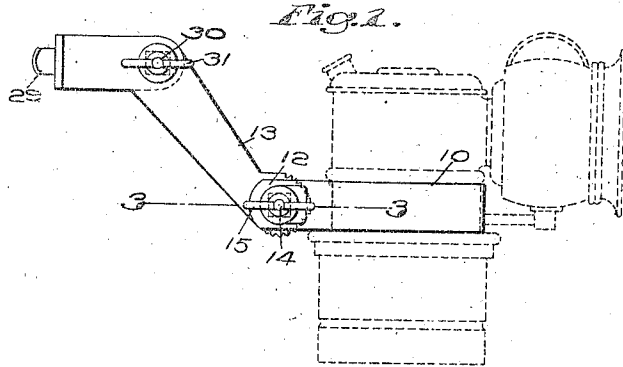
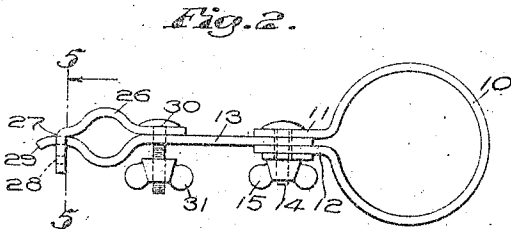
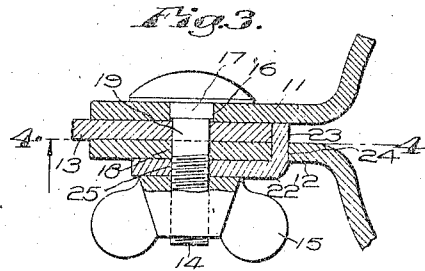
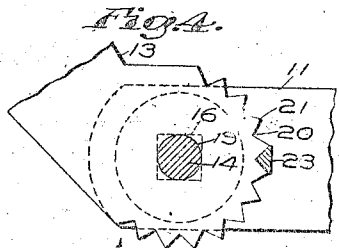
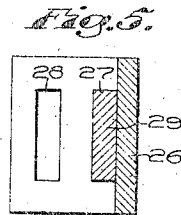
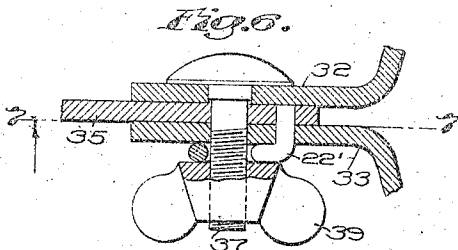
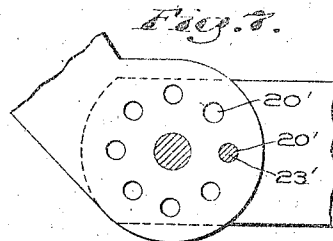
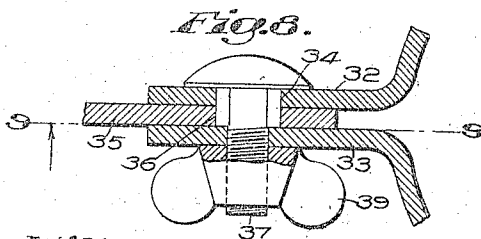
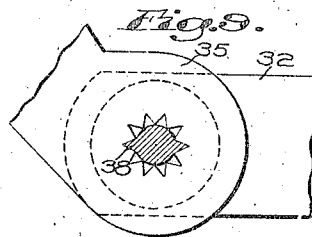


E. J. MADDEN.
ADJUSTABLE SUPPORT.
APPLICATION FILED SEPT. 9, 1912.

1,164,538.

Patented Dec. 14, 1915.



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UNITED STATES PATENT OFFICE.

EDWARD J. MADDEN, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE HAWTHORNE MANUFACTURING COMPANY, INC., OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

ADJUSTABLE SUPPORT.

1,164,538.

Specification of Letters Patent.

Patented Dec. 14, 1915.

Application filed September 9, 1912. Serial No. 719,264.

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, have invented an Improvement in Adjustable Supports, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to adjustable supports, and more especially, though not exclusively, to adjustable lamp brackets for bicycles and the like.

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

In the drawings:—Figure 1 is a side elevation of an adjustable support embodying my invention; Fig. 2 is a plan of the same; Fig. 3 is a detail sectional view on line 3—3 of Fig. 1; Fig. 4 is a detail sectional view on line 4—4 of Fig. 2; Fig. 5 is a detail sectional view on line 5—5 of Fig. 2; Fig. 6 is a detail sectional view similar to Fig. 4, illustrating another form of locking means; Fig. 7 is a detail sectional view on line 7—7 of Fig. 6; Fig. 8 is a detail sectional view similar to Figs. 4 and 6, illustrating still another form of locking means; and Fig. 9 is a detail sectional view on line 9—9 of Fig. 8.

Referring, first, to Figs. 1 to 5 inclusive of the drawings, and to the embodiment of my invention which I have there shown for illustrative purposes, 10 is a clamping ring adapted to encircle the body of the lamp, the outline of the latter being indicated in dotted lines in Fig. 1. This clamping ring is provided with two ears 11 and 12, between which is interposed a member 13, pivoted to the ears in any suitable manner, as by means of a bolt comprising a screw 14 and a suitable nut herein a wing nut 15. This bolt is preferably non-rotatably mounted in the ears 11 and 12, and one of the ears, herein the ear 11, being provided with a square perforation 16, which receives a corresponding square portion 17 of the bolt, while the ear 12 is provided with a

perforation 18, which may be of any suitable shape to receive the bolt.

The member 13 is preferably provided with a round perforation 19 to receive the bolt, and permit said member to turn and be adjusted radially with respect to the ears 11 and 12.

As a means for adjustably locking the two pivotally connected parts, the member 13 may be provided with a plurality of notches or indentations 20 of any suitable shape, forming serrations or teeth 21, preferably concentric with the bolt. A locking member 22 is provided with a lug or tooth 23, extending through an aperture 24 in the ear 12 into any selected indentation 20, thus positively locking the member 13 against turning movement on the bolt. The member 22 is preferably extended along the outer face of the ear 12, and is provided with a perforation 25 to receive the bolt. Thus it will be seen that the bolt serves to clamp the ring 10 about the lamp, it serves as a pivotal connection between the ring and the member 13, and it also serves as a means for holding the locking member 22 in interlocking engagement with the member 13.

When it is desired to change the angular position of the lamp and its clamping bracket with respect to the member 13, the thumb-nut 15 may be loosened a few turns, and the tooth 23 of the locking member may be withdrawn from the indentations in which it is locked by sliding the locking member back a short distance along the bolt. After the desired position of adjustment is secured, the parts may be again locked in their new position of adjustment by a reversal of the foregoing operation. By this means, the lamp may be quickly and conveniently adjusted to the desired position and instantly clamped in a positive manner, so as to leave no opportunity for derangement of the adjustment by reason of vibration or other causes.

The member 13 may be secured to the bicycle or other support in any desired manner, but herein has suitable provision for attaching the same to the upright stem of the handle bar of the bicycle. Herein the attaching means is in the form of a clamp, of which the member 13 constitutes one clamping member, there being provided a second clamping member 26, which together

with the member 13 is suitably formed to receive the cylindrical stem of the handle bar. The clamping members may have suitable provision for adjustment to receive
 5 handle bar stems of different diameters, and to that end the member 26 may be provided with a plurality of apertures, herein two apertures 27 and 28, either of which is adapted to receive a tongue 29 provided on
 10 the member 13. When the tongue 29 is located in the aperture 27, the clamp is adapted to receive a handle bar stem of minimum diameter, and when located in the aperture 28, is adapted to receive a handle bar stem of
 15 maximum diameter.

As a means for clamping the two clamping members about the stem of the handle bar, and affording a still further means of adjustment, I may provide a clamping bolt
 20 comprising a screw 30 passing through the members 26 and 13, and provided with a suitable thumb-nut 31. By this means, the bracket may be firmly clamped to the handle bar stem, or other support, in such a manner
 25 as to be capable of being readily attached and detached, or adjusted.

Referring now to Figs. 6 and 7, I have there shown another form of locking device in which I have substituted for the notches
 30 20 of the first form, a plurality of perforations 20¹ to receive a lug or tongue 23¹ on a locking member 22¹ serving adjustably to lock the parts in a manner similar to the form shown in Figs. 1 to 5 inclusive.

Referring now to Figs. 8 and 9, I have there shown still another form of locking device in which I have provided one of the pair of ears 32 and 33 with a star-shaped
 40 aperture 34, and have provided the member 35 with a similar star-shaped aperture 36 to receive a bolt 37 provided with one or more locking teeth 38 adapted to enter any selected indenture of said apertures and thus
 45 adjustably lock the parts against turning movement one on the other. The bolt is provided with a nut 39 which may be loosened a few turns to permit the teeth of the bolt to be backed out of the apertures so
 50 that the parts may be moved to a new position of adjustment and again locked by drawing the teeth bolt into place in newly selected indentations.

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

Having thus described my invention, what I claim is:

1. A device of the class described comprising, in combination, a member provided with a pair of ears one of which is provided with an aperture, a second member
 70 interposed between said ears and provided with a plurality of indentations, locking means extending through said aperture into interlocking engagement with one of said
 75 indentations, and means to hold said locking means in such engagement.

2. A device of the class described comprising, in combination, a member provided with a pair of ears one of which is provided
 80 with an aperture, a second member interposed between said ears and provided with a plurality of indentations, locking means extending through said aperture into interlocking engagement with one of said in-
 85 dentations, and a bolt passing through said ears, said interposed member, and holding said locking means in such indentation.

3. A device of the class described comprising, in combination, two pivotally connected members one of which is provided
 90 with a pair of ears between which the other is interposed, locking means for interengaging with both of said members to lock the same in a plurality of predetermined positions of adjustment, and means to hold
 95 said locking means in its locking position.

4. A device of the class described comprising, in combination, two pivotally connected members one of which is provided
 100 with a pair of ears between which the other is interposed, locking means for interengaging with both of said members to lock the same in a plurality of predetermined positions of adjustment, and means to carry
 105 said locking means into its locking position and draw said ears together.

5. A device of the class described comprising, in combination, two pivotally connected members one of which is provided
 110 with a plurality of indentations, and a screw-threaded member forming a pivot for said pivotally connected members, said screw-threaded member having locking
 115 means adapted to engage said indentations to keep one member from turning on the other.

6. A device of the class described comprising, in combination, two pivotally connected members one of which is provided
 120 with a plurality of indentations, a screw forming a pivot for said members and provided with one or more projections to engage said indentations, and a nut engaging
 125 said screw and serving to hold said projection or projections in said indentations.

7. A device of the class described comprising, in combination, a member having a pair of ears, a second member interposed
 130 between and pivoted to said ears and pro-

vided with a plurality of openings, locking means engaging one of said openings to keep one of said members from turning on the other, and a screw-threaded member to hold said locking means in such engagement.

8. A device of the class described comprising, in combination, a member having a pair of ears, a second member interposed between and pivoted to said ears, locking means interengaging with one of said members in any one of a plurality of definite positions, and a screw-threaded member to hold said locking means in such interengagement.

9. A device of the class described com-

prising, in combination, two pivotally connected members one of which is provided with a plurality of indentations, a pivot for said members provided with locking means adapted to interlock with said indentations, and means to move said pivot axially to carry said locking means into interlocking relation.

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

EDWARD J. MADDEN.

Witnesses:

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EARL HORACE HAWTHORNE.