(No Model.) 2 Sheets—Sheet 1.

J. H. IRWIN.

INCANDESCENT ELECTRIC LAMP SUPPORT.

No. 262,424. Patented Aug. 8, 1882.

Fig. 1

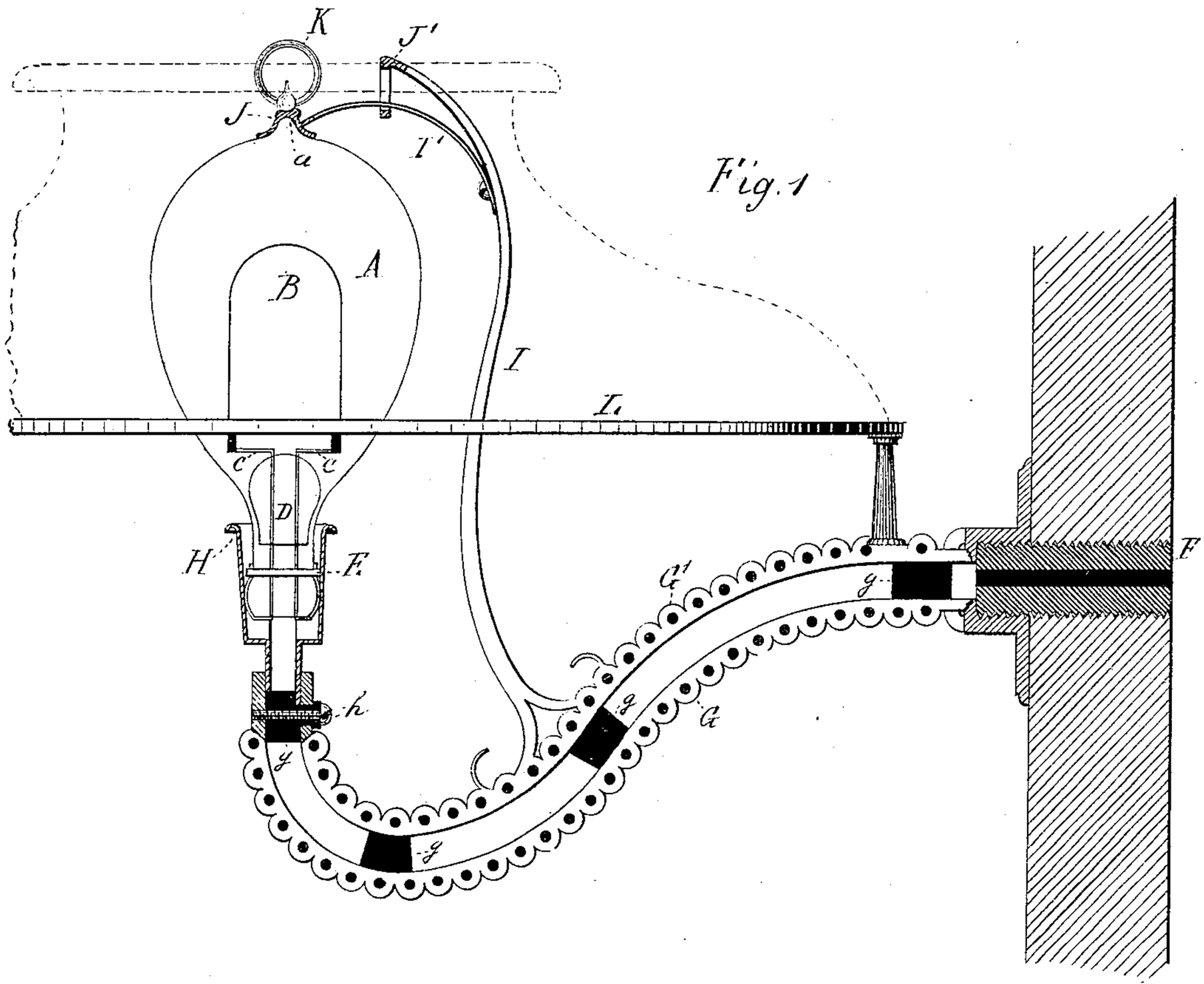


Fig. 2

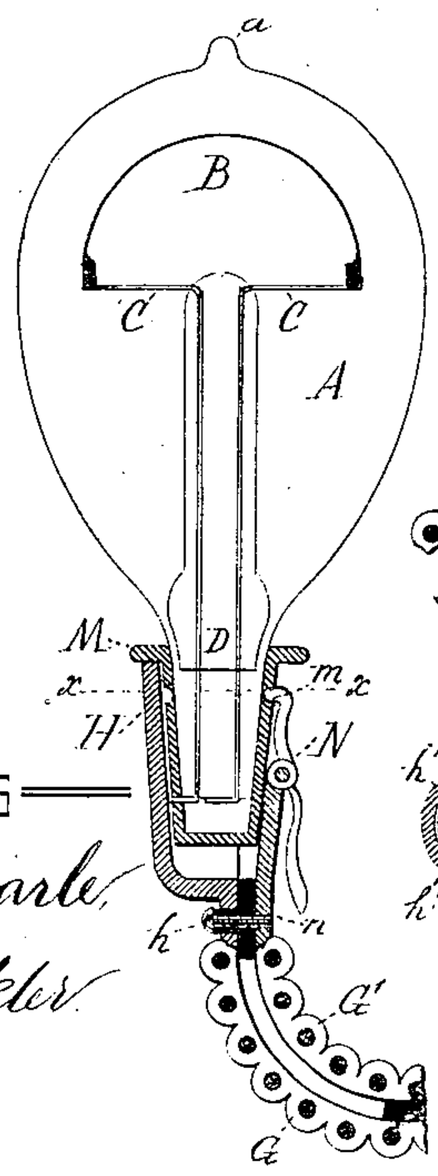


Fig. 3

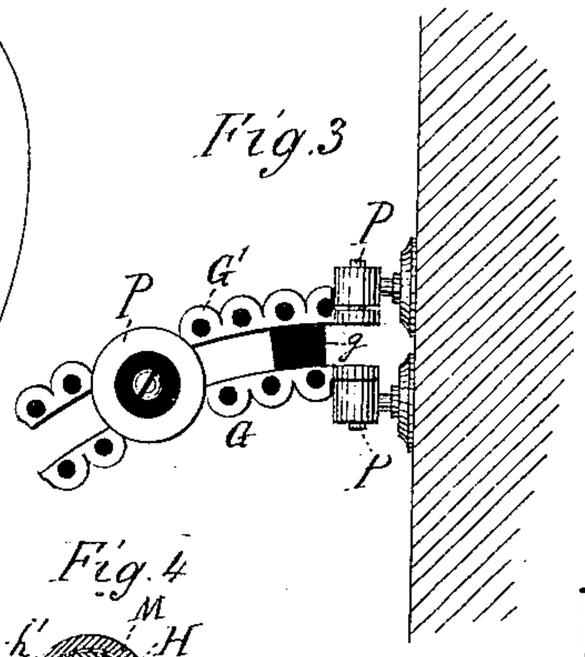
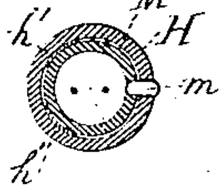


Fig. 4



Witnesses—
Charles R. Searle,
John Buckler.

Inventor—
John H. Irwin,
By A. M. Pierce,
Atty.

(No Model.) 2 Sheets—Sheet 2.

J. H. IRWIN.

INCANDESCENT ELECTRIC LAMP SUPPORT.

No. 262,424. Patented Aug. 8, 1882.

Fig. 5

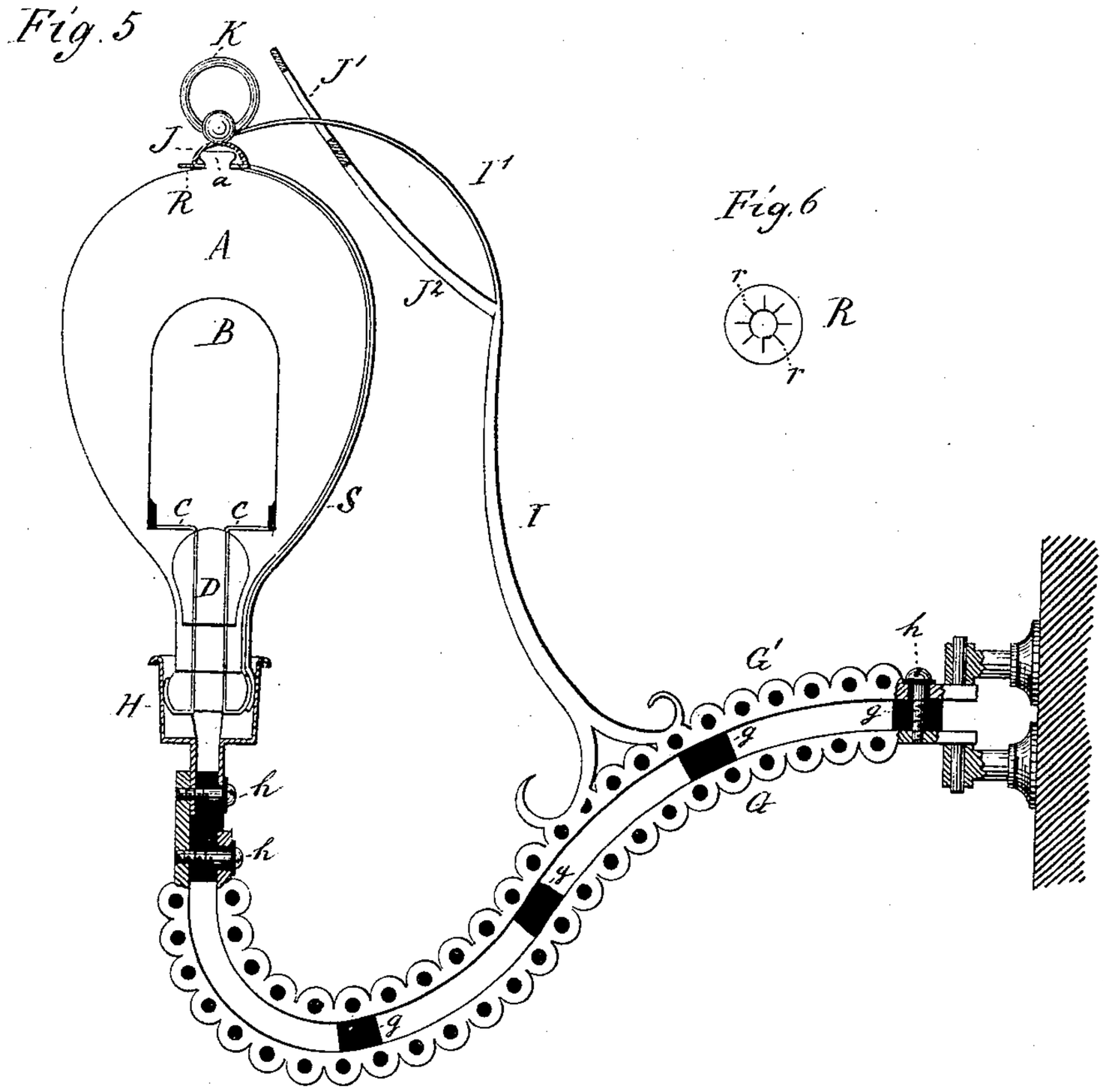


Fig. 6

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN H. IRWIN, OF MORTON, PENNSYLVANIA.

INCANDESCENT ELECTRIC-LAMP SUPPORT.

SPECIFICATION forming part of Letters Patent No. 262,424, dated August 8, 1882.

Application filed March 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. IRWIN, of Morton, county of Delaware, and State of Pennsylvania, have invented certain new and useful Improvements in Incandescent Electric-Lamp Supports, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates especially to incandescent electric lamps and means for supporting and holding the same in place and completing electrical connection between the lamp and circuit; and it consists essentially in arranging the lamp to fit into a suitable socket, forming electrical connection with the conductors located therein or forming a part thereof, and in securing the lamp firmly in the socket by means of a spring-arm engaging with the top thereof, said arm forming one of the conductors through which electrical connection is completed with the incandescing filament, or simply serving to hold the lamp in place, or, where the arm is dispensed with, securing the lamp in its supporting-socket by means of a spring-detent, said detent pressing the lamp-connections against suitable contact-pieces located in the socket. The support for the lamp and socket is formed of two portions of conducting material, insulated from each other and running parallel to each other, or side by side. Said support is adapted and arranged to turn either to the right or left or upward or downward, as occasion may require; and my invention involves certain novel and useful combinations or arrangements of parts and peculiarities of construction and operation, all of which will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figure 1 is an elevation and partial section of my improved lamp and its support. Fig. 2 is a view of a modified form of lamp, and Fig. 3 shows the method of arranging the swinging parts of the device. Fig. 4 is a horizontal sectional view of the base of the lamp and supporting-socket at line *x x*, Fig. 2. Fig. 5 is a modification of the lamp shown in Fig. 1, and Fig. 6 is a plan view of the disk employed at the top of the lamp.

Like letters of reference, wherever they occur, indicate corresponding parts in all the figures.

A is the bulb of the lamp, constructed in the usual manner and provided at top with a projection, *a*.

B is the incandescing filament of carbon, and C are the conductors secured to or passing through a support, D, and passing out from the base of the lamp. In Fig. 1 conductors C are bent upward upon each side of the neck of the lamp and secured in place by means of a band, E, of non-conducting material.

F is a plug formed of two parts, insulated from each other, as shown, and having connection with the main electric circuit. Plug F may be screw-threaded for the reception of the bracket or lamp-support. Said support is formed of two metallic pieces, G and G′, curved in a graceful manner and ornamented at pleasure and insulated from each other at suitable intervals by means of blocks *g* of non-conducting material, the two parts being secured together by screws *h*.

H is a socket, formed of conducting material in two parts, insulated from each other and prepared for the reception of the base of the lamp.

I is an arm, extending upward from the conducting-support G′, having a spring, I′, affixed thereto, and in Fig. 5 forming a part of the electric circuit to the lamp. At the extremity of the spring is affixed a cap, J, which passes over projection *a* upon the top of the lamp-bulb when placed in position, holding the lamp securely in its supporting-socket. A ring, K, attached to cap J, affords ready means for raising the cap from the lamp, and spring I′ is guided and held in place by a ring, J′, affixed to the extremity of arm I in Fig. 1, or to a supplemental arm, I^2, as in Fig. 5. In Fig. 1 is shown a shade or reflector support, L.

When the device is constructed and arranged in accordance with Figs. 1 and 2 the circuit is through plug F, the two portions G and G′ of the bracket or support and socket H having electrical connection with conductors C to the interior of the lamp.

In Fig. 2 the incandescing filament B is shown as semicircular in shape, and is supported near the enlarged extremity of bulb A, the object of such construction being to throw the light from the enlarged extremity of the bulb. The two supporting-conductors G and G′ have electrical connection with conducting-

strips h' in socket H. Affixed to the base of the lamp is a thimble, M, formed of non-conducting material, through the side of which the extremities of conductors C project. A detent, N, actuated by a spring, n, located in or upon socket H, engages with a depression, m, in thimble M, when the lamp is placed in position, and not only holds the lamp securely in place within the socket, but presses the extremities of conductors C against strips h', forming electrical connection therewith. This form of lamp and connection is simple in construction, and by turning the support upon hinges P the lamp may be located and held in any desired position.

The lamp shown in Fig. 5 is a modification of that shown in Fig. 1, the construction differing only in the methods of completing the circuit to the interior of the lamps. A metallic disk, R, having cuts or slits r therein, is passed over the projection a upon the top of the lamp-bulb, and connected to a conducting strip or wire, S, passing to the lower extremity of the lamp-bulb upon the exterior thereof, and having electrical connection with one of the conductors C. In this construction part G only of the supporting-arm has electrical connection with socket H, G′ being insulated therefrom, as shown. The circuit is through arm I, spring J′, cap J, disk R, strip S, and conductor C to the interior of the lamp.

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

1. A bracket for electrical lamps, composed of two parallel conductors insulated from each other and made practically inflexible by interposed blocks, substantially as described.

2. A bracket for electrical lamps, composed of two conductors insulated from each other, and made practically inflexible by interposed blocks, and having electrical connection with a socket adapted and arranged to receive the base of the lamp and form electrical connection therewith, substantially as described.

3. A support for electric lamps, consisting of two conductors placed parallel to and insulated from each other, as specified, and having electrical connection with a socket adapted and arranged to receive the base of the lamp, forming electrical connection therewith, and an arm extending from one of said conductors to the top of the lamp, substantially as shown and described.

4. A support for electric lamps, consisting of two conductors secured paralled to and insulated from each other, as specified, and having electrical connection with a socket adapted and arranged to receive the base of a lamp, forming electrical connection therewith, and an arm extending from one of said conductors to the top of the lamp, said arm bearing a spring and cap passing over a projection upon the top of the lamp-bulb, substantially as shown and described.

5. A support for electric lamps, consisting of two conductors secured parallel to each other and insulated from each other, as specified, one of said conductors having electrical connection with a socket adapted and arranged to receive the base of the lamp and form electrical connection therewith, the other conductor bearing an arm extending to the top of the lamp, substantially as shown and described.

6. A support for electric lamps, consisting of two conductors placed parallel to and insulated from each other, as specified, one of said conductors having electrical connection with a socket adapted and arranged to receive the base of a lamp and form electrical connection with one of the conductors extending to the interior thereof, the other supporting-conductor bearing an arm extending to the top of the lamp, and forming electrical connection with a conductor passing to the socket at the base of the lamp, substantially as shown and described.

7. In an electric lamp and support, the combination, with the lamp, of socket H, conductors G and G′, running parallel to each other, insulators g, and screws h, the whole arranged to operate substantially as shown and described.

8. The combination, with an electric lamp, of socket H, supporting-conductors G and G′, insulators g, screws or bolts h, arm I, spring I′, cap J, and ring K, the whole arranged to operate substantially as shown and described.

9. The combination, with an incandescent electric lamp, of socket H, supporting-conductors G and G′, insulators g, screws h, arm I, spring I′, cap J, ring K, and hinges P, substantially as shown and described.

10. The combination, with an incandescent electric lamp, of the thimble M, the conductors C, the conducting-strips h', the socket H, and spring-detent N, located upon the outside of said socket, all constructed and arranged substantially as and for the purposes described.

11. The combination, with an incandescent electric lamp, of the thimble M, the conductors C, the conducting-strips h', the socket H, the spring-detent N, located upon the outside of said socket, and the conducting-bracket G G′, all constructed and arranged substantially as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

JOHN H. IRWIN.

Witnesses:
F. W. HANAFORD,
A. M. PIERCE.