

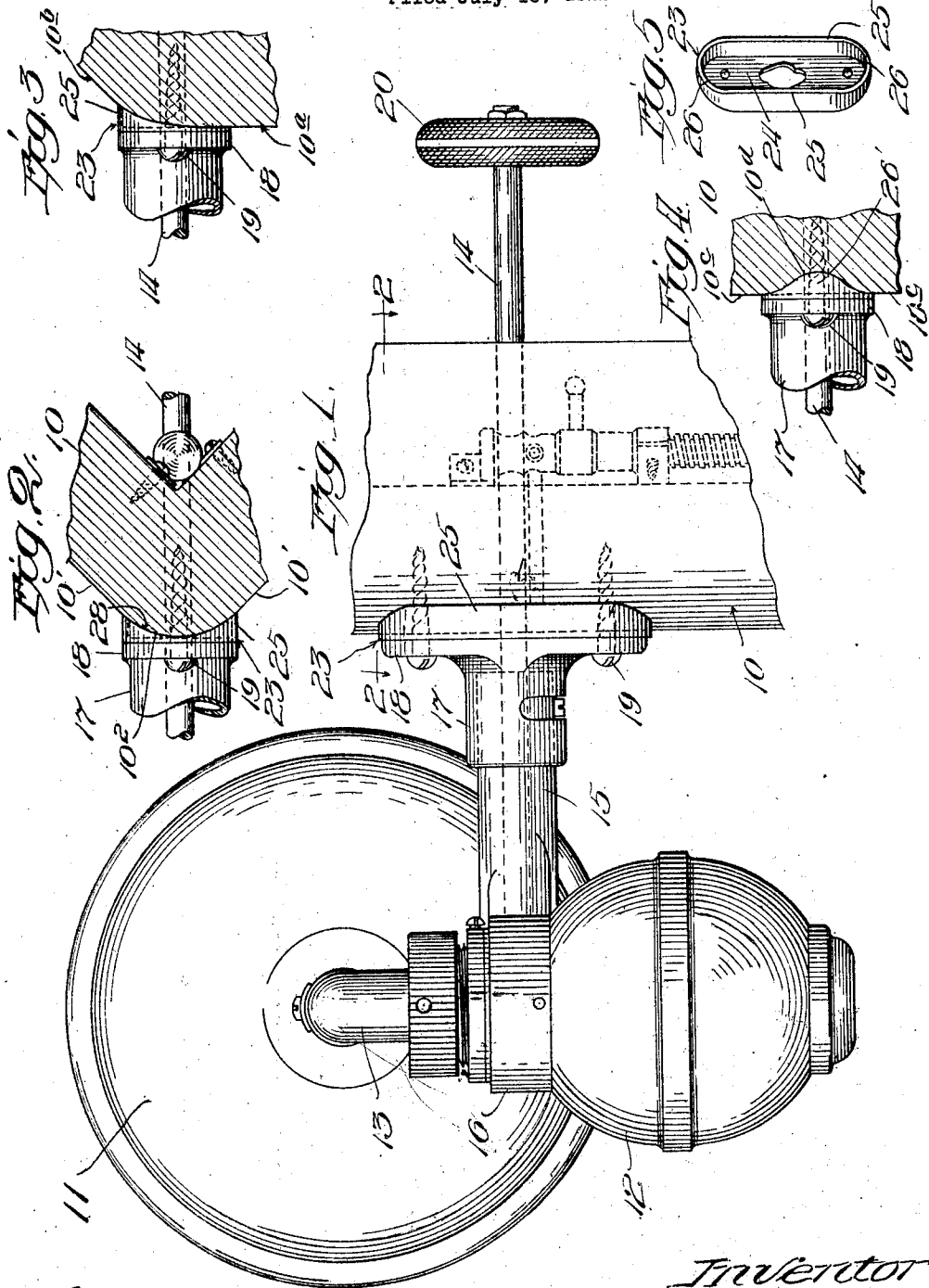
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ADAPTER FIXTURE FOR SPOTLAMP MOUNTINGS

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ADAPTER FIXTURE FOR SPOTLAMP MOUNTINGS.

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To all whom it may concern:

Be it known that I, ERNST G. K. ANDERSON, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Adapter Fixtures for Spotlamp Mountings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

This invention relates to an adapter fixture for use in connection with spot or signal lamp mountings, and refers more particularly to a mounting of that character which is designed for use in connection with a closed body car in which the lamp proper is exterior to the car body, and in which an operating device for adjusting the lamp is within the car body.

It is the object of the present invention to provide an adapted fixture for the general purpose of producing a neat finish on the outer side of the body wall at the point of attachment of the mounting thereto, notwithstanding variations of contour of the outer face of the body wall, and which is also constructed and arranged to co-operate with the mounting, the outer face of the body, and fastening means to fixedly fasten the mounting on the body wall or other support for the lamp, and to connect the mounting to the support in a way to secure and maintain in proper alignment a shaft, as the control shaft of a universal lamp.

This invention consists in the elements and combination of elements shown in the drawings and described in the specifications, and is pointed out in the appended claims.

In the drawings:

Figure 1 is a rear view of one form of universally adjustable spot lamp and its mounting, showing a portion of the car body wall, which serves as the support for the lamp mounting.

Figure 2 is a detail section of the support and portions of the lamp mounting and actuating means, the section being indicated by the dotted line 2—2 of Figure 1.

Figures 3 and 4 are similar fragmentary sections showing other configurations of the outer face of the car body which constitutes

the immediate support for the lamp mounting.

Figure 5 is a perspective view of the adapter fixture, apart from said mounting.

As shown in the drawings, 10 designates a portion of a closed car body to which the lamp mounting is directly fixed. It may constitute a corner angle of the body or the member 10, or may constitute any other support for a lamp mounting. 11 designates the casing of the lamp. 12 designates a shell to enclose and support the winding reel for the lamp cord of that type of spot lamp shown in my prior application for United States Letters Patent, Serial Number 492,036, filed on the 13th day of August, 1921. In such construction the lamp casing is connected by an angular bracket or fitting 13 to an upstanding portion 16 of the shell by a rotating joint to permit the lamp to rotate in a horizontal plane, when actuated by the operating shaft 14. The lamp mounting embraces also a tubular arm 15 which is rigidly connected at its outer end to said upstanding portion 16 of the shell 12, and is rotatively supported at its inner end in an open ended tubular bracket 17, which is attached to the wall or support by fastening screws 19, which extend through the flanged end 18 of said tubular bracket into the support 10. The operating shaft 14 extends continuously outwardly from a hand actuating wheel or disc 20 to means at the outer end thereof, where it is adapted for connection by screw and clutch means, as shown in my aforesaid application, to turn or adjust the lamp.

In practice, the outer faces of the body walls or supports, which sustain the lamp mountings of different car bodies, vary in contour, principally in cross sectional contour, and it is the object of the present invention to provide an adapter fixture which is interposed between the inner face of the flange 18 and the outer face of said wall or support, so constructed as to permit said fixture to be readily adapted to such various contours, and while adapting its outer face to the inner face of the flange 18, and thereby secure not only a neat and attractive finish of the mounting at the support, but also to provide a device in the nature of a compression member which will co-operate with the face of the flange 18, with various

contoured faces of the support, and also to secure and maintain by proper affixment of said fixture a proper alignment of a bearing in the bracket for a shaft, as the control
5 shaft 14.

Such an adapter fixture is shown separately from the mounting in Figure 5. It is designated, as a whole, by 23 both in said Figure 5 and in the other figures where it is illustrated as assembled with the lamp mounting. It comprises, as a fixture, a flat body 24 which is of a shape and dimension to correspond with, and preferably contact against, the inner flat face of the flange 18.
15 The said fixture is herein shown as of oblong contour to correspond with the shape of the flange 18, but may be varied in this respect. It is provided with a central opening for the shaft 14 at its margins with in-standing rims 25, 25 and 26, 26, the former disposed at the side edges of the body and arranged in general, parallel relation to each other as shown, and the latter disposed at the ends of the body and curved to correspond to said
25 ends. The end rims are continuous with the side rims so that, as a whole, said rims constitute a continuous rim about the edge of the body and are integral therewith. The rims of said body can be readily removed in part, as by a shearing or filing operation to adapt their edges to various shaped contours of the outer faces of different walls or supports. The outer faces of such walls or supports are usually rounded, although the rims
35 of the adapter fixture can be cut or formed to adapt them to part straight and part curved or angular faces.

As shown in Figures 1 and 2, the outer face of the support 10 to which the lamp mounting is attached, and through which support the operating shaft 14 extends, is formed with a relatively sharp curve, the plain sides 10', 10' of the faces meeting a short connecting curve 10². When the mounting is to be attached to a support having an outer face of this contour, the end rims 26, 26 are cut away to form inwardly curved edges 28 (Figure 2), to receive the rather sharp curved face, and the side, uncut rims uncut to properly fit on the face at the junction of the curved and straight areas. In accordance with preferable practice, the said end rims are cut away substantially to their roots or at their
55 jointer with the flat body of the fixture. With this construction, it will be observed that the pressure of the attaching screws 19, which extend through the flange 18 into the support 10, is transmitted through the flat body 24 of the adapter fixture at the point of deepest curvature of the rim. This is advantageous inasmuch as it relieves the rims of distorting stresses that may otherwise occur, and permits an
65 adapter fixture of relatively light material

to be employed, while rendering the fixture amply durable to resist compression and deformation of the metal of the fixture under operable compression stresses. The consequent resiliency of the rims, however, enables the uncut rims to be adapted to the
70 faces with which they contact.

In Figure 3, the same fixture 23 is shown as adapted to a face contour of the support 10, which includes a straight line 10^a and the curved line 10^b, with the operating shaft extending through the wall or support at the meeting of the curved and straight lines. In this arrangement, a portion of the end rims and substantially one entire side rim, opposite to the flat face of the wall or support, are cut away so that the body of the fixture rests flat against the flat face of said support, while portions of the end rims and the other side rim are adapted to the curved
85 face of the support.

In the construction shown in Figure 4, the outer face of the support 10 is formed in part with flat faces 10^c, and in part with an intermediate concave surface 10^d, with the deeper part of the concave surface in the plane of the operating shaft 14. In this construction, the side rims 25, 25 are principally cut away, and all but the central portions of the curved end rims 26 are likewise cut away to produce at the centers of said curved rims convex portions 26' to fit in the outwardly facing concave surface of the support.

From the examples which have been illustrated and described, it will be evident that the adapter fixture having the enclosing side and end rims, may be cut away at said rims to adapt the fixture to various contours of the outer face of the support, whether they be symmetrically curved, or irregularly curved, whether such faces are composed of angles instead of curves, and combined curves and straight planes.
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In all of the construction described, it will be noted that when the rim or rims are thus cut away to adapt the fixture to a given face contour of the wall or support, the pressure of the attaching screws is transmitted through the body of the fixture so that such pressure does not tend to measurably deform the rims, the rims being only sufficiently resilient to fit at their edges the faces of the support and there produce a neat trim under attaching pressure. It will also be noted that the adapter fixture described produces at the junction of the flanged bracket and the outer face of the wall or support, an attractive appearance along lines that are determined by the contour of the outer face of the wall or support at which the lamp mounting is directly connected.
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I claim as my invention:

In combination with a lamp mounting to
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be attached to a closed body car including a tubular bracket, an operating shaft passing through the bracket to move the lamp and an adapter fixture of bendable and 5 shearable metal positioned between the bracket and the body of the car, said adapter comprising a flat body to fit the face of the mounting and joined on its inner side adjacent to the car body with a 10 continuous enclosing outstanding rim, the configuration of the rim being such as to fit the outline of the car body, the flat body of the adapter fixture being provided with a central opening for the passage of the operating shaft and other openings for the 15 passage of fastening means to hold the adapter on the car body.

In witness whereof I claim the foregoing as my invention, I hereunto append my signature this 10th day of July, 1922.

ERNST G. K. ANDERSON.