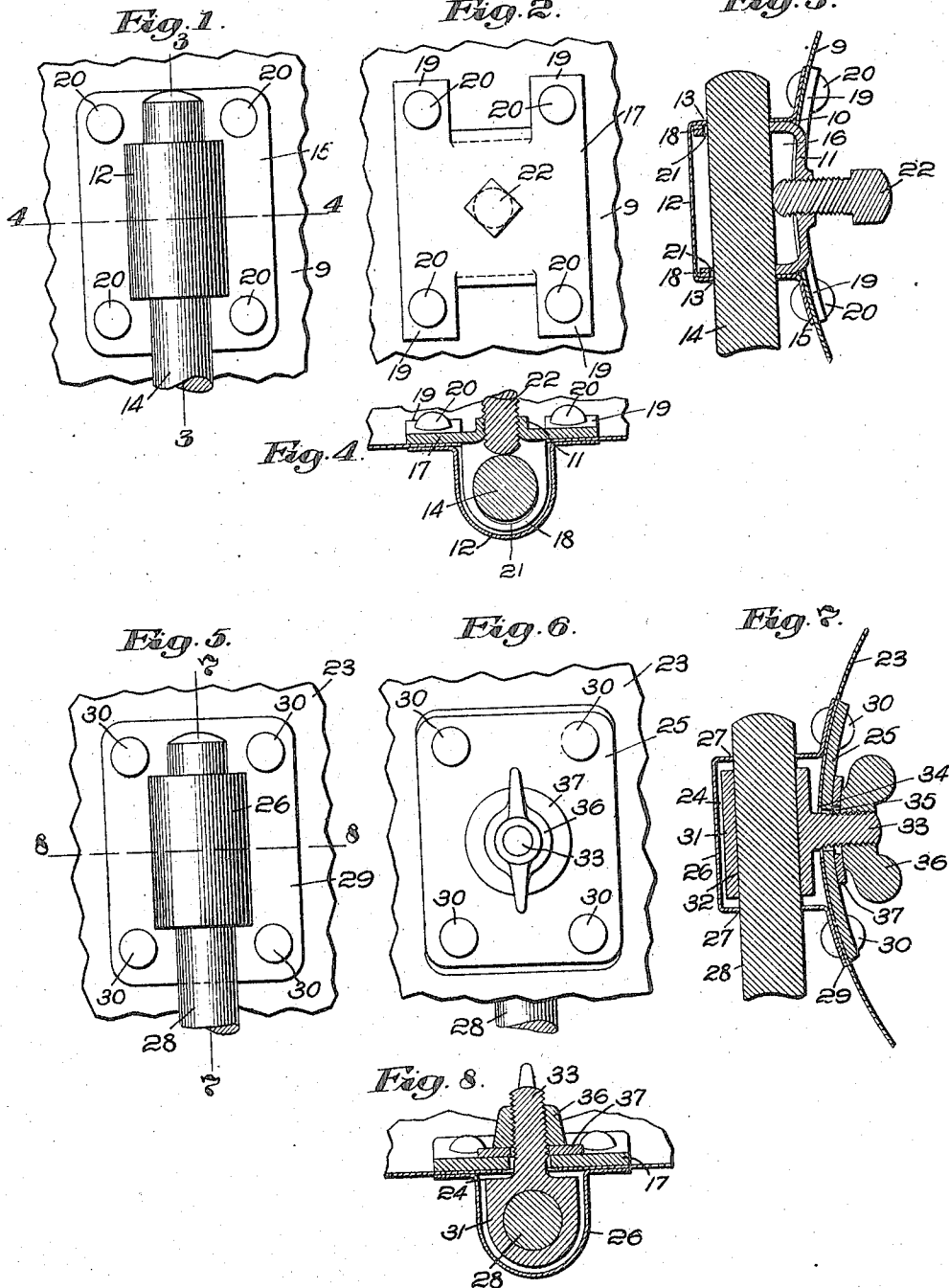


E. J. MADDEN.
CLAMPING DEVICE.
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Patented Sept. 7, 1915.

1,152,530.



Witnesses:
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UNITED STATES PATENT OFFICE.

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CLAMPING DEVICE.

1,152,530.

Specification of Letters Patent.

Patented Sept. 7, 1915.

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To all whom it may concern:

Be it known that I, EDWARD J. MADDEN, a citizen of the United States, and a resident of Bridgeport, in the county of Fairfield and State of Connecticut, (whose post-office address is 35 Spruce street, Bridgeport, Connecticut,) have invented an Improvement in Clamping Devices, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

My invention relates to clamping devices and more especially, though not exclusively, to clamping devices for securing lamp casings to supporting lamp brackets.

My invention will be best understood by reference to the following specification when taken in connection with the accompanying illustration of two specific embodiments thereof, while its scope will be more particularly pointed out in the appended claims.

In the drawings: Figure 1 is an elevation of one form of a lamp supporting clamping device embodying my invention, the lamp support and the lamp casing being partly broken away, the device being shown as viewed from the exterior of the lamp casing; Fig. 2 is an elevation of the device as viewed from the interior of the lamp casing; Fig. 3 is a detail section on line 3—3 of Fig. 1 looking toward the left; Fig. 4 is a plan section on line 4—4 of Fig. 1; Fig. 5 is an elevation of another form of the lamp supporting clamping device embodying my invention as viewed from the exterior of the lamp casing; Fig. 6 is an elevation of the clamping device shown in Fig. 5 as viewed from the interior of the lamp casing; Fig. 7 is a sectional view on line 7—7 of Fig. 5 looking toward the left; and Fig. 8 is a plan section on line 8—8 of Fig. 5.

Referring more particularly to Figs. 1 to 4 inclusive wherein I have shown one specific embodiment of my invention for illustrative purposes I have there shown a lamp casing 9 provided with an aperture 10 through which a bracket receiving device 11 projects into the interior of an inclosing shell 12. This shell is provided with one or more, herein two, apertures 13 to receive a lamp supporting bracket 14, herein in the form of an upright bracket such as is cus-

tomarily employed for the purpose of supporting lamps on vehicles, such, for example, as motor vehicles. In case the shell 12 is very thin and light it may perform no work, but is used only as a cap to give a finished appearance to the clamping device. Herein the shell is stamped or drawn from a single piece of sheet metal and is provided with a flange 15, by means of which it may be conveniently secured to the lamp casing, this flange preferably surrounding the aperture 10 of the lamp casing and surrounding a similarly shaped opening 16 provided in the shell. The bracket receiving device 11 may be of any suitable construction, but herein consists of a single piece of sheet metal having a base portion 17 disposed against the internal surface of the lamp casing and suitably shaped to conform thereto. The piece of sheet metal forming the base portion is first provided with four slits, arranged in pairs, extending thereinto from opposite edges and the portions of the metal between the slits or incisions are bent laterally to form a pair of ears 18 projecting into the interior of the shell. The remaining portions of the metal plate at the corners of the base portion 17 provide convenient lugs 19 for the attachment of the bracket receiving device to the lamp casing. As a convenient and inexpensive means for attaching not only the bracket but the shell as well to the lamp casing, I may employ rivets 20 extending through the flange 15, the lamp casing 9 and the lugs 19, and having heads on the inside and outside. The bracket receiving device 11 may be secured to and supported upon the bracket 14 in any suitable manner as by providing the lugs 18 with apertures 21 located approximately in alinement with the apertures 13 of the shell 12, so that the bracket 14 may pass through all of these apertures as shown in Figs. 1 and 3. If desired, the apertures 13 and 21 may be made somewhat larger in diameter than the bracket or supporting post 14, and said apertures may initially register with each other but may be displaced or moved somewhat out of register with each other so as to exert a clamping action upon opposite sides of the bracket or supporting post in a manner which will presently appear. As a means for securing the bracket receiving device to the bracket or

supporting post, I preferably provide a set screw 22 passing through and having screw threaded engagement with the base portion 17 of the bracket receiving device and extending into the interior of the shell 12, where the inner end of the set screw bears against the bracket or supporting post 14 with a clamping action. It will now be apparent that if sufficient force be exerted against the supporting post by rotating the set screw in the proper direction, the lamp casing 9 may be slightly distorted and a relative motion imparted to the bracket receiving device and the shell, so that the left hand sides of the apertures 13 will be brought against the left hand side of the bracket or supporting post and the right hand sides of the apertures 21 brought against the right hand side of the bracket or supporting post as shown in Fig. 3. In this way a sort of shearing action, as it were, may be exerted upon the bracket or supporting post in such a manner as to afford an exceedingly firm grip upon the latter. If desired, however, this action may be dispensed with and the bracket or supporting post clamped merely by the action of the set screw forcing the post against the left hand side of the apertures 21 in an obvious manner.

Referring now to Figs. 5 to 8 inclusive wherein I have shown another form of lamp supporting clamping device embodying my invention, I have there shown a lamp casing 23 having secured thereto a bracket receiving device 24 having a base 25 herein in the form of a separate plate placed against the internal surface of the lamp casing and suitably shaped to conform to the internal surface of the latter. In this form of my invention, as in the form first described, the bracket receiving device is provided with an inclosing shell 26 having apertures 27 to receive a bracket in the form of supporting post 28. This shell may be attached to the lamp casing in any suitable manner as by providing the shell with a flange 29 suitably shaped to conform to the external surface of the lamp casing and secured thereto by suitable means, herein a plurality of rivets 30, which may also serve to secure the base 25 and for that purpose pass through the flange, the lamp casing, and the base. In this form of my invention the bracket receiving device, instead of being made as a single rigid piece, is composed of the base 25 hereinbefore referred to and a separate lug 31, the latter having an aperture 32 to receive the supporting post 28. The lug 31 may be supported upon and secured to the base 25 in any suitable manner as by providing said lug with a screw threaded shank 33 passing through an aperture 34 in the lamp casing and an aperture 35 in the base 25. A nut 36, herein in the

form of a thumb nut threaded onto the shank 33, bears against a washer 37 and serves as a means for forcibly drawing the lug 31 toward the base 25 and hence drawing the supporting post 28 against the right hand side of the apertures 27 in the shell 26, thus providing a very firm clamping action against the post. In this form of my invention, as well as in the form first described, the inclosing shell for the bracket receiving device gives the clamping device a finished appearance as well as providing an exceedingly light, simple, strong and inexpensive construction, since the shell may be stamped from thin sheet metal the same as the lamp casing while the internal parts which are not exposed to view may be made of comparatively inexpensive materials.

While I have herein shown and described two forms of my invention for illustrative purposes and have disclosed and discussed in detail the construction and arrangement incidental to these specific embodiments thereof, it is to be understood that the invention is limited neither to the mere details or mere arrangement of parts nor to the specific embodiments herein shown but that extensive deviations from the illustrative forms or embodiments of the invention may be made without departing from the principles thereof.

What I claim as new and desire to secure by Letters Patent is:

1. A device of the class described having, in combination, a bracket receiving device having two lugs provided with apertures, an inclosing shell for said bracket receiving device provided with an aperture located substantially in alinement with the apertures in said lugs and having a laterally extending flange, a member against which said flange and bracket receiving device are disposed, fastening means extending through said flange, said member and said bracket receiving device, and clamping means extending through said bracket receiving device into said shell.

2. In a device of the class described, the combination of a casing provided with a projecting shell having a chamber communicating with the interior of said casing, and having a post-receiving aperture leading from said chamber to the exterior of said casing, a member inclosed within said chamber secured to said casing and provided with a post-receiving aperture disposed in substantial alinement with the first-mentioned aperture, and means supported by and within said casing and cooperating with said member to secure a post in said aperture.

3. In a device of the class described, the combination of a casing provided with a projecting shell having a chamber communicating with the interior of said casing and having a post-receiving aperture leading

from said chamber to the exterior of said casing, a member within said chamber secured to said casing and provided with a post-receiving aperture disposed in substantial alignment with the first-mentioned aperture, and means supported by and within said casing and tending to displace said member and the post one with relation to the other to cause the post to be forced against one side of the aperture in said member.

4. In a device of the class described, the combination of a casing provided with a projecting shell having a chamber communicating with the interior of the casing, and having a post-receiving aperture leading from said chamber to the exterior of said casing, a member within said chamber provided with a post-receiving aperture disposed in substantial alignment with the first-mentioned aperture, and means supported by and within said casing for causing a

tendency of the apertures to move into an out-of-register relation.

5. In a device of the class described, the combination of a casing provided with a projecting shell having a chamber communicating with the interior of said casing, and having a post-receiving aperture leading from said chamber to the exterior of said casing, a member within said chamber supported by said casing and provided with a post-receiving aperture disposed in substantial alignment with the first-mentioned aperture, and a threaded member supported by and cooperating with said apertured member to secure a post therein.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

EDWARD J. MADDEN.

Witnesses:

ELLSWORTH A. HAWTHORNE,
E. HORACE HAWTHORNE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."