May 21, 1929. M. F. DEACH 1,714,002

LAMP BRACKET

Filed July 16, 1924

Fig. 1.

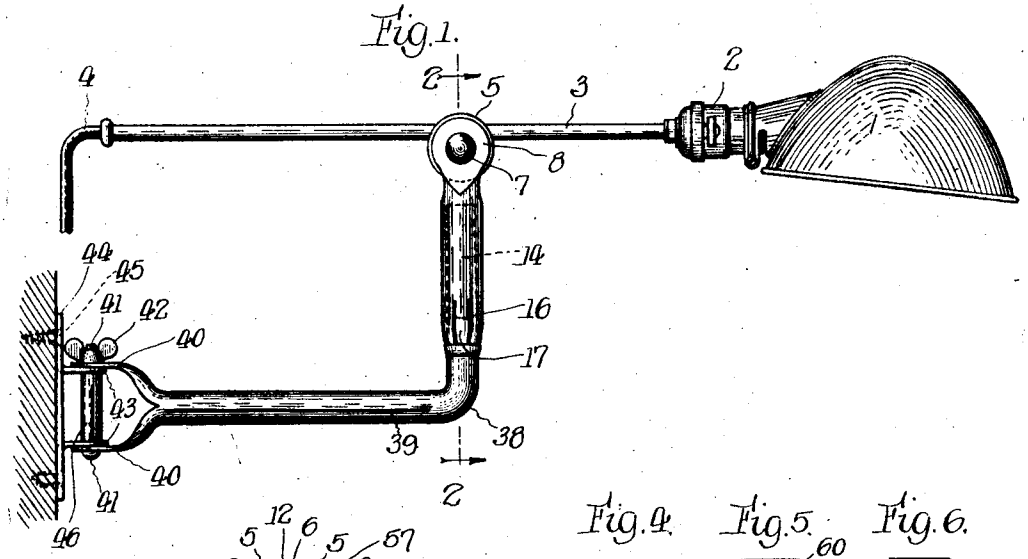


Fig. 2.

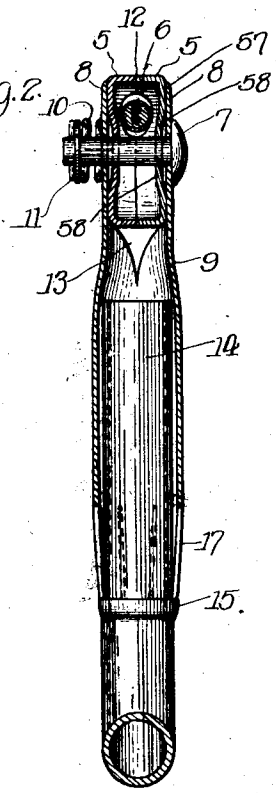


Fig. 4.

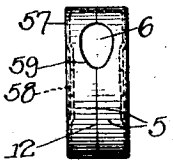


Fig. 5.

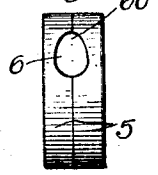


Fig. 6.

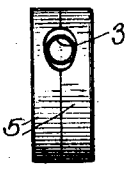
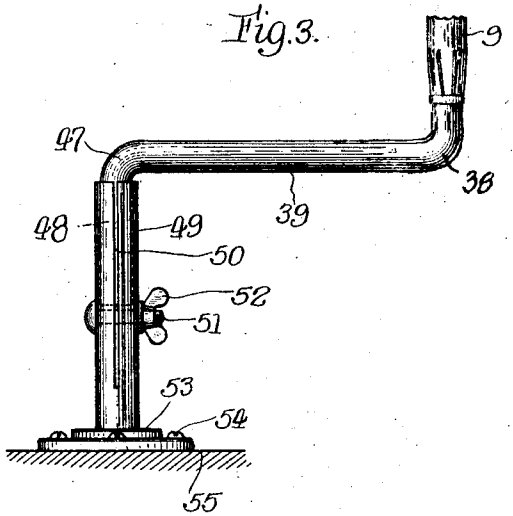


Fig. 3.



Witness:
A. J. Sauer.

Inventor:
Miles F. Deach,
By M. E. Williams
Atty.

Patented May 21, 1929. 1,714,002

UNITED STATES PATENT OFFICE.

MILES FRANK DEACH, OF OAKLAND, CALIFORNIA.

LAMP BRACKET.

Application filed July 16, 1924. Serial No. 726,399.

My invention relates to that class of brackets which are used for holding lamps, such as desk lamps or reading lamps, or work shop lamps, and the object of the invention is to provide a lamp bracket that may be readily adjusted to almost any piece of furniture, bench or the wall and permit any adjustment desired suiting the convenience of the user without necessarily having to reclamp the bracket after it is once set in place.

Reference will be had to the accompanying drawings, of which Figure 1 is an elevation of the bracket when the same is applied to a wall fastening. Figure 2 is a transverse section on line 2—2 of Figure 1. Figure 3 shows a modified form of the invention adapted to be fastened to a table or horizontal surface. Figure 4 is a front elevation of the supporting discs for the lamp rod or tube looking at the edge of the discs. Figure 5 is a rear elevation of the supporting discs. Figure 6 is a front elevation being a similar view to Figure 4.

The lamp to be held by my bracket is fixed into a socket 2, being the ordinary electric light socket and is provided with a deflecting shade 1 of any suitable type desired for a lamp of this sort.

The lamp socket 2 is secured onto a hollow rod or pipe 3, which carries on its inside the flexible electric light cable 4. The rod 3 is supported and held by some supporting discs 5, through which the rod 3 is threaded through an aperture 6 (see Figure 2) made by cutting out a portion of each disc, and these discs are clamped together by a bolt 7 passing through some flanges 8 of a swivel block 9. The bolt 7 has threaded upon one end a spring 10, held in place by a cotter pin 11 and the parts are assembled together under pressure, or rather compression of the spring 10 so that after the cotter pin 11 is in place the two disc pieces 5 are held under a constant tension in supporting relationship onto the rod 3.

The supporting discs 5 are made in two pieces being stamped out of suitable blanks and the seam between the two is indicated by 12. After the blanks are made this seam 12 may be welded if desired into a unitary block making one block out of what is shown as two pieces 5 in the figures. These blocks 5 are provided with annular friction bearing surfaces or checks 57 developed by the recessed portions 58.

The apertures 6, as indicated in Fig. 2, through which the lamp rod 3 is threaded, is made egg shaped as shown in Figs. 4, 5 and 6, the front or lamp side being indicated by 59 in Fig. 4 has the narrow portion on the bottom, and on the rear or electric wire side 60, see Fig. 5, the narrow portion of the egg shaped aperture is at the top.

The lamp end being always heavier than the electric cord side, the rod 3 will always bear down on the narrow portion of the aperture 6, and up on the back side again on the narrow portion, as shown in Fig. 5, and thus the rod has a stable support always in the supporting discs 5.

When the lamp is desired to be adjusted through the supporting discs 5, the user simply lifts the lamp socket end of the rod 3 into a balance and then may slide it freely through its supporting discs 5 and it will stay wherever put, save only perhaps in a straight vertical position which is rarely ever used. When the rod 3 is allowed to slide to the limit of its travel at either end then a vertical position of the lamp may be had.

Thus, as it were, the egg shaped apertures of the supporting discs 5 act as an automatic clamping means for the lamp rod 3.

The flanges 8 of the swivel block 9 are separated from each other by the apertured portion 13 that permits a slight flexure of the flanges 8 under the influence of the spring 10, sufficient at all times to produce a frictional resistance to the rotation of the discs 5 about the bolt 7 so as to hold in stable condition the rod 3, which carries the lamp.

Thus after the rod 3 has been assembled into the embrace of the discs 5 it may be revolved about its axis or shoved longitudinally through the discs 5 in any position that may be desired by the user and will remain in such position because of the frictional contacts of the egg shaped aperture 6 of the discs 5. Not only that, the rod 3 may be rocked or revolved about the axis of the bolt 7 as may be desired in any adjustment of the lamp rod or pipe 3.

The swivel block 9 is threaded over a pedestal rod 14, which is always in an upright position in all of the different modifications or adjustments I have shown or that may be required in normal use of my bracket.

This pedestal rod 14 may be made either

of solid rod or out of a piece of tubing and it is provided with annular shoulder or abutment 15 upon which rides the lower end of the swivel block 9 and this swivel block 9 is held in stable frictional connection with the pedestal block 14 by reason of the clamping feature of the lower end of the swivel block 9, which is brought about by a series of slits 16 in the swivel block, which divides the lower end of the block into a series of clamping fingers 17, which have been contracted in diameter to bring about a clamping of the pedestal block 14 as is indicated in the drawings. Thus any position of revolution of the swivel block 9 traveling with the movement of the adjustment of the lamp rod 3 is held in stable position by the clamping of the sections 17 of the swivel block on to the pedestal block 14 and thus construction is common to all of the different fastening means of the desks or tables which I employ and as shown by the drawings.

In Figures 1 and 3 my pedestal block 14 is bent at right angles at 38 into a horizontal section 39 and in the case of Figure 1 the horizontal section 39 terminates in some separated wings 40 which are perforated for a clamping bolt 41 having a wing nut 42 for an adjustment. This bolt 41 passes through some lugs 43 of a wall piece 44, which is fastened to the wall or any vertical surface by the screws 45. A spreading thimble 46 is threaded over the bolt 41 between the lugs 43 to take the thrust of the nut 42, thus concentrating the clamping action on the wings 40 against the lugs 43 as desired.

In Figure 3 my pedestal block from its portion 39 is turned at 47 into a vertical section 48 which extends down into a tubular clamping member 49, which is slitted at 50 and clamped onto the portion 48 by the clamping bolt 51 and thumb nut 52. The tubular clamping member 49 is fixed in a base piece 53 secured by screws 54 or other suitable means to any horizontal supporting surface 55 as desired.

Thus I provide supporting means for the pedestal block 14 to suit what may be termed any normal variations required in the use of my bracket and at the same time preserve the flexible and universal adjustment feature of the member as provided for by the rod 3, discs 5 and swivel block 9 and spring clamping member 10.

The arrangement of the swivel block 9 onto the pedestal block 14 resting with its end sections 17 onto the flange or abutment 15 is a desirable connection and a cheap one to make. Thus after the pedestal block 14 is connected on to the table, desk or other fixed surface then the user of the lamp may push the lamp about to any position he desires without having to clamp or unclamp manually any device to get the desired lamp position as the frictional arrangement of the parts is such that he may simply push them to position and they will stay so adjusted by reason of the friction devices I have described.

The arrangement of the egg shaped apertures in the discs 5 which holds the rod 3 is a very desirable device from the standpoint that it permits an easy adjustment of the rod 3 longitudinally through these apertures, and allows it to automatically clamp itself as it were whenever it comes to rest.

The pedestal portion 14 is the same for all the different attachments that are necessarily used. These different attachments for different desks, benches, or wall brackets may be provided in different localities and allowed to remain while the lamp with its rod 3 and connections including the swivel block may be lifted off from any given pedestal 14 and replaced on any other pedestal as occasion may require.

In shop work it is frequently desirable to keep the extra lamps in the tool room or store room and allow the pedestal and its supporting fastenings to remain in place, and then as use is required of the lamp, the lamp together with its connected parts to the swivel block 9 is taken out and put in position of use. Thus a workman who may be called upon to shift from one position to another may remove only the swivel block 9 with its connected lamp over to the new pedestal.

Not only that, in shop practice lamps frequently break or burn out and it is more or less a common custom for workmen to rob another fixture of its lamp, but with my arrangement he may simply transfer the position of the lamps moving the swivel blocks 9 onto the other pedestals and thus taking the lamp with him.

While I prefer to make the discs 5 in two pieces, as I have shown which permits the making of them of stampings, I may join the discs by welding them together, as before mentioned, at the seam 12 in order to produce a unitary block, so that where I have used the word "block" in the claims it will readily be understood that thereby is meant the mechanical equivalent of the discs in so far as the function of the bracket is concerned.

The friction bearing surfaces or cheeks 57 located near the outer diameter of the discs or block 5 in association with the reentrant clearance surface 58 concentrates the clamping action of the spring 10 where it is of most service as compared with the uniform flat surface over the entire block which is a desideratum.

By hardening or heat treating this friction or contact surface 57 I get a better result in the working of the fixture.

What I claim is:—

1. In a lamp supporting bracket, a rod

adapted to carry a lamp thereon, an apertured block consisting of disc shaped members formed with an aperture and having opposite openings adapted to carry the said lamp rod, and the said openings being egg shaped and arranged in vertical positions with their smaller and larger portions positioned in reverse arrangement relative to each other, whereby the overbalance of said rod in the aperture will cause said rod to engage the smaller portions on opposite edges of said block.

2. In a lamp bracket of the class described, a block provided with an aperture therethrough, said aperture being egg-shaped and having the smaller end thereof at the bottom on one side of the block and at the top on the other side, and a rod mounted within said aperture.

Signed at Oakland, in the county of Alameda and State of California, this 25 day of June, 1924.

MILES FRANK DEACH.