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H. J. BOSWORTH

1,573,799

LIGHT BRACKET

Filed Dec. 29, 1924

Fig. 1.

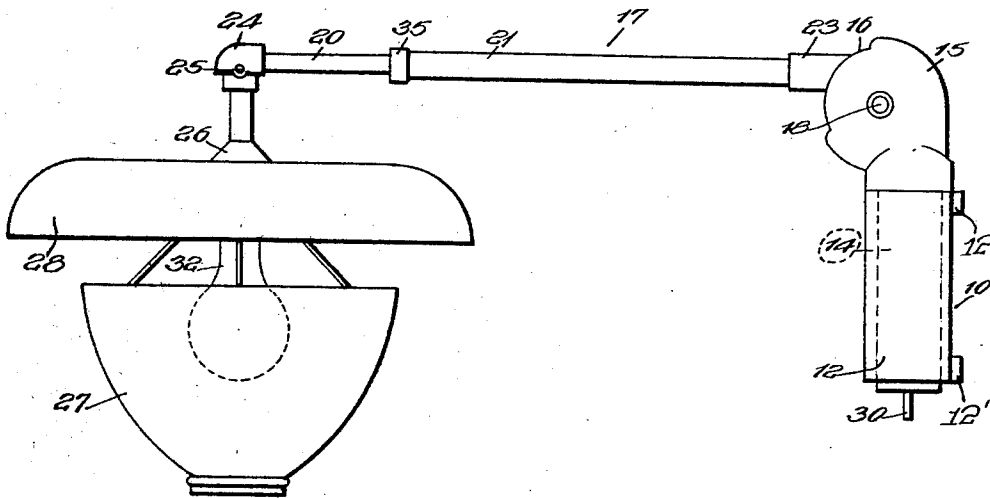


Fig. 2.

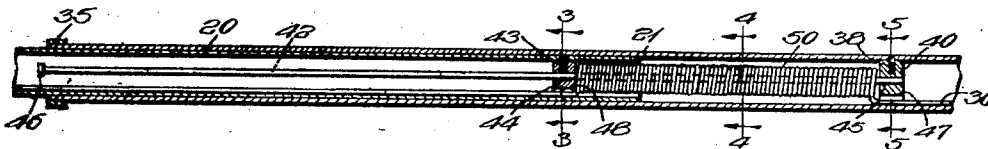


Fig. 3.

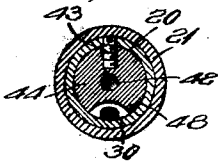


Fig. 4.

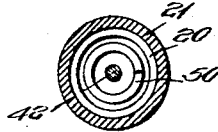
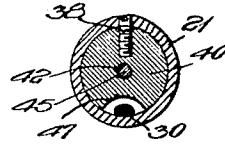


Fig. 5.



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LIGHT BRACKET.

Application filed December 29, 1924. Serial No. 758,517.

To all whom it may concern:

Be it known that I, HARRY J. BOSWORTH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Light Brackets, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to light brackets and its object is the provision of a generally improved, simple and inexpensive take-up means for the conductor of the electric lamp (shown and described in my co-pending application, Serial No. 727,166, filed July 21, 1924).

In that device the current supplying conductor for the electric lamp extends through the tubular mounting post and moves in and out through the bottom of the post in extending and retracting the light arm, provision being made usually externally of the post for moving the conductor out of the bottom thereof to take-up the slack in retracting the arm, and such provision at the same time permitting movement of the conductor up into the post in extending the arm. The means of my present invention is adapted for embodiment within the bracket itself, preferably within the extensible and retractable light arm thereof, and it provides for taking up the slack of the conductor without movement of same into and out of the bottom of the mounting post and without the usual external provisions heretofore made for that purpose. It also makes possible an improvement in the means for limiting the extension of the light arm and co-operates with said means to the end of a simple and inexpensive combination having a minimum number of parts.

The invention is illustrated in the accompanying drawings, in which:

Figure 1 is a side elevational view of the light support;

Fig. 2 is a longitudinal section substantially centrally through the extensible and retractable light arm;

Fig. 3 is a transverse section on line 3—3 of Fig. 2;

Fig. 4 is a transverse section on line 4—4 of Fig. 2;

Fig. 5 is a transverse section on line 5—5 of Fig. 2.

Referring to the drawings, the supporting bracket of the fixture is designated at 10 and comprises a tubular post 12, in which the tubular post 14 is rotatably mounted, said post 12 having on each side a pair of integral feet or apertured lugs 12' for attachment to the wall or other support. As more fully disclosed in my aforesaid co-pending application, the post 14 has clamped thereon, at its upper end, a pair of head members 15, and a head 16, at the adjacent end of the light arm 17, is mounted between said head members 15 upon a pin or post 18 for swinging movement in a vertical plane thereabout.

The light or lamp carrying arm 17 comprises a pair of telescoping tubes 20 and 21, the tube 21 being suitably secured in the tubular projection 23 of the mounting head 16. Fixedly mounted upon the outer end of tube 20, is a light supporting fitting 24 having a downwardly opening mouth in which, and between the sides of the fitting, is pivoted at 25, a pendant light support 26. The particular light shown comprises a lower translucent bowl or open topped globe 27 and an upper shade 28.

The light and light arm may be counterbalanced in any suitable manner, preferably in the manner disclosed in my hereinbefore referred to co-pending application, by means housed in the tubular post 14 and associated head member 12. In use, the arm 17 has pivotal or swinging movement in a vertical plane about pivot 18 and the light may be swung into any position about said pivot. The light may be swung in a horizontal plane by turning or rotation of post 14 in the mounting bracket 10 and the distance of the light from the support is increased or decreased, and its path of swinging movement about pivot 18 in a vertical plane and about post 14 in a horizontal plane, may be adjusted by extension or retraction of the telescoping arms 20 and 21. Although suitable means may be provided for locking the tube 20 in any desired ex-

tended or retracted position, this tube is, as before, preferably held by friction and the counterbalancing action so that a nut or other means need not be loosened or adjusted each time.

The conductors 30, which supply current to the lamp 32, are preferably of the flexible type and they are led into the lower open end of supporting tube 14, up, out, around the pivot 18 in the head members at the upper end of said post, out through tubular arms 20 and 21 and down through the pendant support 26 to the lamp 32, with which they have suitable electrical connection, as for example, by means of a standard "Edison," or any other preferred type of socket or connecting member. On the outer end of arm 21 is a ferrule 35.

Anchored fixedly in the post end of arm 21, as by means of a radial pin 38, is a disc or block 40 which serves the dual function of a stop or abutment for one end of the coiled or spring take-up portion of the conductors and carries an axial rod 42 for limiting the extension of the arm 20. It is to be understood that a complete disc is not necessary, but the particular form of stop or abutment and rod carrying member may be varied.

Anchored fixedly in the inner end of the extensible arm 20, as by means of a radial pin 43, is a second disc or block 44 which serves the dual function of a stop or abutment for the opposite end of the coiled take-up portion of the conductor, and a guide for the rod or stem 42. The rod or stem 42 is fixedly secured at 45 in the block 40 and projects freely through the block 44 to permit free sliding of the block 44 therealong in the extension and retraction of the arm 20. The outer end of the rod 42 has a head 46 which, by co-operation with the block 44, limits the extension of the arm 20. The block 44 thereby serves the still further function of a stop for the extensible arm of the fixture. Each of the blocks 40 and 44 has a notch or segment cut from its periphery, as indicated at 47 and 48, the conductor 30 being led through the notch 47 into the space between the blocks and through the notch 48 out to the light 32 at the opposite end of the fixture. Between the blocks 40 and 44, the conductor 30 is coiled helically at 50, forming in effect a spring and thereby a self take-up provision in itself. Conductor wires having sufficient springiness to impart any desired spring action at this point, may be employed, or additional spring provision may even be made along this length of the wire. I find that the ordinary flexible conductors usually employed have considerable springiness for the self take-up purpose intended. The conductors illustrated comprise, as shown in Figures 3 and 5, a pair of wires or conductors insulated from each other and enclosed in a common covering,

standard practise being to provide a fabric or silk wound covering for such conductors. It is to be understood, however, that the particular type or conductor or conductors employed may be varied as desired. The conductors may be separately wound and stranded together and, as already pointed out, the use of special spring conductors and the provision of additional spring strips or other means along the coiled portions of the conductors is contemplated.

In use, as the distance from the light 32 to the mounting post is increased upon extending the arm 20, the additional length of conductor required is drawn from the coiled portion 50 of the conductor without the necessity of moving the conductor into and out of the bottom of the post 14. As the extensible light arm of the fixture is retracted, the slack in conductor 30 is automatically taken up by the coiled portion 50 thereof and the outer and inner ends of the conductor on each side of the coiled portion 50, are maintained substantially taut at all times and gathering, binding, collecting and interference with proper movement of the parts of the fixture by the conductor is prevented. The provisions which I have made are adapted for embodiment in the extensible arm itself, so as to in no way interfere with the counterbalancing means in the tubular mounting post of the fixture and by eliminating movement of the conductors into and out of the bottom of the post 14 and external take-up provisions, a more compact fixture and pleasing appearance is secured.

While I have described my invention in connection with the details of a particular embodiment, it is to be understood that modifications and changes and other uses than that described are contemplated within the scope of my present invention.

I claim:

1. In a lighting fixture, a support, an arm mounted on said support, said arm comprising a pair of telescoping tubes, a block member mounted in one tube, a block member mounted in the other tube, a light on said arm, and a conductor for said light, said conductor extending through said tubes and coiled helically between said block members and means mounted upon one of said block members and co-operable with the other block member for limiting the extension of said tubes.

2. In a lighting fixture, a support, an arm mounted on said support, said arm comprising a pair of telescoping tubes, a block member mounted in one tube, a block member mounted in the other tube, a light on said arm, a conductor for said light, said conductor extending through said tubes and coiled helically between said block members, and a stem secured to one of said block members and extending longitudinally through

the other, said stem having a head adapted for engagement with said last block member to limit the extension of said tubes.

3. In a lighting fixture, a support, an arm
5 mounted on said support, said arm comprising a pair of telescoping tubes, a block member mounted in one tube, a block member mounted in the other tube, a stem secured to one of said block members, and passing
10 slidably through the other, a head on said

stem co-operable with said other block member for limiting the extension of the tubes, a light on said arm and a conductor for said light, said conductor having take-up means tensioned in said arm and between 15 said first and second block members.

In witness whereof, I hereunto subscribe my name this 22 day of December, 1924.

HARRY J. BOSWORTH.