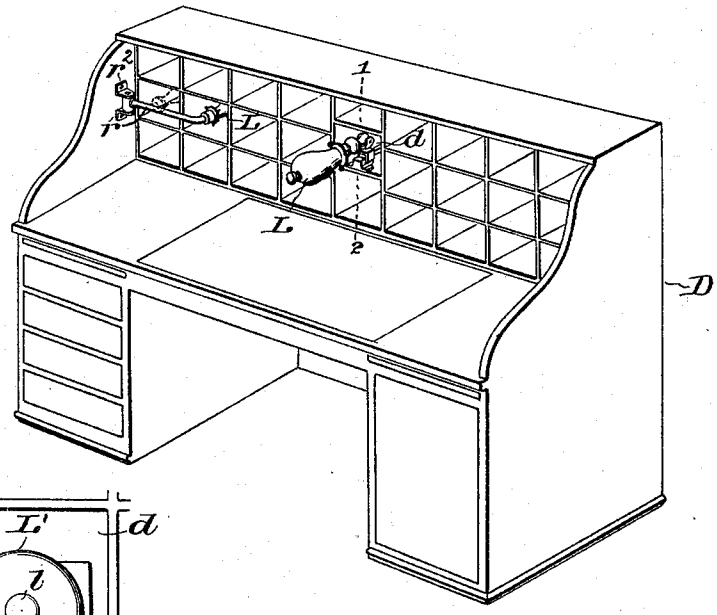


Fig. 4.

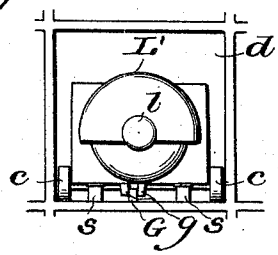


Fig. 2.

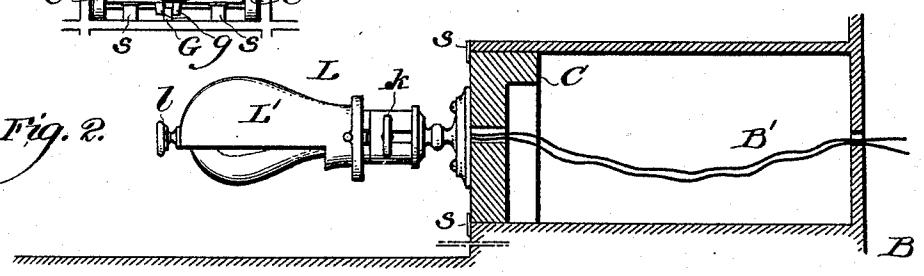


Fig. 3.

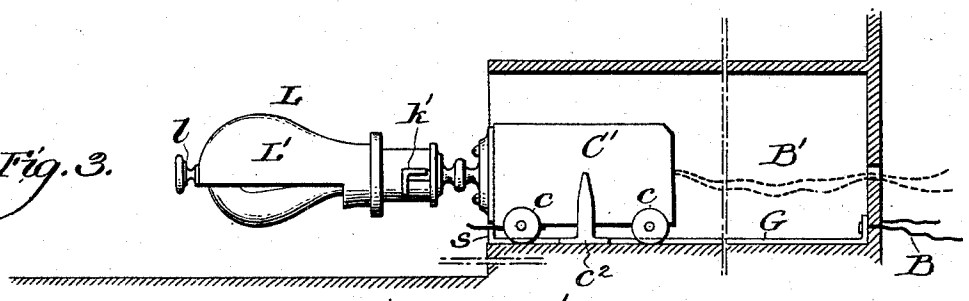
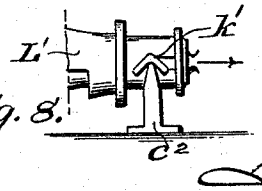


Fig. 8.



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(No Model.) 2 Sheets—Sheet 2.

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Fig. 5.

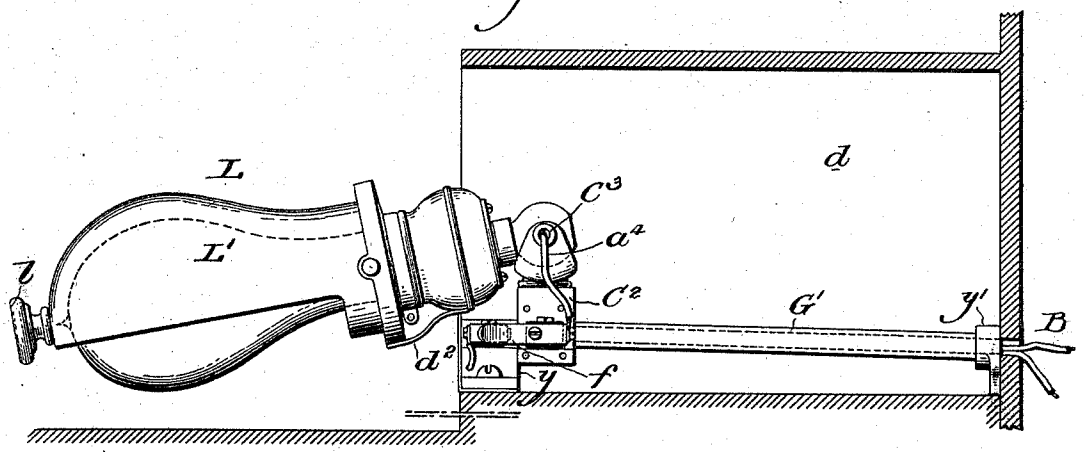


Fig. 6.

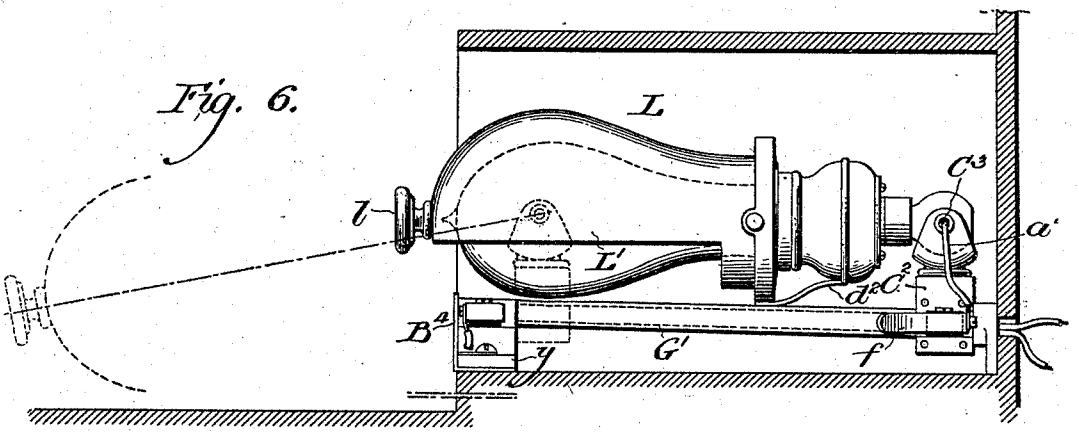
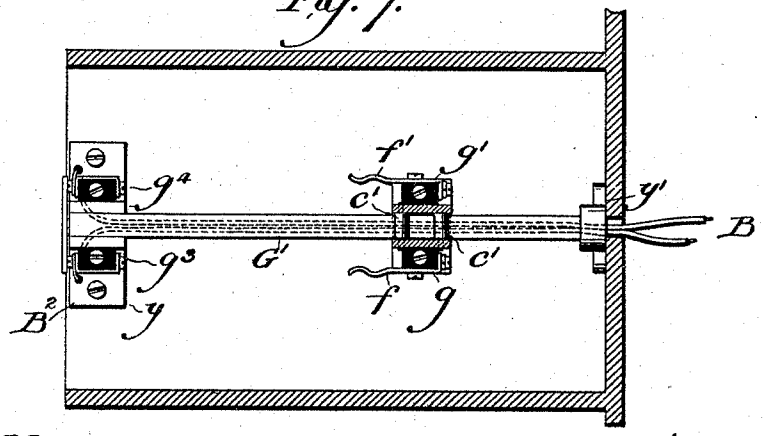


Fig. 7.



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WILLIAM H. CONNELL, OF WILMINGTON, DELAWARE.

SUPPORT FOR ELECTRIC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 518,713, dated April 24, 1894.

Application filed March 28, 1893. Serial No. 467,920. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. CONNELL, a citizen of the United States, residing at Wilmington, in the county of New Castle, in the State of Delaware, have invented a certain new and useful Improvement in Supports for Electric Lights, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to electric light supports which, though of general application are especially designed to be applied to desks.

The main objects of my invention are, first, to so support an electric light that it may be conveniently moved into and out of a position where its light may be desired, and second when so moved that it may automatically light and extinguish itself.

My invention is best described in connection with drawings in which it is illustrated and in which—

Figure 1 is a perspective view of a desk with an electric light attached in a manner according to my invention; Fig. 2, a cross section of the desk on lines 1—2 of Fig. 1 showing one form of carriage for the electric light. Fig. 3 is a similar view to Fig. 2 showing a different form of carriage. Fig. 4 is a front view of the device shown in Fig. 3. Fig. 5 is a similar view to Fig. 2 showing my preferred form of carriage and having the electric light thrown out. Fig. 6 is a view similar to Fig. 5, showing the electric light pushed in out of the way. Fig. 7 is a plan view partly in section of the guide and carriage shown in Figs. 5 and 6, and Fig. 8 is a detail of the automatic shut off device shown in Fig. 3.

D represents a desk having recesses or pigeon holes *d*.

L is an electric lamp of any preferred construction preferably arranged with a shade L′ in a well known manner.

B B′ is an electric circuit leading to the lamp.

C as shown in Fig. 2, is a carriage or support on which the lamp is secured.

K is the usual switch or key by which the lamp is put into or thrown out of circuit; a knob or handle *b* is conveniently arranged as shown so as to facilitate the pulling of the lamp out of the pigeon hole.

C′ represents another form of carriage preferably supplied with rollers as *c c* and guided, as shown in Figs. 3 and 4 by means of a slide G and guide lugs *g g*. When this device is attached to a desk and a light is required, the lamp and carriage are pulled out of the recess or pigeon hole and the light turned on when the light is no longer needed it is extinguished and the lamp is pushed back into the pigeon hole where it is safe from all harm or fear of breakage. Another mode of supporting the lamp is shown in Fig. 1 where a bracket *r* is shown secured to the side of the desk and a lamp L is supported on the bracket by means of a rod pivoted thereto, by turning the lamp on its pivot it is adapted to be moved into and out of one of the pigeon holes of the desk. While this device is very useful and convenient, the objection to its use is, that if it is inadvertently pushed back into its recess when lighted, it may set fire to papers contained in the desk or to the desk itself. To obviate this I have devised means by which the light may be automatically turned off when the lamp is moved into a position where its light is not desired. There are obviously, many ways to accomplish this, which will be apparent to a skilled mechanic. In Fig. 3 I have shown one way to accomplish this end, which broadly stated is, to arrange a cam or stop so as to turn the switch or key *k′* of the lamp in such a manner that the lamp will be extinguished when moved into the position where its light is no longer required and will be lighted when moved into a position where its light is required; as shown in Fig. 3 an upright stud or cam as c^2 is arranged in the way of the key or switch *k′* operating it, as shown more in detail in Fig. 8 so as to turn on and off the light as required.

I have described my lamp and support as used in connection with a desk but it is of course obvious that it may be used in any position desired, and I do not wish to be considered as at all limiting myself to its use in a desk; the devices so far described moreover are just as applicable to any other position as to a position in a desk, such as bookcases, pianos, and so on. I have however arranged the lamp and its support with particular reference to its being placed in a desk. This construction is shown in Figs. 5, 6 and 7.

G′ represents a guide preferably of brass tubing and conveniently made square, though two or more guides may be used and these may be of any desired shape; this guide is

conveniently secured in a pigeon hole or recess of a desk as at y y' and as shown, is slightly inclined toward the rear so as to prevent the lamp and carriage carried thereby from rolling forward accidentally. A carriage C^2 preferably supplied with rollers c' c' is arranged on the slide and carries preferably pivoted at C^3 an electric lamp L. Secured to the side of the carriage as shown in Fig. 3 are insulating blocks g g' and connected to the terminals of the lamps by wires as a^4 are spring contact pieces f f'. At the front of the guide is arranged a stop B^4 to limit the movements of the carriage and two insulating blocks g^3 g^4 carrying the terminals f^3 f^4 of the circuit B. These terminals are arranged in line with the contact plates f f' so that on pulling the carriage and lamp forward to the position as shown in Fig. 5, the terminals and plates will be in contact and complete the circuit through the lamp; a guide piece d^2 is conveniently arranged as shown to prevent the lamp itself from scraping on the guide or stop. The hollow guide serves also as a very convenient conduit for the circuit wires, though these may be arranged in any convenient manner, and in Fig. 6 the wires a^4 are shown issuing from the pivotal point of the lamp so that there will be no strain on the wires due to the turning of the lamp from a horizontal position to that seen in Fig. 5.

While I have described a convenient mode of wiring the lamp it will of course be understood that I do not intend to limit myself to any specified manner of arranging the circuit or terminals, as it is evident that various methods of wiring can be adopted according to the exigencies of the situation without departing from the spirit of my invention. It is also evident that in many cases it may be more convenient to build out a protecting housing for the lamp, instead of moving the lamp in and out of a recess or pigeon hole formed in an article of furniture and therefore by the word "recess" I do not wish to be limited to a pigeon hole formed in the body of a desk or other article of furniture.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with walls forming a recess or housing, of a support, an incandescent electric light on said support and adapted to be moved into and out of said recess, an electric circuit leading to said lamp and means for opening and closing said circuit operated by the movement of the light into and out of the recess.

2. The combination with walls forming a recess or housing, of a support, an incandescent electric light on said support and adapted to be moved into and out of said recess, a stop to limit the movement of the lamp out of the recess, an electric circuit leading to said lamp and means for opening and closing said circuit operated by the movement of the light into and out of the recess.

3. The combination with a desk or other article of furniture having a recess or pigeon hole therein, of a movable support carried on the desk or other article of furniture, an electric lamp secured to said support and adapted to be moved into and out of the recess by the movement of the support, an electric circuit leading to said lamp and a suitable key adapted to open and close the circuit from said lamp.

4. The combination with a desk having a recess or pigeon hole, of a carriage or support therein, an electric light secured on said support and adapted to be moved into and out of said recess, an electric circuit leading to said light and means for opening or closing said circuit operated by the motion of the light.

5. The combination with a desk having a recess or pigeon hole and a guide in said recess of a carriage sliding on said guide, an electric lamp secured on said carriage, a circuit leading to said lamp, and means as contact plates on the carriage and poles in the line of the travel thereof for connecting and disconnecting the lamp and circuit.

6. The combination with a guide secured to a desk or other article of furniture, of a carriage guided by said guide, insulated contact pieces on said carriage and on the guide, said pieces adapted to come in line with each other and close an electric circuit on movement of the lamp, an electric circuit leading to the contact pieces on the guide and a lamp carried by the support, substantially as and for the purpose specified.

7. The combination with a desk having a recess or pigeon hole, of a movable support arranged in said recess, an electric lamp secured to said support and adapted on the movement of the support to be carried into and out of the recess, an electric circuit leading to the lamp and a key for making and breaking the circuit.

8. The combination with a desk having a recess therein, of a movable support situated in said recess, an electric lamp secured to said support and adapted on the movement of the support to be carried into and out of the recess, a stop to limit the movement of the support, an electric circuit leading to the lamp and a key for making and breaking the circuit.

9. The combination with a desk having a recess therein of a movable support situated in said recess and guided therein, an electric lamp secured to said support and adapted on the movement of the support to be carried into and out of the recess, a stop to limit the movement of the support, an electric circuit leading to the lamp and a key for making and breaking the circuit.

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