R. F. FERGUSON.

LAMP BRACKET.

APPLICATION FILED NOV. 18, 1919.

1,343,499.

Patented June 15, 1920.

3 SHEETS—SHEET 1.

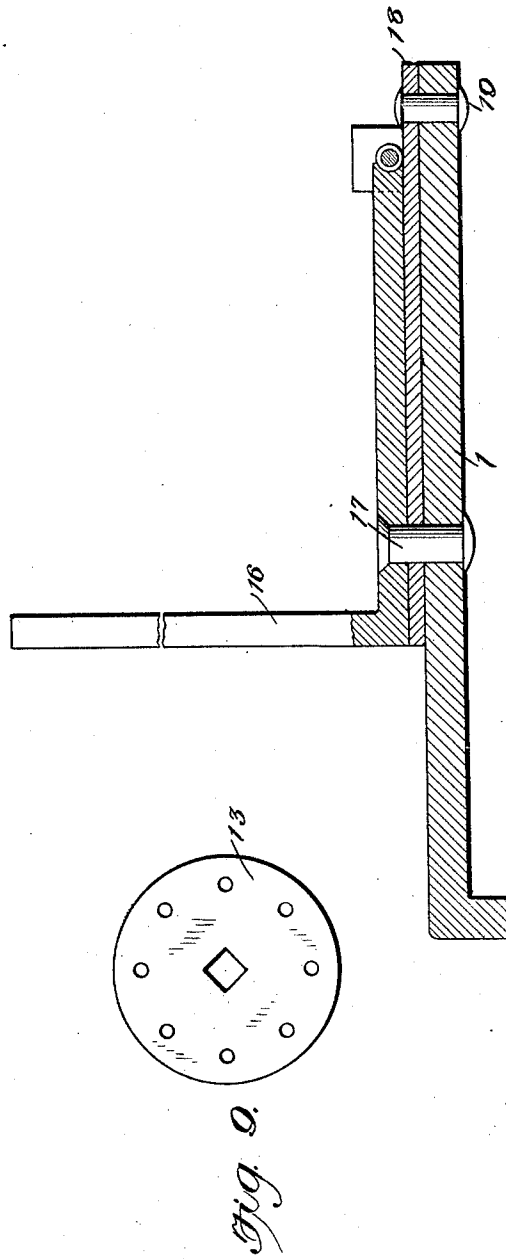


Fig. 4.

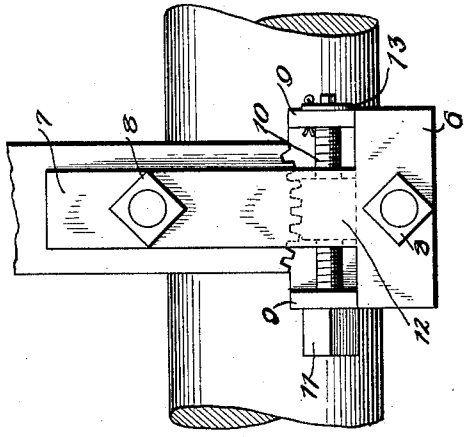


Fig. 9.

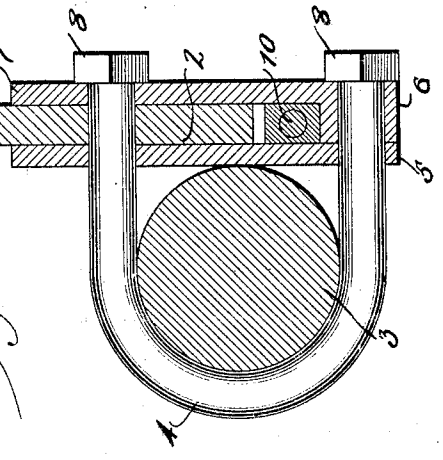


Fig. 1.

WITNESSES

J. H. Crawford.

C. E. Trainor.

INVENTOR

R. F. Ferguson,

BY Munn & Co.

ATTORNEYS

R. F. FERGUSON.

LAMP BRACKET.

APPLICATION FILED NOV. 18, 1919.

1,343,499.

Patented June 15, 1920.

3 SHEETS—SHEET 2.

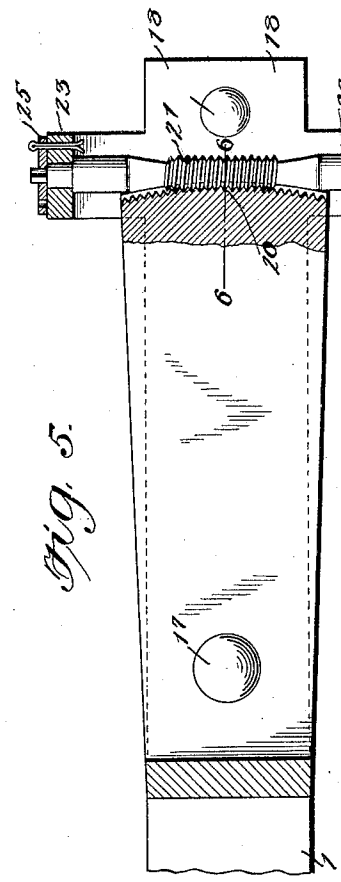


Fig. 5.

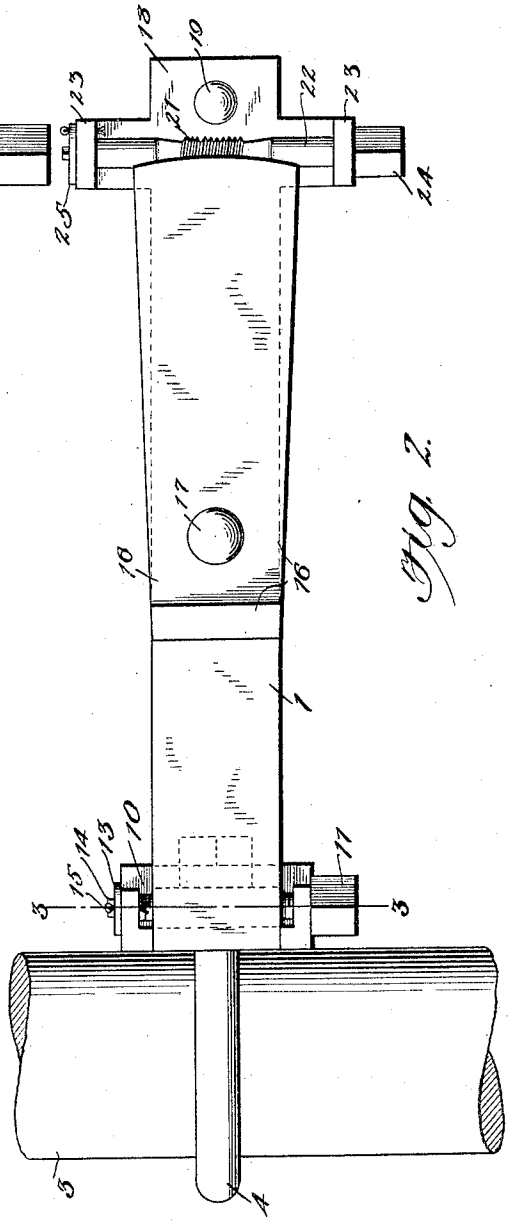


Fig. 2.

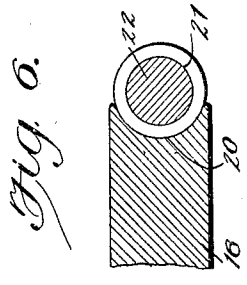


Fig. 6.

WITNESSES

J. H. Crawford

C. E. Trainor.

INVENTOR

R. F. Ferguson,

BY Munn & Co.

ATTORNEYS

R. F. FERGUSON.

LAMP BRACKET.

APPLICATION FILED NOV. 18, 1919.

1,343,499.

Patented June 15, 1920.

3 SHEETS—SHEET 3.

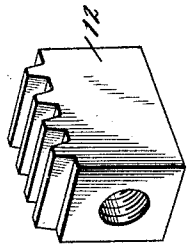


Fig. 7.

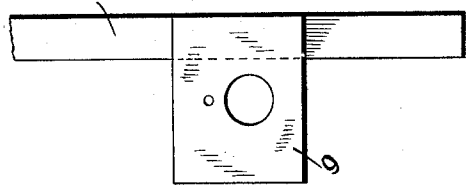


Fig. 8

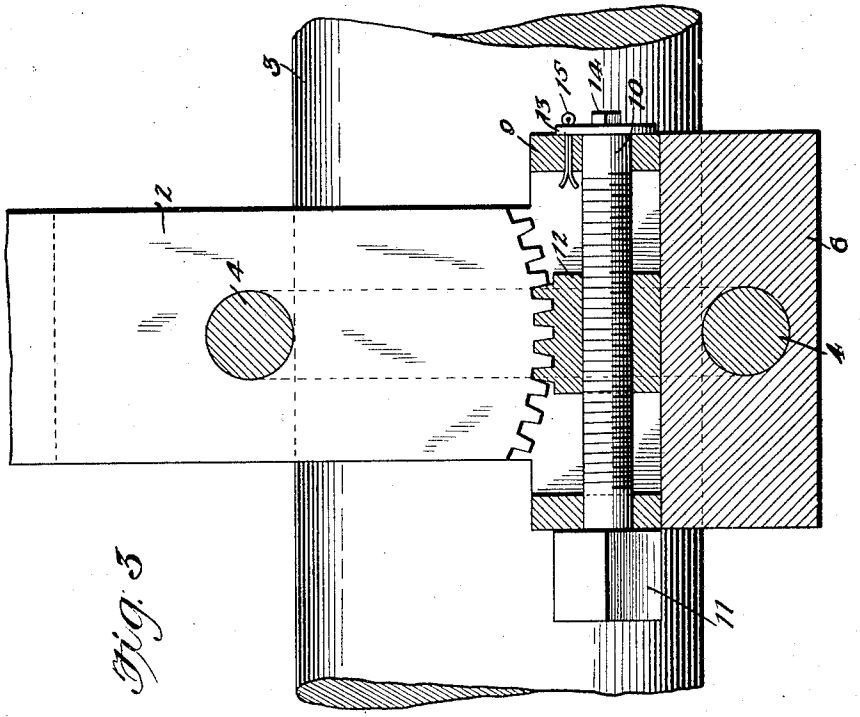


Fig. 5

WITNESSES

J. H. Crawford

C. E. Trainor.

INVENTOR

R. F. Ferguson,

BY Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

ROBERT FRANCIS FERGUSON, OF DETROIT, MICHIGAN.

LAMP-BRACKET.

1,343,499. Specification of Letters Patent. Patented June 15, 1920.

Application filed November 18, 1919. Serial No. 338,944.

To all whom it may concern:

Be it known that I, ROBERT FRANCIS FERGUSON, a citizen of the United States, and a resident of Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Lamp-Brackets, of which the following is a specification.

My invention is an improvement in lamp brackets, and has for its object to provide a simple and inexpensive bracket of the character specified, wherein a maximum of adjustment is permitted.

In the drawings:

Figure 1 is a vertical section of the improved bracket,

Fig. 2 is a top plan view,

Fig. 3 is a section on the line 3—3 of Fig. 2,

Fig. 4 is a view looking at the fixed support,

Fig. 5 is a top plan view of a portion of the bracket with parts in section,

Fig. 6 is a section on the line 6—6 of Fig. 5,

Fig. 7 is a perspective view of the adjusting nut,

Fig. 8 is a partial side view of the T-shaped plate,

Fig. 9 is a plan view of the locking washer.

In the embodiment of the invention shown the bracket comprises an L-shaped bar, consisting of a relatively long portion 1, and a relatively short portion 2. This relatively short portion 2 is connected to a fixed support 3, by means of a stable or U-shaped clip 4. The body of the clip embraces the fixed support with the arms extending above and below the support, and the arms are connected with the arm 2 of the bracket in a manner to be presently described.

A plate 5 is arranged on the opposite side of the fixed support from the body of the clip, and this plate has openings through which the arms of the clip extend. The portion 2 of the bracket has an opening registering with the uppermost opening of the plate, for receiving the uppermost arm of the plate, and the lowermost arm in addition to passing through the plate 5 extends through the cross member 6 of a T-shaped plate comprising the cross portion 6 and the stem or body 7. Nuts 8 engage the arms to connect the parts together, and referring to Fig. 1 it will be seen that the stem or body portion 7 of the plate 6—7 is of less width than the cross portion 6. The face of this cross portion 6 abuts the plate 5, but the stem portion is spaced far enough from the plate 5 to receive the relatively short portion 2 of the bracket.

The ends of the cross portion 6 of the T-shaped plate have lugs 9, in which is journaled a screw 10. This screw has a polygonal head 11 at one end for convenience in turning the same, and a nut 12 has a threaded opening through which the screw passes. This nut has a series of gear teeth, and these teeth mesh with a similar series on the lower end of the portion 2 of the bracket. This screw is locked from movement when desired, that is when the nut is in adjusted position, by means of a locking washer 13. This washer has a polygonal opening for receiving the reduced polygonal end 14 of the screw, and the washer is held from turning movement with the screw by means of a cotter pin 15, which passes through registering openings in the washer and in the adjacent lug 9. Referring to Fig. 9 it will be seen that the washer has an annular series of openings for engagement by the cotter pin.

An angle plate 16 is pivotally connected to the long arm 1 of the bracket 1—2, one of the arms of the angle plate being pivoted to the said portion 1 by a rivet 17 or the like. A plate 18 is arranged between the angle plate and the portion 1 of the bracket, being secured to the said portion 1 by the rivet 17, and by a rivet 19 near the free end of the portion 1. That portion of the angle plate 16 which is perpendicular to the portion 1 is at the inner end of that portion of the angle plate which lies upon the portion 1, and the rivet 17 is near this vertical portion of the angle plate.

That end of the portion of the angle plate resting upon the plate 18 remote from the portion which is perpendicular to the bracket is provided with an arc shaped series of worm teeth 20, which mesh with a worm 21 on a shaft 22 which is journaled in angular extensions 23 from the plate 18 before mentioned. One end of this shaft has a polygonal head 24, and the other end is provided with a locking washer 25 for locking the shaft in adjusted position, the

said washer being constructed in the same manner as that shown in Fig. 3, and operating in the same manner.

In operation, the lamp to be supported is arranged on the angle plate 16. In order to adjust the beam of light laterally to the proper position, the washer 25 is released, and by turning the shaft 22 the angle plate 16 may be adjusted to vary the angle of the beam of light laterally. In order to level the bracket 1—2, or to vary the inclination of the wide dimension of portion 1 to the horizontal shaft 10 is released and is turned to swing the arm 2. After the parts are adjusted, they are locked by the washers and cotter pins. By means of the clip 4 the bracket as a whole may be adjusted longitudinally of the support 3.

I claim:

1. A lamp bracket, comprising an angle bracket consisting of two portions extending at approximately a right angle with respect to each other, a fixed support to which one arm of the bracket is pivotally connected, coöperating means on the said arm and on the support for swinging the said arm on its pivotal connection, a lamp support pivoted to the other arm of the bracket and lying upon the said other arm of the bracket, and means in connection with the said arm and the support for swinging the support on its pivotal connection, each of the said swinging means consisting of teeth on the lamp support and on the bracket arm respectively, worm shafts journaled on the fixed support and on the other bracket arm respectively and engaging the adjacent teeth, and means for locking each shaft from turning movement.

2. A lamp bracket, comprising an angle bracket consisting of two portions extending at approximately a right angle with respect to each other, a fixed support to which one arm of the bracket is pivotally connected, coöperating means on the said arm and on the support for swinging the said arm on its pivotal connection, a lamp support pivoted to the other arm of the bracket and lying upon the said other arm of the bracket, and means in connection with the said arm and the lamp support for swinging the lamp support on its pivotal connection, each of the said swinging means consisting of teeth on the lamp support and on the bracket arm respectively, worm shafts journaled on the fixed support and on the other bracket arm respectively and engaging the adjacent teeth.

3. A lamp bracket, comprising an angle bracket consisting of two portions extending at approximately a right angle with respect to each other, a fixed support to which one arm of the bracket is pivotally connected, coöperating means on the said arm and on the support for swinging the said arm on its pivotal connection, a lamp support pivoted to the other arm of the bracket, and means in connection with the said bracket arm and lamp support for swinging the lamp support on its pivotal connection.

4. A lamp bracket consisting of two portions extending at approximately a right angle, a fixed support to which one of the arms of the bracket is pivoted, a lamp support pivoted to the other arm of the bracket, and means in connection with the fixed support and the bracket for swinging said bracket on the support, means in connection with the bracket and the lamp support for swinging said support on the bracket, and means for locking each of the said swinging means in adjusted position.

5. A lamp bracket consisting of two portions extending at approximately a right angle, a fixed support to which one of the arms of the bracket is pivoted, a lamp support pivoted to the other arm of the bracket, means in connection with the fixed support and the bracket for swinging said bracket on the support, and means in connection with the bracket and the lamp support for swinging said support on the bracket.

ROBERT FRANCIS FERGUSON.