No. 634,464. Patented Oct. 10, 1899.

B. F. KENT.

LAMP BRACKET.

(Application filed July 30, 1898.)

(No Model.)

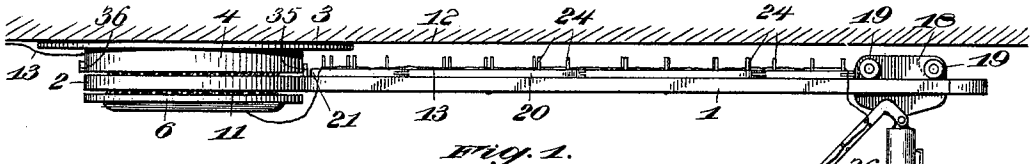


Fig. 1.

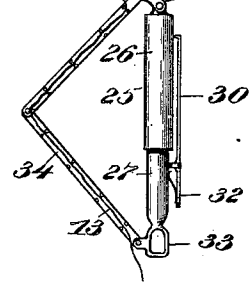
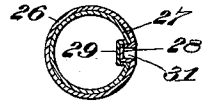


Fig. 6.



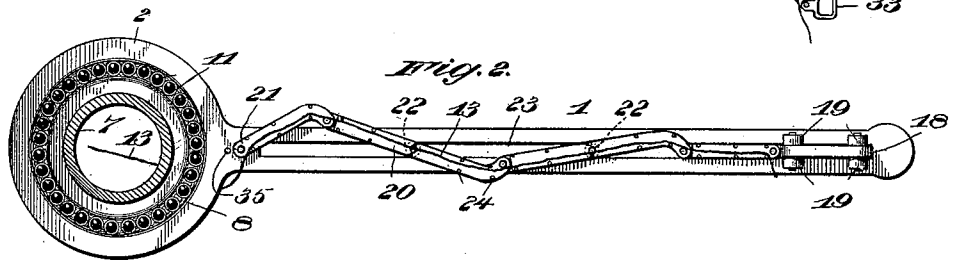


Fig. 2.

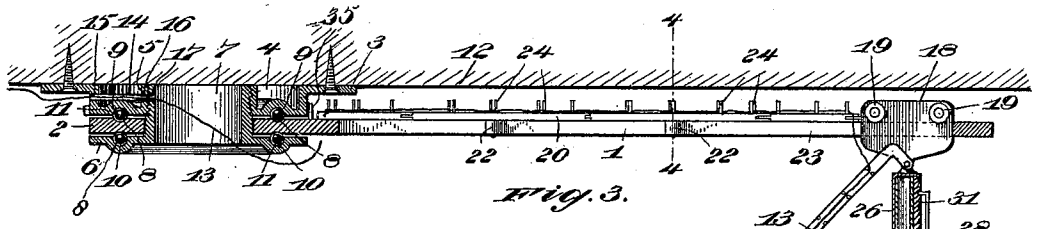
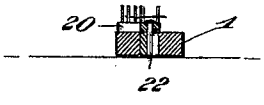
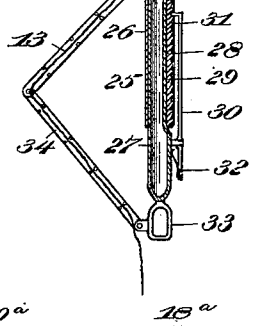


Fig. 3.

Fig. 4.





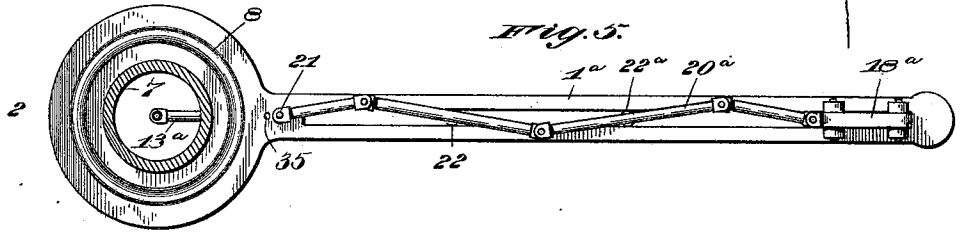


Fig. 5.

Witnesses
Wm. F. Doyle.

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By his Attorneys.
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

BENJAMIN F. KENT, OF EUGENE, OREGON.

LAMP-BRACKET.

SPECIFICATION forming part of Letters Patent No. 634,464, dated October 10, 1899.

Application filed July 30, 1898. Serial No. 687,296. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. KENT, a citizen of the United States, residing at Eugene, in the county of Lane and State of Oregon, have invented a new and useful Lamp-Bracket, of which the following is a specification.

My invention relates to a supporting-bracket for lamps, and has for its object to provide a simple and efficient device adapted for supporting either electric, gas, oil, or other lamps, the same being provided with means for arranging the lamp in any desired position, either in a horizontal or a vertical plane.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a side view of a lamp-bracket constructed in accordance with my invention. Fig. 2 is a plan view of the same. Fig. 3 is a vertical section taken parallel with the bracket-arm. Fig. 4 is a detail transverse section on the line 4 4 of Fig. 3. Fig. 5 is a plan view of a modified construction adapted for a gas-lamp. Fig. 6 is a transverse section of the hanger to show the telescoping members thereof.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The device embodying my invention includes a pivotal or swinging bracket-arm 1, provided with a hub or enlargement 2, which is mounted in a bearing adapted to be secured to the ceiling or other horizontal support, said bearing in the construction illustrated consisting of a base-plate 3, preferably upstruck to form a casing 4 and having a central internally-threaded socket 5, and a bearing-plate 6, having a central exteriorly-threaded journal-tube 7, which is adapted to fit within the socket 5, the plate 6 being spaced from the adjacent surface of the plate 3 to form an interval sufficient to receive the hub 2 of the bracket-arm. In order to reduce friction, the bracket-arm may be provided in its opposite faces with ball-races 8, registering with corresponding ball-races 9 and 10 in the plates 3 and 6, respectively, to receive antifriction balls or rollers 11. The cavity or chamber formed by the upstruck portion of the base-plate 3 not only serves to space the upper side of the hub 2 from the plane of the ceiling, which is indicated in the drawings at 12, but to accommodate a conductor 13, which in the construction illustrated consists of a wire with the usual incasing insulating-tube 14, which passes through registering openings 15 and 16 in opposite walls of the offset portion 4 of the base-plate, and also through a registering opening 17 in the journal-tube 7 of the bearing-plate 6. This conductor or conveyer, instead of consisting of an electric wire, as indicated in Figs. 1 to 4, inclusive, may consist of a tube 13^a suitable for gas, the latter construction being indicated in Fig. 5. The conductor extends into the open center of the hub 2 and thence downwardly to a point below the plane of the bracket-arm.

Mounted for radial reciprocatory movement with relation to the bracket and upon the bracket-arm is a carrier 18, preferably having antifriction-rolls 19 to traverse the arm and having a lazy-tongs connection 20 with a point 21 at the inner end of the arm to carry that portion of the conductor for the illuminating agent which extends from the hub of the bracket-arm to the carrier. In the construction illustrated in Figs. 1 to 4 the wire or other conductor 13, after leaving the interior of the hub 2, is extended longitudinally throughout the length of the connection 20 to the carrier and then makes suitable connection with the lamp, (not shown,) which may be suspended from a hanger depending from the carrier. Also, in this construction the lazy-tongs connection consists of a series of pivotally-connected members, of which the innermost is pivotally mounted, as at 21, to the bracket-arm, while the outermost is correspondingly pivoted to the carrier, and the intermediate members are preferably provided with depending guide-pins 22, which operate in a longitudinal slot or guideway 23, which in the construction illustrated is formed between parallel members or sides of the bracket-arm, as shown clearly in Figs. 2 and 4. Also, the members or elements of the lazy-tongs connection are terminally offset or bent to allow said elements to fold into close parallel positions to adapt the carrier to occupy a position near the inner end of the

bracket-arm. When the bracket is designed for supporting an electric lamp, the lazy-tongs connection should also be provided with upstroke retaining-pins 24, between which the conductor 13 extends, and it is obvious that when the connection 20 is folded the conductor 13 is correspondingly disposed without interfering with the function of the lamp.

In the modified construction illustrated in Fig. 5, wherein the bracket is adapted to support a gas-lamp or other device requiring a tubular conductor 13^a, the lazy-tongs connection 20^a consists of a tube which, in connection with the conductor 13^a, forms a folding conveyer for the illuminating fluid or agent. In other respects the construction of the connection 20^a, with its attachments, is analogous to that described in connection with Figs. 1 to 4 in that, for instance, said connection is provided with depending guide-pins 22^a to operate in a guideway arranged longitudinally of the bracket-arm 1^a and in that the outer end of the connection 20^a is pivotally connected to the carrier 18^a, which traverses said bracket-arm.

The hanger 25, which depends from the carrier, may be of extensible construction, and a convenient form of hanger is illustrated in the drawings, consisting of telescoping tubes 26 and 27, of which the former is provided with a guide-rib 28, fitting in a guide-groove 29 in the latter to prevent relative rotation while not interfering with the free sliding or axial movement of the member 27. To secure the movable member at the desired adjustment, the locking pawl or dog 30 may be employed to engage a rack 31 on the member 26, said locking pawl or dog being extended and pivotally mounted upon the movable member 27 and having a thumb-piece 32, which is located within the reach of a hand grasping the grip 33 on the member 27. For the purpose of conveying an illuminating agent to the lamp suspended from the hanger I employ an auxiliary lazy-tongs connection 34, of which the remote extremities are pivotally mounted, respectively, upon the relatively-adjustable members 26 and 27 of the hanger and of which the construction corresponds, essentially, with that described in connection with the main lazy-tongs connection 20.

It will be understood that when the bracket is designed for supporting oil or similar lamps wherein no conductor for illuminating agent is required some of the details of the lazy-tongs connection may be dispensed with, and obviously the means hereinbefore described for extending the conductor through the bearing-plates may be omitted; also, while I have illustrated and described only a single bracket-arm mounted upon the bearing for swinging movement it will be understood that I do not limit the construction to one arm, as it is obvious that a plurality of arms may be employed to increase the capacity of the device, means of mounting identical with those disclosed being utilized for additional arms.

In order to limit the swinging movement of the bracket-arm to prevent it from turning through a complete circle, I preferably employ a pin or projection 35 on the arm-hub to engage a suitable stop 36 on the base-plate.

It will be obvious, furthermore, that various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. A supporting device for lamps having a base-plate provided with a central interiorly-threaded socket, a bearing-plate having a central exteriorly-threaded journal-tube removably fitted in said socket of the base-plate, a bracket-arm having a hub mounted between said plates concentric with the journal-tube, and a lamp-carrier mounted upon the bracket-arm, substantially as specified.

2. A supporting device for lamps having a base-plate provided with a central socket and a surrounding upstruck portion forming a casing, a bearing-plate having a central journal-tube removably fitted in said socket, the walls of said casing being provided with alined openings registering with a corresponding opening in said journal-tube, a conductor for an illuminating agent extending through the alined openings, a bracket-arm having a hub mounted between said bearing and base plates, concentric with the journal-tube of the former, and a lamp-carrier mounted upon the bracket-arm, substantially as specified.

3. A supporting device for lamps connected with conductors for an illuminating agent, the same having a bracket-arm mounted to swing in a horizontal plane, a lamp-carrier mounted to traverse the bracket-arm for movement radially toward and from the axis of said arm, and a lazy-tongs connection pivoted at its remote ends respectively to the carrier and to the inner end of the bracket-arm, the lazy-tongs connection serving as a means for supporting the conductors, substantially as specified.

4. A supporting device for lamps having a bracket-arm mounted for swinging movement in a horizontal plane and provided with a centrally-open hub to receive a conductor for an illuminating agent, a carrier mounted upon the bracket-arm for radial movement with relation to the axis of the arm, and a lazy-tongs connection between the carrier and the inner end of the bracket-arm for supporting a conductor for the illuminating agent, substantially as specified.

5. A supporting device for lamps having a bracket-arm mounted to swing in a horizontal plane, a carrier mounted to traverse the bracket-arm, a lazy-tongs connection between the carrier and the inner end of the bracket-arm and provided with intermediate guide-pins for traversing a guideway disposed lon-

gitudinally of the bracket-arm, and a conductor for illuminating agent carried by the lazy-tongs connection, substantially as specified.

6. A supporting device for lamps having a bracket-arm mounted for swinging movement in a horizontal plane, a carrier guided by and mounted to traverse said arm, a lazy-tongs connection pivotally attached at one end to the carrier and at the other end to the bracket-arm near its axis of movement, a conductor for illuminating agent longitudinally traversing the lazy-tongs connection, and upstanding retaining-pins carried by the lazy-tongs connection to prevent displacement of said conductor, substantially as specified.

7. A supporting device for lamps having a bracket-arm mounted for swinging movement in a horizontal plane, a carrier guided by and mounted to traverse said arm, and means for conveying an illuminating agent from the axis of the bracket-arm to said carrier, said means including a connection having pivotally-connected foldable elements extending from the inner end of the arm to the carrier, substantially as specified.

8. A supporting device for lamps having a longitudinally-slotted bracket-arm mounted for swinging movement in a horizontal plane, a carrier mounted to traverse said arm, and a horizontal lazy-tongs connection terminally mounted respectively upon the carrier and the bracket-arm near its axis of movement, and intermediate depending guide-pins operating in said longitudinal slot of the bracket-arm, the lazy-tongs connection serving as a means for supporting the conductors for an illuminating agent, substantially as specified.

9. A supporting device for lamps having a bracket-arm and a carrier, and an extensible hanger depending from the carrier and comprising telescoping members, one of which is provided with a rack, and a locking pawl or dog pivotally mounted upon the other member for engagement with said rack, and having a terminal thumb-piece, substantially as specified.

10. A supporting device for lamps having a bracket-arm and a carrier, and an extensible hanger depending from the carrier and comprising fixed and movable members, of which the latter terminates in a grip, a rack carried by the fixed member, and a locking pawl or dog pivotally mounted upon the movable member and having a terminal thumb-piece arranged adjacent to said grip, substantially as specified.

11. A supporting device for lamps having a bracket-arm mounted for swinging movement in a horizontal plane, a carrier mounted to traverse said arm, a foldable connection between the carrier and the inner end of the bracket-arm, a hanger depending from the carrier and consisting of telescoping members, and means for securing said members at the desired extension, and a lazy-tongs connection between the remote ends of the members of said hanger and adapted to carry a conveyer for an illuminating agent, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

BENJAMIN F. KENT.

Witnesses:

E. J. McCLANAHAN,

W. O. ZEIGLER.