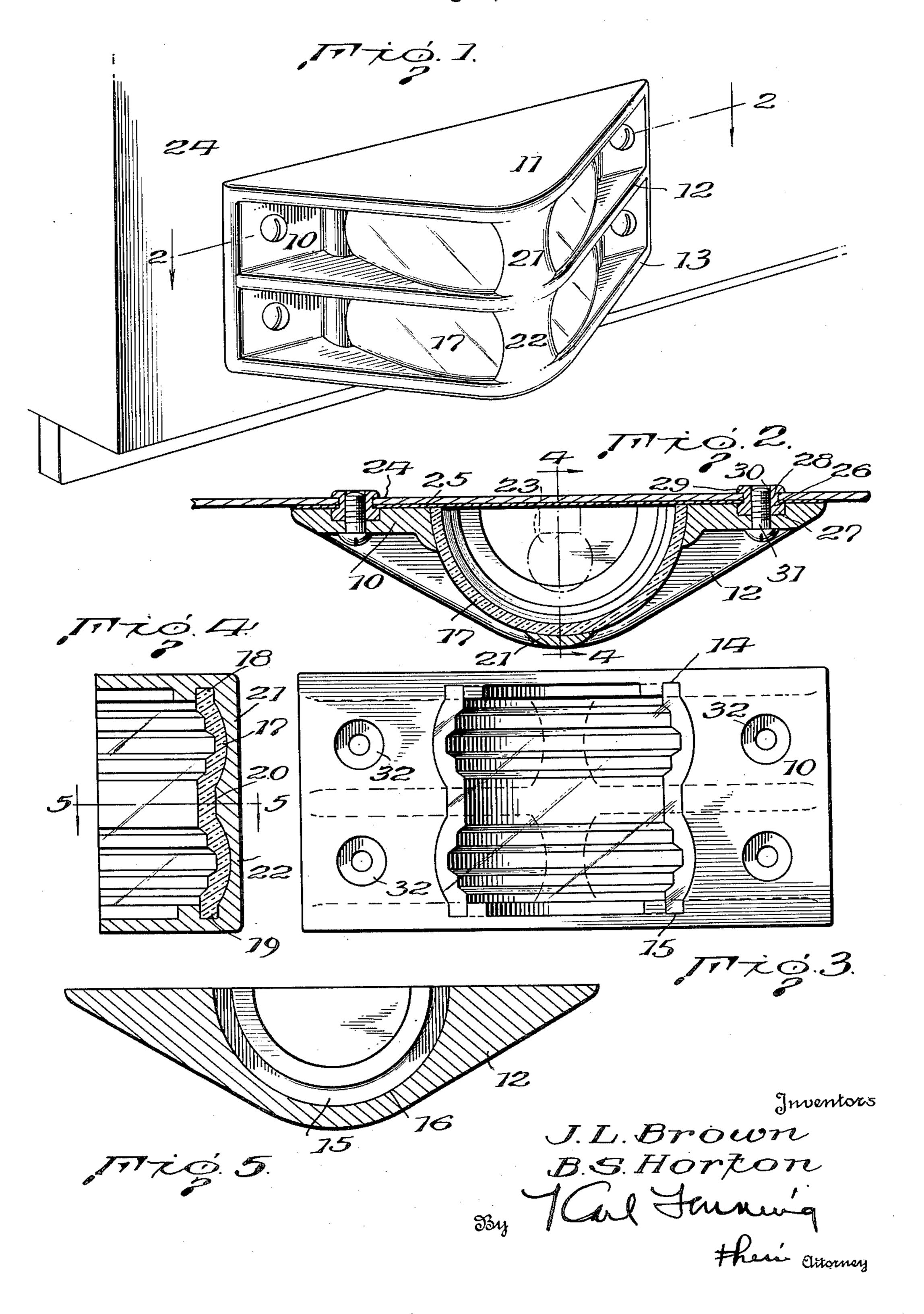
LIGHT

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## UNITED STATES PATENT OFFICE

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LIGHT

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The invention is particularly directed toward the production of a light to be applied to the side of a truck or similar vehicle. It is desirable that such a light be visible toward the front and rear and to some extent toward the side. An objection to some lights now in use is that they project a considerable extent from the side of the truck and are fragile and held in a fragile manner, so that, in the ordinary operation of a truck, overhanging or projecting obstacles are met with by the side lights in such a way that improper stress and strain are put upon them. Among other things, overhanging and projecting branches of trees may wipe against the light and bend or break it or pull it from the truck.

It is a purpose of the present invention to provide a light especially adapted for the side of a truck or car or the like of such a character that it will present substantially no obstruction to opposing articles and will not catch in opposing articles. These obstructions may pass over and about the light without injuring it and without displacing it. To this end the body of the light is more or less streamlined and the lens is fully protected although left visible through a very 25 large arc which may approach 180°.

In such a construction it has been found convenient to employ a substantially semi-cylindrical lens or one having substantially semi-circular ends and to arrange the frame of the light so 30 as to allow the lens to be readily inserted and removed but at the same time to allow of its being held more or less rigidly in place and protected when the light is in position on the vehicle.

35 The invention may be embodied in various forms. In the accompanying drawing one specific embodiment of the invention is illustrated. Figure 1 is a perspective view of the light in place on the side of a truck or other vehicle. Fig. 2 40 is a horizontal section on the line 2—2 of Fig. 1. Fig. 3 is a rear plan view of the light frame. Fig. 4 is a vertical section on the line 4—4 of Fig. 2. Fig. 5 is a horizontal section on the line 5—5 of Fig. 4, the lens being omitted.

The frame of the light preferably consists of a casting which may be of any suitable material and may be finished in any suitable way. It may be preferred to have the light frame chromium plated with a high polish, especially when the light is to be applied to a vehicle, the walls of which are made of stainless steel or other polished material.

The light casting may consist of a base plate 10 from which rise three substantially triangular plates 11, 12 and 13. The uppermost plate 11 like the lowermost plate 13, on its outer surface is smooth and unbroken. All three plates at their apexes may be slightly curved so as to provide 60 no sharp angle or corner for entanglement with opposing or interfering objects. The distance between the various plates 11, 12 and 13 may be relatively small so that there is slight opportunity or chance of any foreign object projecting between the plates but still large enough to allow of sufficient display of the illumination. The outer edges of the plates are smooth and tend to push aside and easily pass about any obstructing matter. They are set at an angle and incline gradually outward from the truck body so In as to easily and smoothly pass by obstructions without catching. On the inner surface the plate If is provided with a semi-circular groove or channel 14. Similarly there is provided in the inner face of the plate 13 a substantially semi-circular groove or channel 15. Between the grooves 14 and 15 there is cut from the intermediate plate 12 a substantially semi-circular portion 16. The lens 17 is substantially semi-cylindrical in shape, having a substantially semi-circular end portion 18 20 of substantially the same shape and form as the slot 14. At the other end the lens 17 is provided with a substantially semi-circular portion 19 corresponding substantially in shape and form to the slot 15. At its middle portion the outer surface 20 of the lens 17 corresponds substantially 20 in shape to the cut out portion 16 in the intermediate plate 12. Thus one edge of the lens 17 may be inserted at one end of the channels 14 and 15 and it may then be turned and slid easily into position in the channels 14 and 15 as indicated in the drawing. The length of the arc of the portions 14, 15 and 16 is substantially the same as the length of the arc of the portions 18. 19 and 20 so that when the lens is put into position its ends rest substantially flush with the base member 10.

The grooves and the engaging portions of the lens may be less or more than semicircular and still be installed and held as described. The channel or grooves 14 and 15 may be of proper width and properly positioned to receive the ends 18 and 19 respectively of the lens. When the lens ends are of the same size the grooves 14 and 15 will be in register or directly opposite each 45 other as shown, but this is not essential as the lens may be substantially semi-cylindrical but larger at one end than at the other. Because the grooves and the lens ends are on an arc of a circle having a center on the base member the 50 lens readily slides into the grooves and this operation and relation may be performed and maintained if the ends of the lens differ from each other in size.

The portions of the lens between the portions <sup>55</sup> 18, 19 and 20 may be of any suitable or desired shape. They are illustrated as curved outwardly on the surface and somewhat angularly shaped on the interior. This will produce a bulging ap-  $_{60}$ 

pearance and will tend to give the proper balanced effect to the light.

Strengthening ribs 21 and 22 extend respectively between the plates 11 and 12 and 12 and 13 at or near the apexes. These plates 21 and 22 act as strengthening or reinforcing bars and also protect the outer surface of the lens 17 from direct side contact.

An electric bulb 23 may project from the side 10 24 of a vehicle and the light frame may be held about and over the bulb 23. This may be accomplished in any suitable manner. As shown in the drawing a relatively thin base plate 25 is fixed about the bulb 23 and on to the vehicle side 24 15 by means of small tubes 26 having enlarged heads 27 which engage the plate 25 while their stems 28 pass through the plate 25 and the vehicle wall 24 and are spread or bent over as at 29 to hold the parts together. The tubular part is tapped 20 or threaded at 30 to receive screws 31 which pass through the base member 10 and have spreading heads to rest against the base member and hold it in position. Preferably on the under side of the base member are provided re-25 cesses 32 to receive the heads 27 of the tubes so that the lamp frame itself may rest flatly and snugly against the base plate 25 in which position the lens at its edges is in contact with the base plate 25 and so held in place and against 30 movement.

The intervening base plate 25 may be omitted but it is desirable in some instances. Because it may be shaped to correspond with the base plate 10 it may be desirable to use the plate 25 as a convenient means of properly locating and affixing the holding tubes with their heads 27 in proper position to engage the recesses 32. It will be understood, of course, that the base plate 25 may be substantially the same shape and size as the base member 10.

When in position the light is visible through a large arc from the rear and the front and side-ways although it is thoroughly protected by the streamlined casing.

Changes may be made in the construction, arrangement and form of various parts of the apparatus and the invention may be embodied in devices having various other forms.

We claim as our invention:

1. In a light a frame comprising a base member and three substantially triangular substantially parallel plate members the apexes of the triangles being rounded, a reinforcing member extending between the plates near their apexes, there being a substantially semi-circular portion cut out of the middle plate member, a substantially semicircular groove in the inner side of each outer plate member of substantially the same size as the cut out portion of the middle plate member, a substantially semi-cylindrical lens member in the grooves and resting against the edge of the cut out of the middle member, means for holding the base member against a supporting plate to hold the lens against movement; and an incandescent bulb extending through the plate and into the lens.

2. In a light frame comprising a base member and three substantially triangular substantially parallel plate members the apexes of the triangles being rounded, a reinforcing member extending between the plates near their apexes, there being a substantially semi-circular portion cut out of the middle plate member, a substantially semi-circular groove in the inner side of each outer plate member of substantially the

same size as the cut out portion of the middle plate member, a substantially semi-cylindrical lens member in the grooves and resting against the edge of the cut out of the middle member, and means for holding the base member against a supporting plate to hold the lens against movement.

3. In a light frame comprising a base member and three substantially triangular substantially parallel plate members the apexes of the triangles 10 being rounded, a reinforcing member extending between the plates near their apexes, there being a substantially semi-circular portion cut out of the middle plate member, a substantially semicircular groove in the inner side of each outer 15 plate member of substantially the same size as the cut out portion of the middle plate member, a substantially semi-cylindrical lens member in the groove and resting against the edge of the cut out of the middle member, a supporting 20 plate, internally threaded lugs on the supporting plate adapted to engage recesses in the base member, and screws passing through the base member and engaging the lugs for holding the base member against the supporting plate to hold 25 the lens against movement.

4. In a light a base member and three substantially triangular substantially parallel plate members, there being a substantially semi-circular portion cut out of the middle plate member, a substantially semi-circular groove in the inner side of each outer plate member of substantially the same size as the cut out portion of the middle plate member, a substantially semi-cylindrical lens member in the grooves and resting against the edge of the cut out of the middle member, and means for holding the base member against a supporting plate to hold the lens against movement.

5. In a light a base member and two substantially triangular substantially parallel plate members all in one piece, a substantially semicircular groove in the inner side of each plate member and in register with each other, a substantially semi-cylindrical lens member extending from one plate to the other and adapted to be inserted by rotating in the grooves, means without the lens and between the plate members for protecting the lens, and means for holding the base member against a supporting plate to hold the lens against movement.

6. In a light a base member and two substantially parallel plate members all in one piece, a substantially semi-circular groove in the inner side of each plate member, a substantially semi-cylindrical lens member extending from one plate 55 to the other and adapted to be inserted by rotating in the grooves, and means for holding the base member against a supporting plate to hold the lens against movement.

7. In a light a base member and two substan- 60 tially parallel plate members all in one piece, a substantially semi-circular groove in the inner side of each plate member, and a substantially semi-cylindrical lens member extending from one plate to the other and adapted to be inserted by 65 rotating in the grooves.

8. In a light a base member and two substantially parallel plate members all in one piece, a substantially semi-circular groove in the inner side of each plate member, and a lens having sub- 70 stantially semi-circular ends extending from one plate to the other and adapted to be inserted by rotating in the grooves.

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