(No Model.)

E. WADE.

ADJUSTABLE INCANDESCENT LAMP HOLDER.

No. 557,732. Patented Apr. 7, 1896.

FIG. 1.

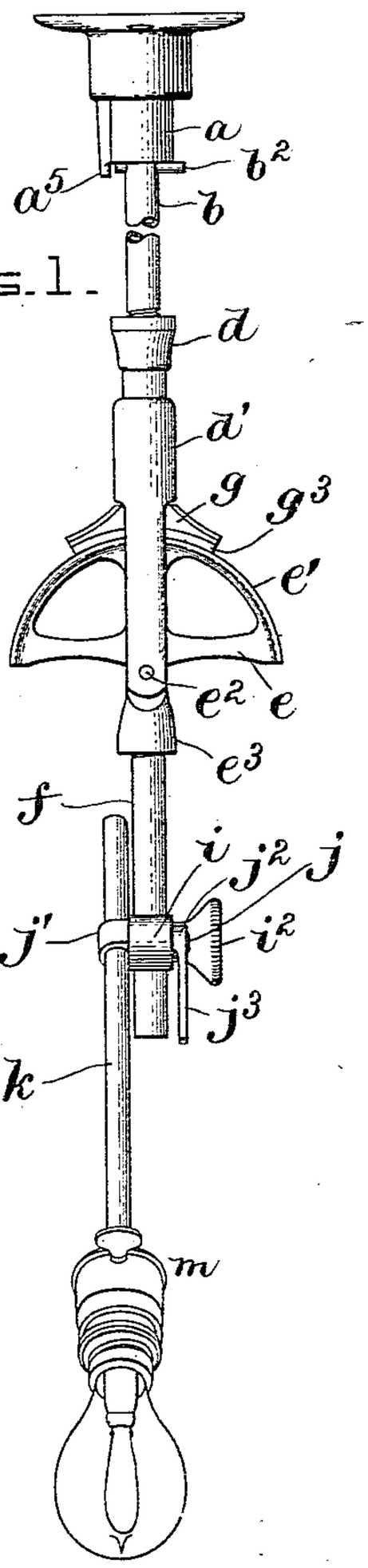


FIG. 3.

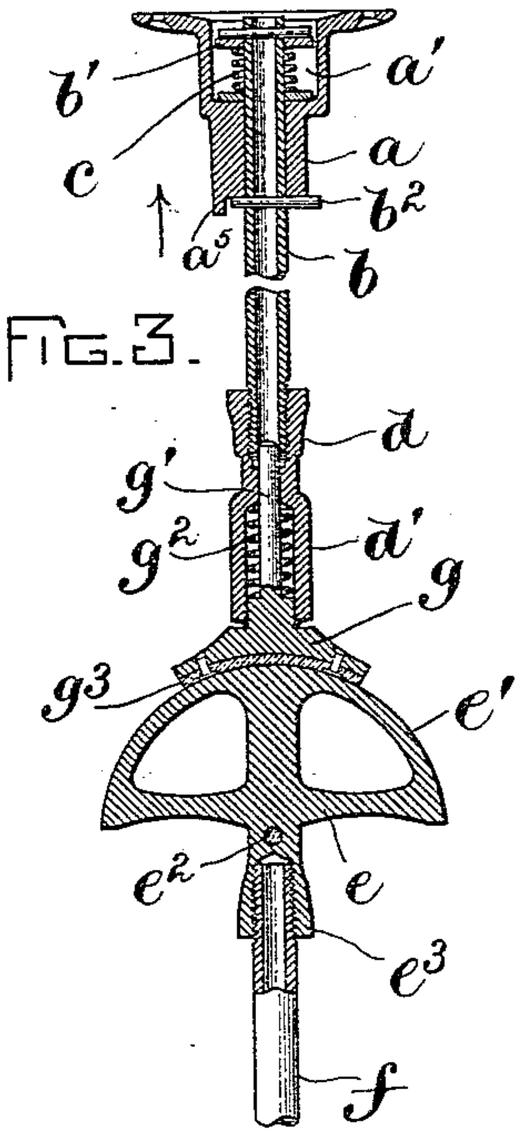


FIG. 2.

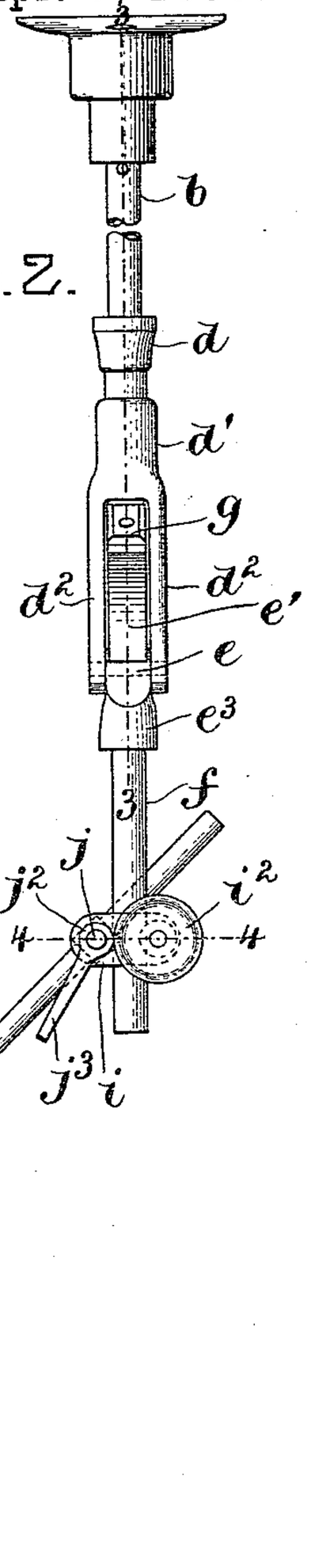
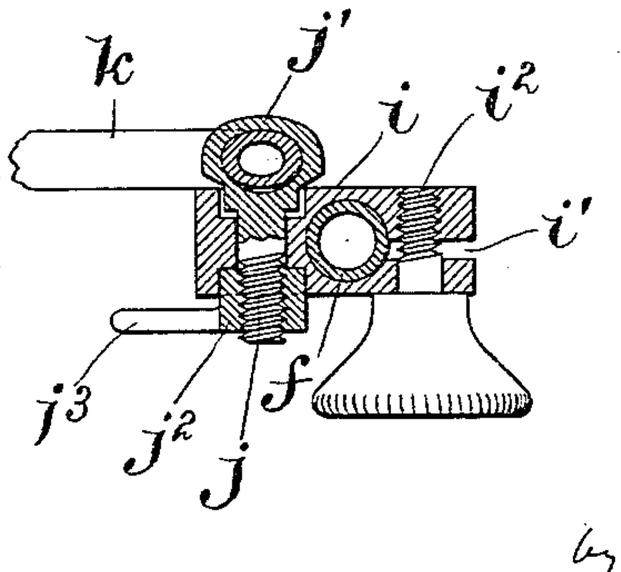


FIG. 4.



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UNITED STATES PATENT OFFICE.

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ADJUSTABLE INCANDESCENT-LAMP HOLDER.

SPECIFICATION forming part of Letters Patent No. 557,732, dated April 7, 1896.

Application filed July 1, 1895. Serial No. 554,551. (No model.)

To all whom it may concern:

Be it known that I, EDWARD WADE, of Lawrence, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Adjustable Incandescent-Lamp Holders, of which the following is a specification.

This invention has for its object to provide a simple, durable, and effective adjustable holder adapted to be secured to a fixed support and to be adjusted to a variety of positions and retained by friction in any position to which it may be adjusted.

The invention consists in the improved construction which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of my improved lamp-holder. Fig. 2 represents a similar elevation from another point of view. Fig. 3 represents a section on line 3 3 of Fig. 2. Fig. 4 represents a section on line 4 4 of Fig. 2.

The same letters of reference indicate the same parts in all the figures.

In the drawings, a represents a tubular holder or bracket adapted to be attached to a suitable support, such as a wall or ceiling.

b represents a rod which is fitted to turn in said bracket and extends upwardly into a chamber a' in said bracket, where it is provided with a collar b', supported by a spring c, located in said chamber, said spring exerting endwise pressure on the rod a in the direction indicated by the arrow in Fig. 3, and thus causing frictional contact between a pin b^2 affixed to the rod and a portion of the lower end of the bracket a, said frictional contact being sufficient to retain the rod against loose swinging movement in either direction, and therefore enabling the bracket and rod to be placed horizontally, as when the bracket is affixed to a vertical wall. The lower portion of the bracket a has a tongue or projection a^5 at one side of the pin b^2, said projection extending across the path of the pin b^2 and constituting a stop which limits the rotary movement of the rod in the bracket.

d represents an internally-threaded screw which is screwed upon the threaded lower end of the rod b, and is formed in one piece with a spring-contained chamber d' and arms d^2, projecting downwardly from the chamber d'.

e represents a plate having a segmental edge e', said plate being pivoted at e^2 to the lower portions of the arms d^2. On the plate e is formed a downwardly-projecting screw-threaded socket e^3, into which is screwed the threaded end of a rod f. The plate e is located between the arms d^2 d^2, and its segmental edge e' is engaged with a brake-shoe g, formed on or attached to the rod or stud g', which is fitted to slide in the socket d. A spring g^2 inserted in the socket d' presses the shoe g downwardly upon the segmental edge of the plate e. Said shoe has a concave face fitting the convex edge e' of the plate e, said face having a covering g^3 of leather or other comparatively yielding material. The shoe is kept constantly pressed by the spring g^2 against the plate e, said spring and the yielding covering g^3 compensating for the wear of the contacting-surfaces, and enabling the brake to hold the plate e and arm f at any angle to which they may be adjusted.

i represents a slide which is fitted to move upon the rod f, and is split at i' to form two branches or divisions, connected by a clamping-screw i^2, which, when tightened, binds the slide i firmly upon the rod f. When the screw i^2 is loosened, it releases the slide i and permits it to move freely upon the rod.

One end of the slide i is provided with a transverse orifice, through which passes a bolt j having a hollow or socket head j', in which is inserted a lamp-supporting arm k. The bolt j is screw-threaded in its inner end, and with its screw-threaded portion is engaged a nut j^2 having a handle j^3. Said nut bears against the slide i, and when tightened draws the arm k closely against the opposite side of the slide i, thus binding said arm tightly against the slide and holding it at any angle to which it may have been adjusted by the rotation of the bolt j in the slide i, while the nut j^2 was loosened. The outer end of the arm k is adapted to be engaged in any suitable way with an incandescent-lamp socket m.

It will be seen that the described construction permits the following adjustments of the lamp:

First. The rotary connection of the rod b

to the bracket *a* enables the lamp to be swung through an arc of which the rod *b* is the center, the spring *c* and pin b^2 and the lower end of the bracket *a* constituting means for preventing the loose turning of the rod *b*.

Second. The pivotal connection of the plate *e* and arm *f* to the arms d^2 d^2, which are rigidly attached to the rod *b*, enables the lamp to be swung in an arc of which the pivot e^2 is the center, the yieldingly-supported brake *g*, holding the lamp at any position to which it may be swung in said arc.

Third. The rod *f* and slide *i* permit the lamp to be adjusted vertically, or toward and from the pivot e^2.

Fourth. The pivotal connection of the lamp-arm *k* to the slide *i* enables the lamp to swing in an arc of which the bolt *j* is the center.

Fifth. The sliding connection afforded by the socket *j'* and lamp-arm *k* enables the lamp to be moved toward and from the bolt or stud *j*, the nut j^2 securing the lamp-arm to the slide *i* in any of the positions to which the lamp-arm may be adjusted.

I claim—

An electric-lamp holder comprising a bracket or socket adapted for attachment to an elevated support, a vertical rod *b* fitted at its upper end to rotate in said socket, a rod *f* pivotally connected with the lower portion of the rod *b*, frictional holding means whereby the rod *f* may be retained at any angle to which it may be turned on the pivot that connects it with the rod *b*, said means including a segmental plate attached to one of said rods and a spring-pressed brake supported by the other rod and bearing on said plate, an adjustable slide *i* on the rod *f*, provided with clamping devices whereby it may be secured to the rod at various heights, a lamp-arm holder *j* adapted to be rotated in the slide *i* and provided with clamping means whereby it may be secured to the slide in any position to which it may be adjusted, and the lamp-holding arm *k* supported by said holder and longitudinally adjustable therein, the said arm and the lamp thereon being capable of the various adjustments produced as follows, viz., first by the rotation of the rod *b* in the socket or bracket, secondly by the swinging movement of the rod *f* on the pivot that connects it with the rod *b*, thirdly by the vertical movement of the slide *i* on the rod *f*, fourthly by the rotary movement of the lamp-arm holder *j* in the slide *i*, and fifthly by the longitudinal movement of the lamp-arm in the holder *j*.

In testimony whereof I have signed my name to this specification, in presence of two subscribing witnesses, this 27th day of June, A. D. 1895.

EDWARD WADE.

Witnesses:
C. F. BROWN,
A. D. HARRISON.