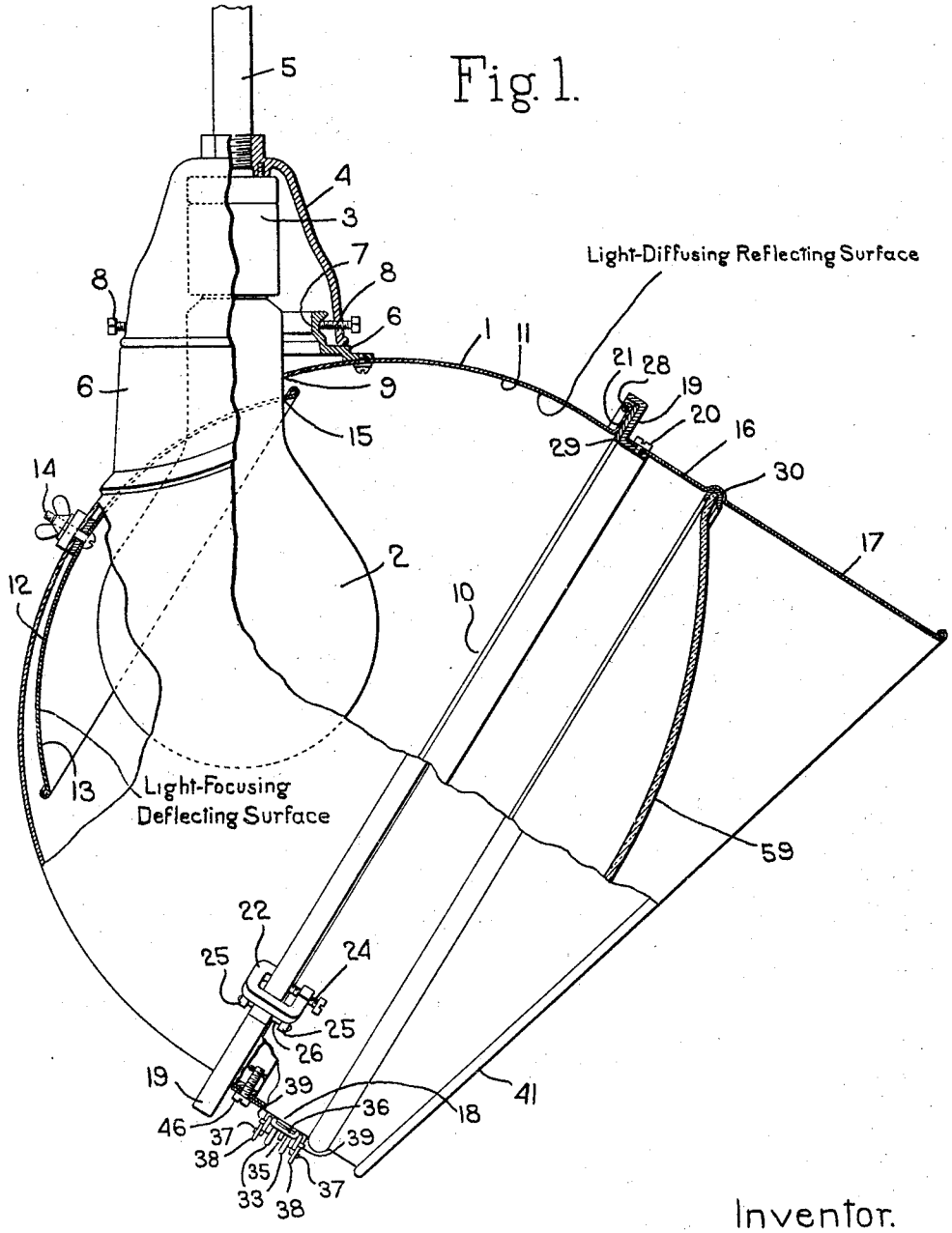
March 21, 1933. K. A. SAWIN 1,902,587

FLOODLIGHT

Filed Dec. 4, 1930 2 Sheets-Sheet 1

Fig. 1.



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FLOODLIGHT

Filed Dec. 4, 1930 2 Sheets-Sheet 2

Fig.2.

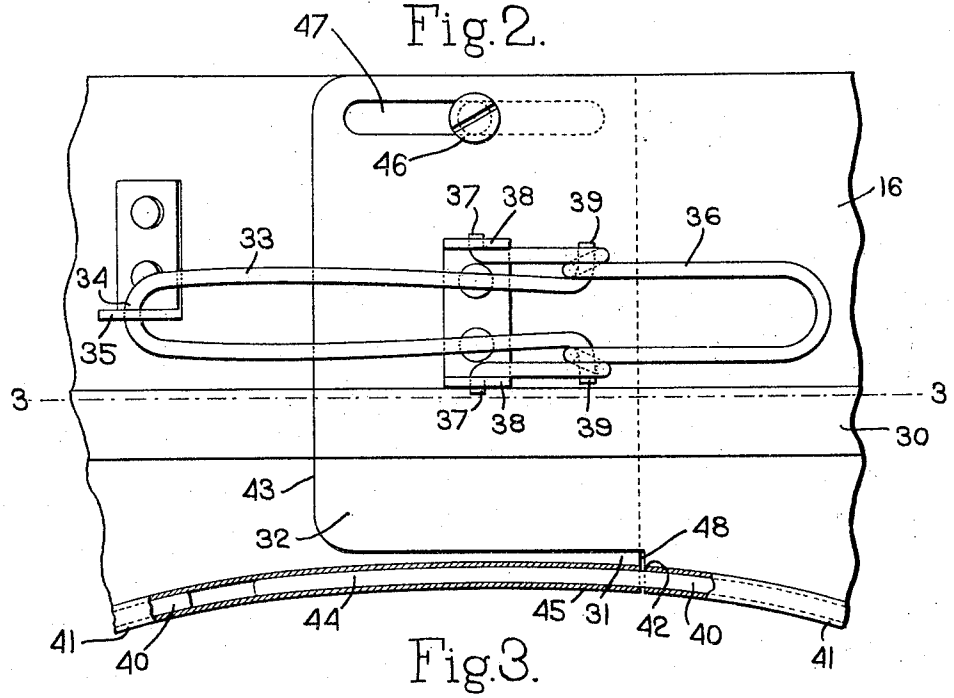


Fig.3.

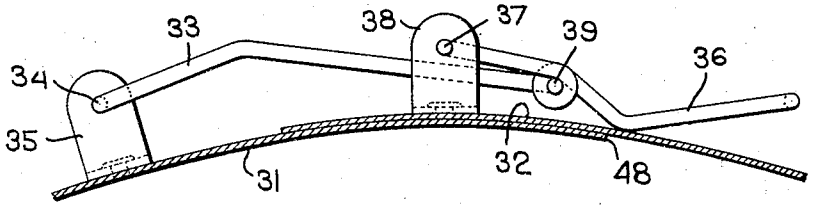


Fig.4.

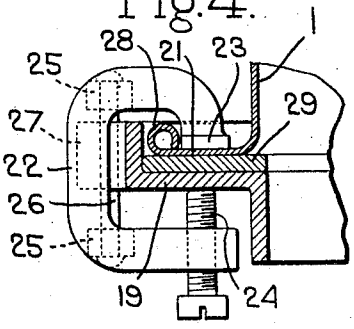
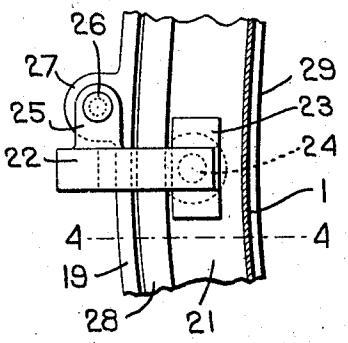


Fig.5.



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UNITED STATES PATENT OFFICE

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FLOODLIGHT

Application filed December 4, 1930. Serial No. 500,032.

This invention relates to so-called "flood lights" and has for one of its objects to provide a novel flood light which is constructed so that it will not only give the flood light effect but will also project a beam of light.

A further object of the invention is to provide a flood light with a visor element which can be adjusted about the axis of the reflector to shade the flood light in any given direction.

A still further object of the invention is to provide a novel means for clamping this adjustable visor to the reflector element of the flood light which clamping means will permit the ready adjustment of the vision.

Another object of the invention is to provide an improved cover glass which is mounted in the adjustable visor and which serves to close in and thus protect the reflecting surface of the reflector so that said surface will maintain its high reflecting value.

Other objects of the invention are to improve generally flood lights in general particulars as will be more fully hereinafter set forth.

In order to give an understanding of the invention I have illustrated in the drawings a selected embodiment thereof which will now be described after which the novel features will be pointed out in the appended claims.

Fig. 1 is a side elevation of a flood light embodying my invention with parts broken out;

Fig. 2 is a detail of the clamping device for clamping the cover glass in the adjustable visor;

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

Fig. 4 is a sectional view through the edge of the reflector and visor with my improved clamping device for clamping the visor to the reflector, said section being taken on substantially the line 4—4, Fig. 5;

Fig. 5 is a top plan view of Fig. 4.

The flood light herein shown is of the type which comprises a semi-circular reflector member 1 within which the electric light bulb 2 is located. The electric light bulb is shown as secured to a socket member 3 which in turn is located within and attached to a canopy 4, the latter being screw threaded to a pipe 5 which not only supports the flood light but also furnishes a conduit by which the circuit wires are led to the socket member 3.

The main reflector member 1 may be secured to the canopy 4 in any approved way. As herein shown said reflector member has attached thereto a supporting collar 6 which has the neck portion 7 that is entered in the open end of the canopy, said collar being suspended from the canopy by means of screws 8 which are screw threaded through the lower end of the canopy and the inner ends of which engage in an exterior groove formed in the neck 7.

The reflector member 1 is, of course, provided with an opening 9 through which the electric light bulb extends and in the construction shown this opening and the collar 6 are situated non-axially of the reflector member 1 so that the mouth 10 of the deflector member through which the light is projected is directed at an angle to the supporting pipe 5.

As stated above, one feature of my invention relates to a novel construction by which the lighting fixture will produce not only a flood light effect but also will throw a beam of light.

The interior surface 11 of the main reflector member 1 is constructed to give a flood light effect, this being accomplished by providing said surface with a reflecting surface designed to diffuse the light more or less. Such light-diffusing reflecting surface may be secured by providing the surface 11 with a coating of porcelain enamel.

The body of the reflector 11 may conveniently be made of steel or sheet metal and the approximately semi-circular shape of the shell 1, together with the porcelain enamel reflecting surface will produce a flood-lighting effect, it being understood, of course, that the electric light bulb 2 will be a high-powered bulb.

To produce the beam of light I propose to equip the reflector member with a light-focusing reflector element, which is situated behind the bulb 2 in the axial line of the opening 10 and which is constructed to focus

the light into a beam and project the beam through the opening 10. Such light-focusing reflector is indicated at 12 and it is of the proper shape to project a beam of light. This light-focusing reflector 12 may be made of any suitable material and may conveniently be made of metal which has the surface 13 prepared so that it will have high light-reflecting qualities.

This light-focusing reflector 12 can conveniently be secured to the main reflector 1 in any appropriate way and as herein shown it is retained in position by a clamping bolt 14. The light-diffusing reflector member 12 will, of course, have an opening 15 therein through which the neck of the electric light bulb extends.

Another feature of the invention relates to a novel visor construction for the reflector member 1 which is secured to the reflector member 1 for adjustment about the axis of the opening 10 and which functions to shade the light source from any desired direction. This visor element is indicated generally at 16 and it is annular in shape with a greater width on one side as shown at 17 than on the other side as shown at 18 thereby giving the visor effect. This visor member is formed of sheet metal bent into the cylindrical shape and it is attached to a supporting ring 19 by means of screws 20. The ring 19 thus forms in effect a peripheral flange extending radially from the inner end of the visor member. The reflector member 1 is provided with a radially-extending peripheral flange 21 which mates the flange 19 and to which said flange or ring 19 is clamped by suitable clamping means.

The clamping means herein illustrated comprise a plurality of clamping members 22, each of which is pivoted to the supporting ring 19 and each of which has two clamping jaws between which the flange 21 and ring 19 may be clamped. Each clamping member has a general **C** shape, one arm of which constitutes a clamping jaw 23 adapted to engage the flange 21 and the other arm of which carries a clamping screw 24 that is adapted to engage the ring 19. Any desired number of these clamps may be employed and they will be placed at appropriate distances around the supporting ring 19. When the clamp is in its clamping position and the clamping screw 24 is tightened the ring 19 will be firmly clamped against the flange 21 thereby retaining the visor in position. When the clamping screws are loosened the visor can be readily turned about the axis of the reflector member into any desired position.

These clamping members 22 are shown as pivotally connected to the supporting ring 19 and for this purpose each clamping member has two ears 25 extending laterally therefrom, which ears carry a pivot pin 26 that extends through an ear 27 formed on the ring 19. The ears 25 are spaced apart further than the vertical dimension of the ear 27 so that when the screw 24 is backed off sufficiently the corresponding clamping member may be raised to an extent to permit the jaw member 23 to swing over the bead 28 at the edge of the flange 21. These clamping members 22 are thus pivotally connected to the ring 19 and can be swung into a position out of engagement with the ring 21 in order to permit the removal of the visor.

The visor 16 is constructed to support a cover glass 59 which closes the front of the reflector and thus furnishes the protector for the reflecting surfaces 11 and 13. The periphery of the cover glass 59 is shown as received in an annular groove 30 formed in the visor 16 and said visor is made contractible radially thereby to clamp the glass in position.

The visor element is in the form of a split ring with the ends 31 and 32 overlapping each other and a self-locking clamping device is provided by which the overlapping ends are shifted relative to each other to contract the diameter of the visor member, said clamping member serving also to lock the visor in its contracted relation.

This clamping member comprises a link member 33 which is pivoted at one end as shown at 34 to an ear 35 secured to one end of the visor member, said link being pivoted at the other end to a locking member 36 which in turn is pivoted to the other end of the visor member. The member 36 is shown as a **U**-shaped member, the two ends thereof being pivoted at 37 to ears 38 rigid with the end 32 of the visor member and the link 33 is also shown as a **U**-shaped member with the ends of the arms pivoted to the arms of the link 32 as shown at 39.

Figs. 2 and 3 show the locking member in its locking position with the visor element contracted. When the arm 36 is swung to the left Fig. 3 about its pivot 37 this movement will operate through the link 33 to shift the end 31 of the visor member to the left relative to the end 32 thereby expanding said member. When the parts are in the operative position shown in Fig. 3 the pivot point 39 is slightly below the pivot point 30 so that the device is a self-locking device.

The edge of the visor member is stiffened by means of a wire 40 which is enclosed in a bead 41 formed by rolling the edge of the visor back on itself.

The beaded portion of the visor is cut away at the end 32 so that at its end the termination 42 of the bead is at a point in the rear of the edge 43 of the end 32. One end 44 of the wire 40 projects beyond the end 42 of the bead and this projecting end enters the end portion 45 of the bead at the end 31 of the visor. The two ends of the bead are thus interlocked together at the point where-

by the visor will present a stiff edge portion.

The two overlapping parts 31, 32 of the visor are guided in their relative movement by a guiding pin 46 which is anchored in the part 31 and which extends through a slot 47 in the part 32.

I claim:

1. In an electric light fixture, the combination with a reflector, of a light within the reflector, a supporting ring detachably secured to the reflector, a visor element carried by the supporting ring, said visor element being expansible and contractible radially, a cover glass situated within the visor member and a lock for locking the visor member in its contracted condition, the cover glass being held in the visor by the contraction thereof.

2. In an electric light fixture, the combination with a reflector, of a visor member secured thereto, said visor member being in the form of a split ring and expansible and contractible radially, means for locking the visor member in its contracted condition, the edge of the visor member being rolled to present a bead, a stiffening wire within the bead, said wire projecting beyond one of the meeting ends of the split visor member and into the bead at the other end thereof.

3. A visor element for an electric light fixture provided with a reflector having a radially-extending peripheral flange, said visor element having a radially-extending flange mating that of the reflector, C-shaped clamping members pivotally carried by the visor flange at a point outside of the reflector flange, and adapted to swing about an axis substantially parallel to that of the visor, the arms of the clamping member being adapted to embrace the mating flanges when the clamping member is in operative position, and a clamping screw carried by one of the arms of said clamping member and co-operating with the other arm to clamp the two flanges together.

4. A visor element for use in connection with a reflector of an electric light fixture having a radially-extending peripheral flange, said visor element having a radially-extending flange mating that of the reflector, clamping members pivoted to the visor flange at a point outside of the reflector flange and to turn about an axis parallel to the axis of the visor, each clamping member having two opposed jaws adapted to receive the flanges between them when the clamp is in operative position, one of the jaws being movable toward and from the other jaw.

In testimony whereof, I have signed my name to this specification.

KENNETH A. SAWIN.