

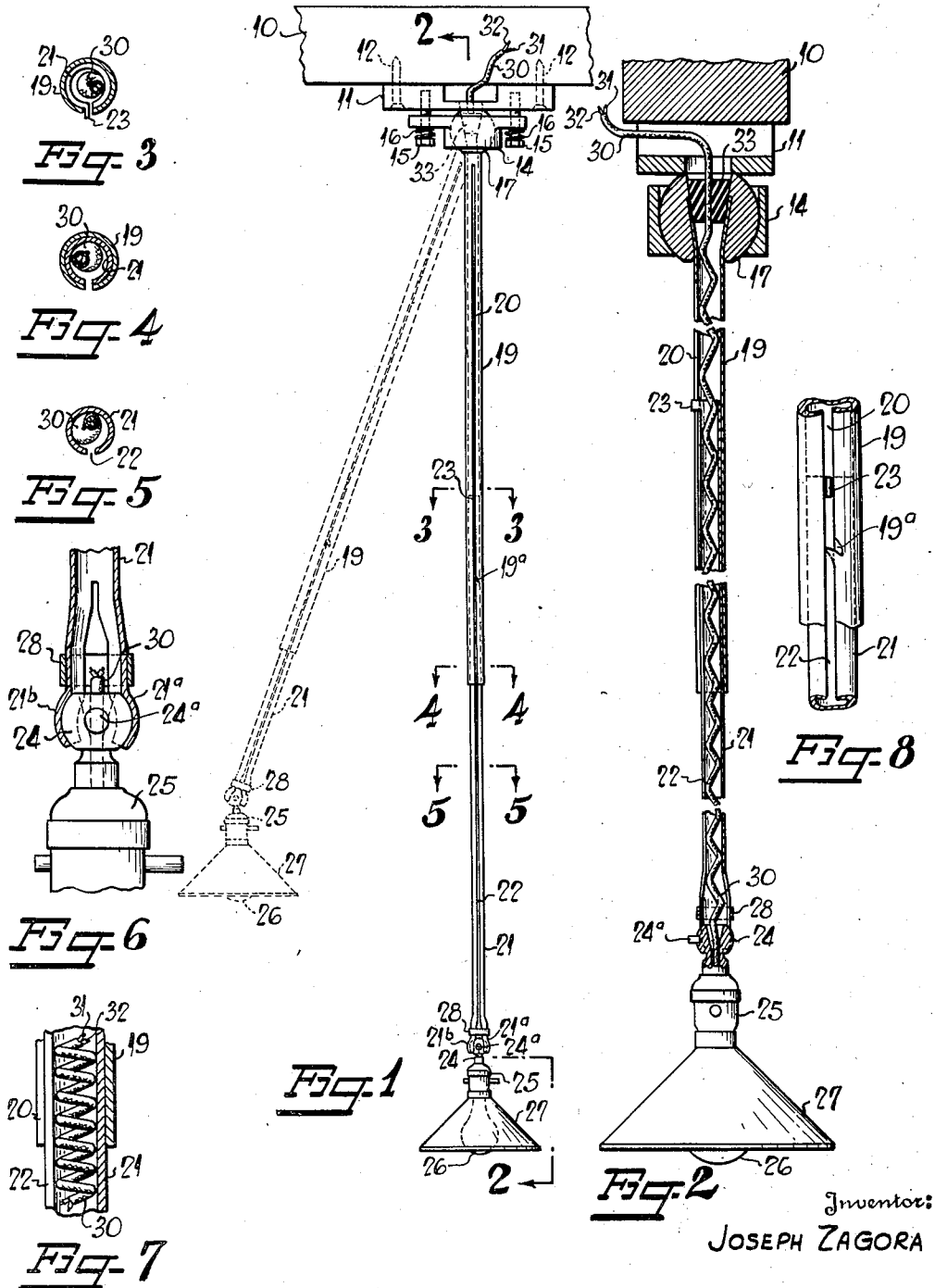
May 3, 1938.

J. ZAGORA

2,115,898

SUPPORT

Filed Dec. 7, 1936



Inventor:
JOSEPH ZAGORA

James Eaton

Attorney

UNITED STATES PATENT OFFICE

2,115,898

SUPPORT

Joseph Zagora, Charlotte, N. C.

Application December 7, 1936, Serial No. 114,593

2 Claims. (Cl. 248—323)

This invention relates to a bracket and more especially to a bracket having an arm extending therefrom, the free end of which supports an object such as a display sign or an electric light. In many factories, machine shops and the like, which are provided with electric lights, the lamps are suspended from the ceiling by a single insulated wire. It has been found desirable to have some means for moving the lamp to any desired position relative to a particular location. In order to do this it is obviously necessary to provide means for taking up the slack in the suspended wire which conveys the current to the electric light on the end thereof. This take-up means has often proved to be very cumbersome and inconvenient on devices heretofore used for that purpose, being an obstruction to workmen and often resulting in short circuits.

It is therefore, an object of this invention to provide a support for lamps, display signs, and the like, comprising a bracket which is normally secured to a stationary object such as a ceiling or beam, said bracket having one end of an arm mounted for universal movement therein and said arm having a light or display sign secured to the lower end thereof which likewise is adapted to have universal movement relative to said arm.

It is a further object of this invention to provide a bracket of the class described comprising a supporting member having a telescopic member universally secured thereto, a lamp mounted for universal movement on the lower end of said telescopic member, and an electrical conduit leading from said lamp and through said telescopic member to supply the current to said lamp. By thus enclosing the current supply wires within the telescopic member the undesirable effect of having an exposed conduit is thereby eliminated. Upon the contraction of the telescopic member the conduit therein will assume a coiled position thereby taking up the slack.

Some of the objects of the invention having been stated, other objects will appear as the description proceeds when taken in connection with the accompanying drawing, in which:—

Figure 1 is an elevation of the invention shown secured to a suitable beam and also showing the same in a dotted line position;

Figure 2 is a vertical sectional view, with portions thereof broken away and taken along line 2—2 in Figure 1;

Figure 3 is a sectional view taken along line 3—3 in Figure 1;

Figure 4 is a sectional view taken along line 4—4 in Figure 1;

Figure 5 is a sectional view taken along line 5—5 in Figure 1;

Figure 6 is an enlarged sectional view through the lower end of Figure 1 showing the manner in which the lamp is mounted for universal movement on the telescopic bracket;

Figure 7 is an enlarged sectional view similar to the central portion of Figure 2 but showing the position assumed by the electric cord when the invention is in a shortened or contracted position;

Figure 8 is an enlarged view of the intermediate portions of the telescopic members showing means for limiting the extension thereof.

Referring more specifically to the drawing, the numeral 10 indicates a suitable ceiling beam or floor joist to which is secured a plate member 11 by any suitable means such as wood screws 12. Member 11 has secured to the lower side thereof a cap member 14 by any suitable means such as screws 15, each of said screws having a compression spring 16 disposed between the head thereof and the flanges or ears of cap member 14. The function of these springs is to normally press the cap member 14 upwardly against the lower side of ball member 17 and cause the upper portion of this ball to normally rest against the lower surface of the plate member 11. These springs will allow for any irregularities in the periphery of the ball member 17 when the same is turned to a different position from that shown in Figures 1 and 2.

These springs also provide the necessary friction between the ball 17 and the lower side of plate 11 to cause the ball and its associated parts to remain in the position in which it is placed. Ball 17 has penetrating the central portion thereof a hollow cylindrical pipe 19 which has a longitudinal groove 20 therein. This pipe is telescopically mounted over a second pipe 21 which has a similar longitudinally disposed groove 22 therein. The upper end of the pipe 21 has an outstanding projection 23 which slides in groove 20 of pipe 19 and thereby prevents rotative movement of pipe 21 within pipe 19. The friction between these two pipes will hold pipe 21 in whatever position it may be placed. The lower end of pipe 21 has ears 21a and 21b integral therewith which are adapted to form a suitable socket for a ball 24. This ball has secured to the lower end thereof an electric light socket 25 which has a bulb 26 in the lower end thereof and also a shade 27 surrounding the same.

The desired frictional contact between the members 21a and 21b and ball 24 is obtained by

means of band 28 which surrounds the lower portion of member 21 and restricts the outward movement of the members 21a and 21b. It will be noted that the lower end of the pipe, at the point where band 28 is placed, is tapered and also of a slightly larger diameter (Figure 6), than the other portion of the pipe thereby making it possible for the band 28 to be moved to a clamping position as shown, or to be pushed upwardly to a position where members 21a and 21b can be spread apart to allow the removal of ball 24 therefrom.

In order to prevent axial rotation of light socket 25, a pin 24a is secured to the ball member 24, and extends therefrom. This prevents the light socket from being turned to unwind the coiled wire which is in the pipes 19 and 21.

Socket 25 has extending upwardly therefrom a conduit 30 in which is placed suitable electrical conductors 31 and 32 for supplying the necessary current to bulb 26. At the point where the conduit 30 passes through ball 17 a suitable plug 33 is provided. This tightly surrounds conduit 30 and the plug is secured within the cavity in ball 17. This will prevent conduit 30 from sliding upwardly out of pipe member 19 when the members 19 and 21 are in a converged or contracted position.

By referring to Figures 2 and 7, it is seen that cord 30 will assume a coiled position within the pipe when members 19 and 21 are pushed to a contracted position such as shown in dotted line position in Figure 1. This eliminates the necessity of providing means for taking up the slack of the coil since this coil is confined within the tube and will be automatically compressed when the telescopic member is contracted. It is also seen that universal movement of the telescopic member is made possible by means of ball 17 this making it easy for the lower end thereof to be placed in any desired position. Furthermore, the light from the lower end of this member is also mounted for universal movement which will enable the user to direct light rays in the desired manner.

Figure 8 is an enlarged view of the intermediate portion of pipes 19 and 21 with the pipes shown in a more extended position from that position shown in the other figures. The large pipe 19 has a notch 19a cut therein and the metal from this notch is bent across the slot 20 so that it will act as a stop when the member 21 has been extended far enough to allow projection 23 to

engage it. This prevents the pipe 21 from being unintentionally removed from pipe 19.

While the present embodiment is shown in connection with a lamp cord, and an electric light bulb, it is to be understood that this bracket may be used for any other suitable purposes such as for a display sign for a window or for placing mirrors in the desired position in automobiles and the like. In fact, the same principle can be embodied in any position where it is desired to have a bracket universally supporting a telescopic member with means for universally supporting an object on the free end of the telescopic member.

In the drawing and specification there has been set forth a preferred embodiment of the invention, and although specific terms are employed, they are used in a generic and descriptive sense only, and not for purposes of limitation, the scope of the invention being set forth in the appended claims.

I claim:

1. A support comprising a pair of telescopically disposed tubes, each tube having a longitudinally disposed slot extending from its outer end to the extreme inner end, the innermost of said tubes having a tongue extending from the sidewalls of its slot and slidably penetrating the slot in the outer tube, the sidewall of the slot in the outer tube having a tongue extending therefrom across the slot in the outer tube to limit outward movement of the innermost tube relative to the outer tube, the innermost tube frictionally engaging the inner surface of the outer tube to cause the two tubes to remain in adjusted position, and means for supporting the outer end of one of the tubes.

2. A support comprising a pair of tubes having outer ends and telescoping inner ends, the outer tube being slotted from near its outer end to its extreme overlapping or inner end, and the outer tube having a projection near its inner or overlapping end extending across the slot in said outer tube, the inner tube being slotted from its outer end to its extreme inner or overlapping end and frictionally and resiliently engaging the inner surface of the outer tube, the inner tube having a projection extending through the slot in the outer tube and being adapted to engage the projection on the outer tube to limit outward movement of the inner tube relative to the outer tube and also preventing relative rotative movement between the two tubes, and means for supporting the outer end of one of the tubes.

JOSEPH ZAGORA.