P. FORG.

LAMP FIXTURE.

APPLICATION FILED NOV. 14, 1907.

974,253. **Patented Nov. 1, 1910.**

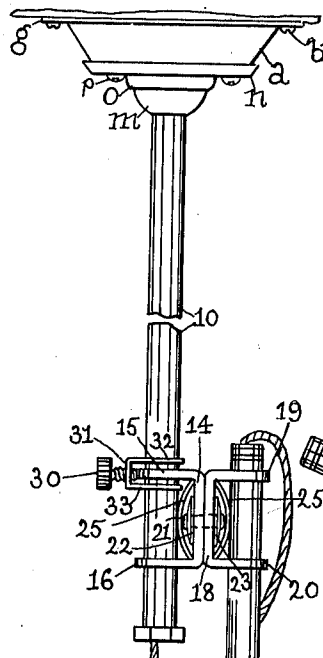


Fig. 1.

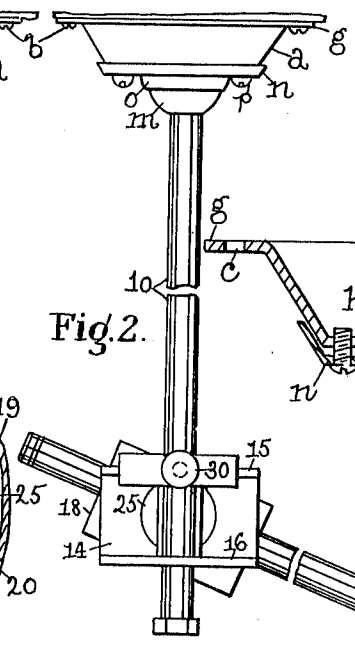


Fig. 2.

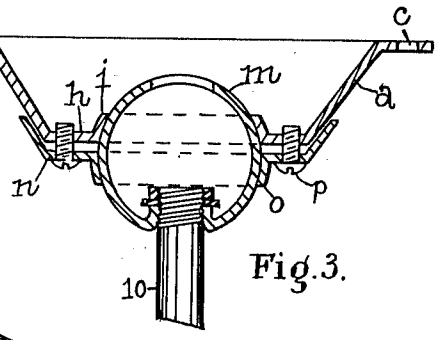


Fig. 3.

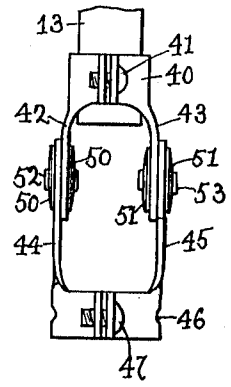


Fig. 4.

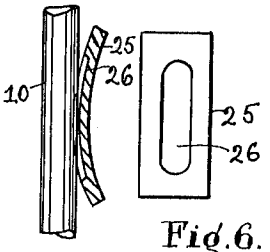
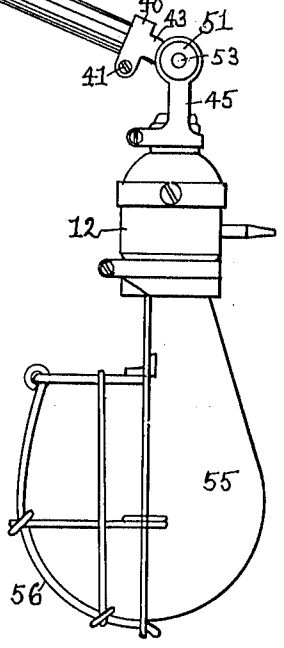


Fig. 5.

Fig. 6.



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UNITED STATES PATENT OFFICE.

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LAMP-FIXTURE.

974,253. Specification of Letters Patent. Patented Nov. 1, 1910.

Application filed November 14, 1907. Serial No. 402,095.

To all whom it may concern:

Be it known that I, PETER FORG, a citizen of the United States, residing in Somerville, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Lamp-Fixtures, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to a fixture or support especially adapted among other uses to be employed in connection with incandescent electric lamps.

The invention has for its object to provide a simple and efficient support or fixture, which can be attached to the ceiling or a wall of a room, and which is constructed as will be described, so that the fixture or support can be moved in different directions to bring the lamp into any position desired. These and other features of this invention will be pointed out in the claims at the end of this specification.

Figure 1 is an elevation of a fixture or support embodying this invention. Fig. 2, an elevation of the fixture in a different position from that shown in Fig. 1. Fig. 3, a sectional detail on an enlarged scale of the base plate and its coöperating clamping plate to be referred to. Fig. 4, a detail of the hinge joint for the lamp holder, and Figs. 5 and 6, details to be referred to.

Referring to the drawings *a* represents a hollow base, which may be of cast metal and is adapted to be fastened to a ceiling or wall of a room by screws *b* passed through holes *c* in a flange *g* of said base. The hollow base *a* is provided with a conical body portion and a bottom wall *h* having a substantially central opening formed by a substantially conical flange *i* extended from the bottom wall *h* into the hollow base. The opening formed by the conical annular flange *i* constitutes a socket into which is fitted the upper portion of a ball *m* of metal, which is retained in its socket by a clamping plate or disk *n*, provided with a substantially central opening formed by a conical flange *o*, which extends in the opposite direction to the flange *i* and serves to hold the ball in its socket, the openings formed by the flanges *i* and *o*, being of smaller diameter than the ball, whereby the latter is prevented from passing through the bottom wall *h* of the base or through the clamping plate or disk *n*, the latter being secured to the bottom wall *h* of the hollow base by screws *p*, which engage threaded holes in the said bottom wall. By tightening up or loosening the screws *p*, the conical flange *o* on the clamping plate or disk is caused to embrace the ball nearer to or farther away from its center and thereby increase or diminish the friction between said flange and ball and thus regulate movement of the ball in the base plate.

The ball *m* has firmly secured to it the upper end of a rod 10, which may be hollow and which forms one member of an extensible support for the holder or socket piece 12 of the incandescent lamp, the other member of which is shown as a rod 13, preferably hollow, which is adjustably connected with the rod or member 10 by a frictional clamping device as will be described. The frictional clamp consists of two members, one on each rod, one of the said members comprising a back plate or bar 14 having arms 15, 16, extended from the end of the bar or plate substantially at right angles thereto, and provided with holes (not shown), through which the rod 10 is passed. The other member is of like construction and comprises a back plate or bar 18 and arms 19, 20 having holes through which the rod 13 is passed. The back plates or bars 14, 18 are frictionally secured together by a rivet 21 extended through concaved metal washers 22, 23, which press the back plates of the two members together with sufficient force to create a friction which will hold the two members in any position into which they are turned, thereby enabling the member 13 and the lamp socket 12 carried by it, to be turned into various angular positions with relation to the rod or member 10. In Fig. 2, the member 13 is shown as turned into a position which is inclined with relation to the member 10. Provision is also made for adjusting the members of the clamping device on the rods 10, 13, and for frictionally holding said members in their adjusted position. This result may be accomplished as herein shown by curved sheet metal spring plates 25, which are located between the rods 10, 13, and the back plates 14, 18, respectively said spring plates having longitudinally extended depressions 26 (see Figs. 5 and 6), whose walls engage the rods 10, 13 to prevent lateral movement of said springs. Provision is also made for posi-

tively securing one member to the rod 10 in any desired position, and this result may be accomplished by a thumb-screw 30 passed through a threaded hole in the back 31 of a saddle or yoke having ears 32, 33, which straddle the arm 15 and through which the rod 10 is passed, so that, by turning the thumb-screw 30 against the arm 15, the saddle is moved away from the arm 15 and the rod 10 is clamped or gripped by the lugs 32, 33 and the said arm. Provision is also made for adjustably securing the socket piece 12 of the lamp to the member 13 and this result may be accomplished by a friction hinge as will be described. The friction hinge referred to, may be made as herein shown and consists of a collar 40 secured on the lower end of the rod or member 13 as by the set screw 41, and provided with arms 42, 43, which are held in frictional engagement with like arms 44, 45 on a collar 46, which is secured as by a screw 47 on the socket piece or holder 12 for the incandescent electric lamp. The arms 42, 43, 44, 45 are held in frictional engagement by means of spring washers 50, 51, and rivets 52, 53 extended through them (see Fig. 4).

The socket piece 12 may have clamped on it a metal reflector 55 to which is detachably secured a wire guard 56 for the bulb of the lamp.

In operation with the fixture herein shown, the hollow base *a* is fastened to the ceiling or it may be the wall of a room, and in the present instance, it is represented as fastened to the ceiling. The frictional engagement of the ball *m* with the walls of its socket may be regulated by adjusting the screws *p* so as to bring the clamping disk or plate *n* nearer to or farther away from the base *a*, and thereby cause the flange *o* to engage the ball *m* nearer to or farther away from its center. The clamping disk or plate is adjusted so as to create sufficient friction to hold the ball *m* and the rod or member 10 in the position in which it is turned. The friction clamp engaging the members or rods 10, 13, permits the rod or member 13 to be turned into a position at an angle to the member or rod 10 as represented in Fig. 2, and the friction hinge between the lamp holder and the member 13, enables the said holder to be turned into a position at an angle to the member or rod. Further the rod 13 may be moved lengthwise or rotated and held in its adjusted position by the spring 25. It will thus be seen that the adjustable fixture or support is capable of being turned or adjusted so as to bring the incandescent lamp carried by its holder or socket piece into any desired position, which is especially desirable in mills, factories and machine shops, and other places. So also, it will be observed that the friction device 25 enables the rods 13 to be moved longitudinally and to be automatically held in the position into which it is moved. So also the member of the friction clamp may be moved on the rod 10 and automatically held by the curved spring 25 or positively held by the saddle 31.

The rods 10, 13 may be solid or as may be preferred they may be made hollow and the lamp cord or conducting wires 60 passed through them.

Claims:

1. In an adjustable fixture or support, in combination, two rods or members, and a frictional clamp for connecting said members, said clamp comprising two back plates pivoted together and engaged by spring washers, arms extended from said back plates and provided with holes through which said rods are passed, and spring plates engaging said rods between the said arms, substantially as described.

2. In an adjustable fixture or support, in combination, two rods or members, and a frictional clamp for connecting said members, said clamp comprising two back plates pivoted together and engaged by spring washers, arms extended from said back plates and provided with holes through which said rods are passed, spring plates engaging said rods between the said arms, a saddle straddling one of said arms and provided with holes through which a rod passes, and a set screw extended through the back of said saddle and engaging the arm straddled by said saddle, substantially as described.

3. In an adjustable fixture or support, in combination, two rods or members, and a frictional clamp for connecting said members, said clamp comprising two back plates pivoted together and engaged by spring washers, arms extended from said back plates and provided with holes through which said rods are passed, a spring plate carried by one of said clamping members and engaging the rod passed through the arms of said member and means to secure the other of said clamping members to the rod extended through its arms, substantially as described.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

PETER FORG.

Witnesses:
JAS. H. CHURCHILL,
J. MURPHY,