No. 880,460. PATENTED FEB. 25, 1908.

H. H. McGIFFIN & E. H. McCAULEY.

CLAMPING DEVICE.

APPLICATION FILED JUNE 26, 1907.

Fig. 1.

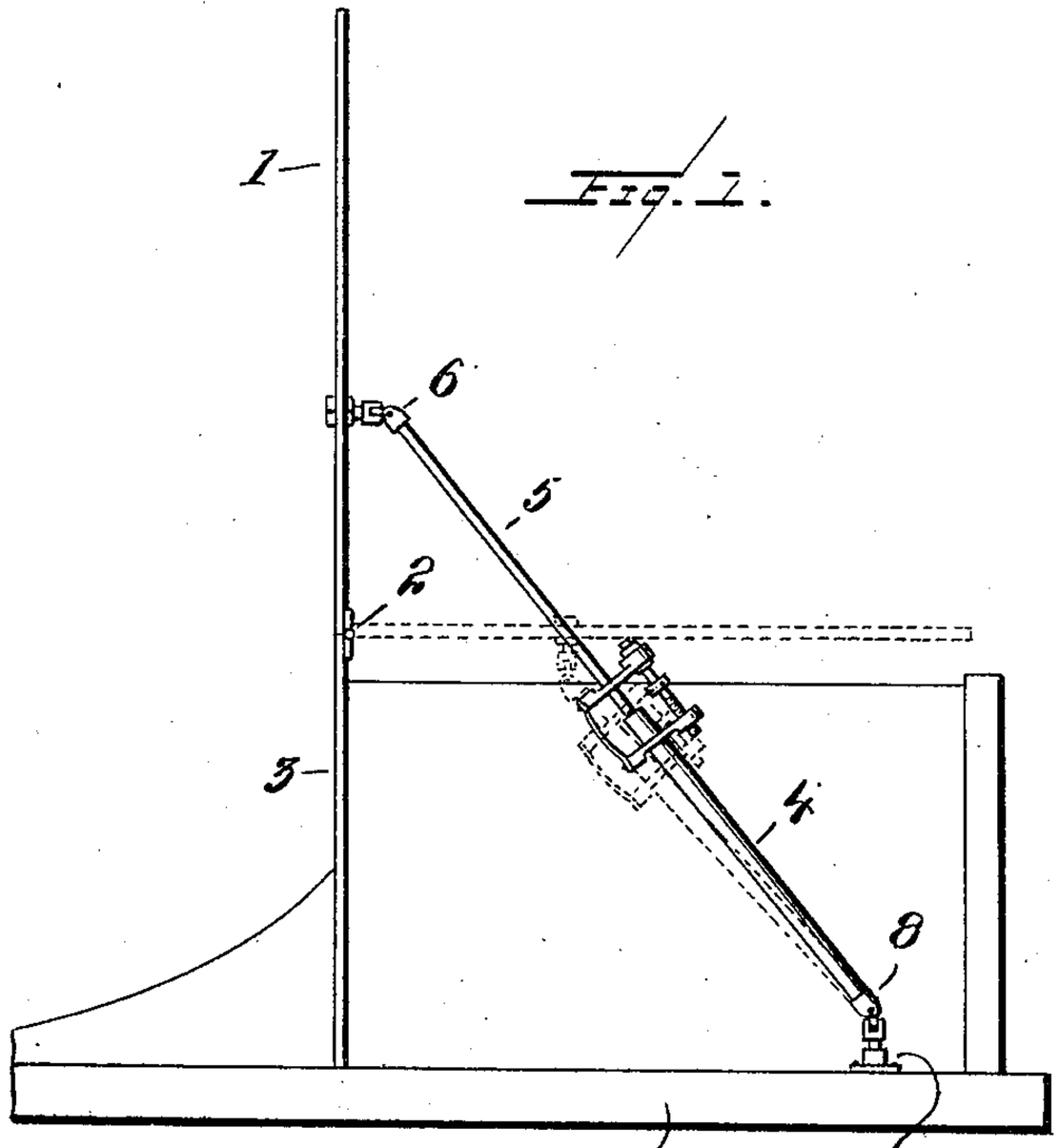


Fig. 3.

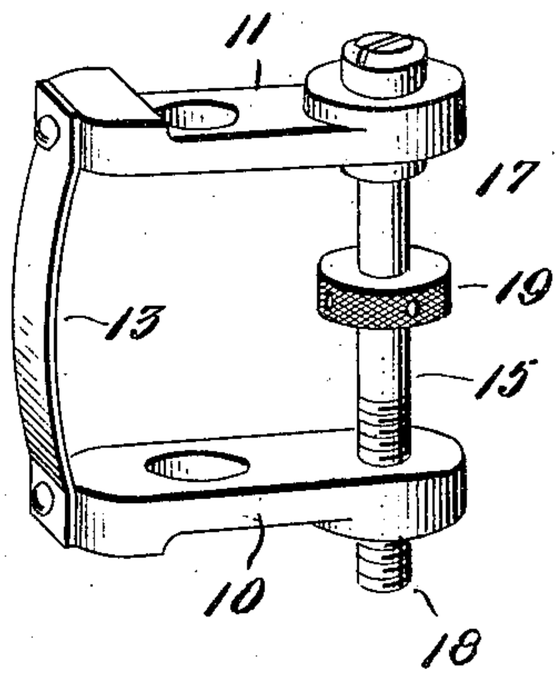


Fig. 2.

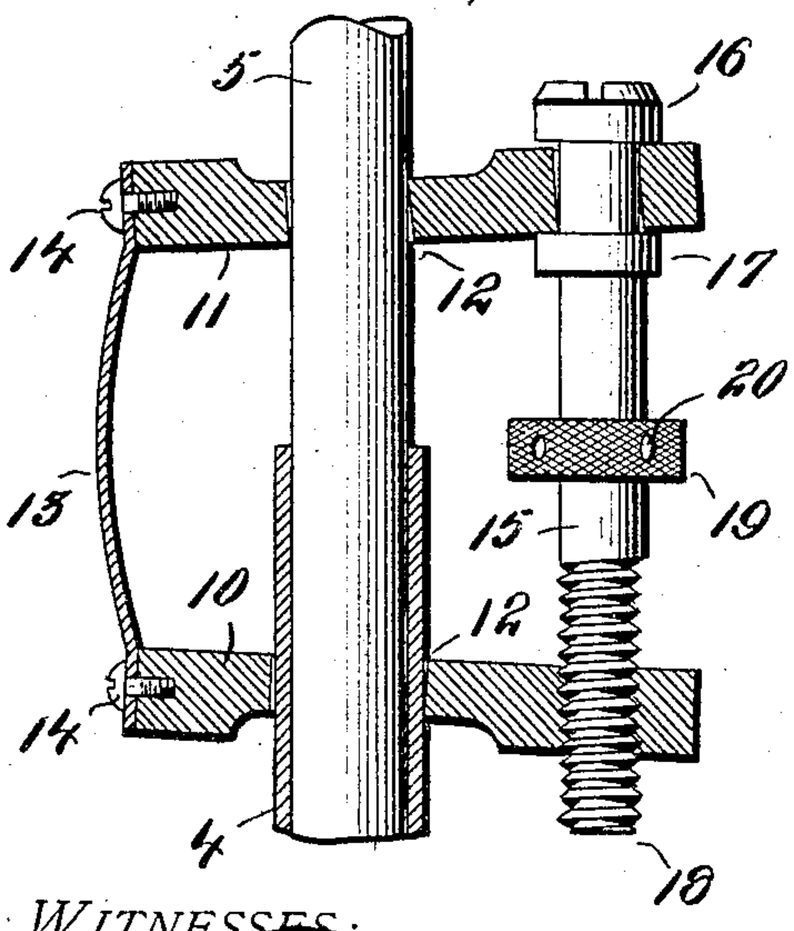
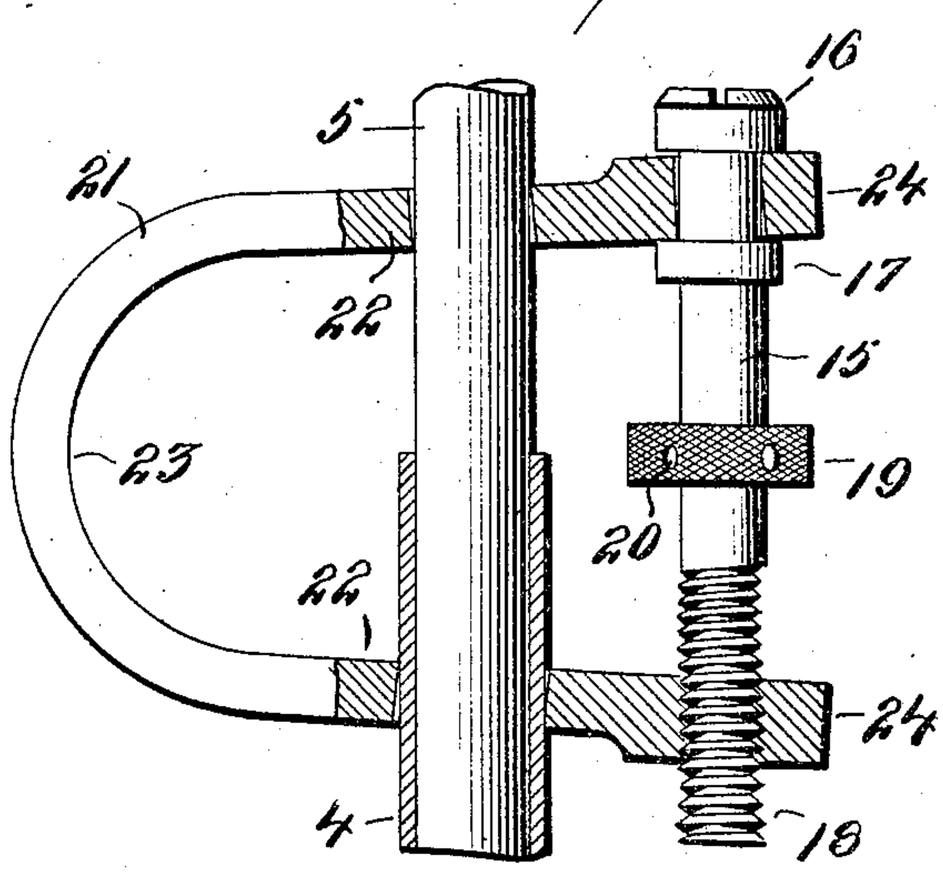


Fig. 4.



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UNITED STATES PATENT OFFICE.

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CLAMPING DEVICE.

No. 880,460. Specification of Letters Patent. Patented Feb. 25, 1908.

Application filed June 26, 1907. Serial No. 380,924.

To all whom it may concern:

Be it known that we, HENRY H. McGIFFIN and EDWARD H. McCAULEY, citizens of the United States, residing at Pittsburg, county of Allegheny, and State of Pennsylvania,. have invented certain new and useful Improvements in Clamping Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a clamping device, and particularly to spring actuated plates adapted to embrace telescoping members and retain said members in their relative position while permitting an adjustment thereof.

The invention has for an object to provide clamping plates apertured to receive telescoping members, and normally held in clamped relation by the elasticity of said plates, while the parts are adapted to be drawn together to release the telescoping members by a connecting screw which also prevents any accidental movement of said plates toward each other.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawing; Figure 1 is a side elevation of the invention showing its application to the wind guard of an automobile; Fig. 2 is a vertical section; Fig. 3 is a detail perspective of the clamp removed from the telescoping members, and Fig. 4 is a modified form of the clamp.

Like numerals refer to like parts in the several views of the drawing.

This invention is adapted for application to any construction or arrangement of telescoping members, but particularly in connection with a folding wind guard, as shown in Fig. 1 to which it is especially adapted. In this application of the invention the numeral 1 designates the wind guard which is the usual glass plate pivoted or hinged at 2 to the front of the dash board 3 of an automobile, and is adapted to be folded downward into the dotted line position shown in Fig. 1. This guard is held in its vertical position by means of the telescoping members 4 and 5, the former of which is connected to the guard by means of the knuckle joint 6, and the latter to the forward portion 7 of the machine by means of a similar joint 8 pivotally connected with the bracket 9 located upon the portion 7. The clamping is effected by means of the plates 10 and 11 each of which is provided with the aperture 12 of slightly greater diameter than the portion to be gripped so that when said plates are drawn at an angle other than a right angle to the telescoping members the edges of the apertures 12 bite against said members and secure a firm grip thereon which prevents any slipping of the adjustment. These plates 10 and 11 may be connected by means of the spring 13 which normally forces the same outward away from each other, as shown in Fig. 2, this spring being connected to the plates by means of the screws 14 where found desirable. The plates are adapted to be held in their gripping position and to be released therefrom when desired by means of the bolt 15 which is swiveled in one of the plates by means of the head 16 and collar 17 at opposite sides thereof, and has its opposite end 18 threaded into the other plate. The bolt is also provided with the knurled hand hold 19 provided with the tool sockets 20 to assist in its adjustment and operation.

In the modified form of the invention shown in Fig. 4, the U-shaped spring member 21 is used, the opposite ends 22 thereof being equivalent to the plates 10 and 11, and connected by the bow 23 by which they are normally separated from each other. The adjusting bolt 15, shown in Fig. 2, is connected to the free ends 24 of this spring, as shown in Fig. 2 and acts thereon in a similar manner to that hereinbefore described.

In the operation of the invention it will be seen that the spring of the gripping plates normally forces them away from each other and into biting contact with the telescoping members which are connected to the wind guard and frame of the machine respectively so that the guard is retained in an upright position under the frictional gripping which allows the necessary vibration to prevent the breakage of the glass in rough traveling or the cutting of the threads of the holding brace if

the same be made of a permanent character. Furthermore, the construction permits the ready release of the telescoping parts so that they can be slid together, and the wind guard folded down above the radiator at the front of the machine, as shown by dotted lines in Fig. 1, thus presenting a simple and efficient construction by which the telescoping members may be readily held in adjusted position and quickly released when desired. The spring of the gripping plates causes them to bite upon the telescoping members, and the bolt extending between these plates prevents any accidental compression thereof and consequent releasing which might allow a slipping of the telescoping members under the vibrations of the machine, while the operation of this bolt draws the gripping plates into parallelism thus releasing the bite upon the telescoping members and permitting a free movement thereof relative to each other for the adjustment of the wind guard or its folding as above described.

Having described my invention and set forth its merits, what I claim and desire to secure by Letters Patent is:—

1. In a brace for wind guards, telescoping members, a clamping device mounted on said members and comprising opposite gripping plates connected by a spring portion to normally dispose them out of parallelism, and a connecting bolt extending through the free ends of said plates and having a threaded end mounted in one plate for bringing them into parallelism to release the grip thereof.

2. A clamping device comprising opposite gripping plates normally held out of parallelism by a connecting spring portion, and a bolt pivoted in one of said plates and threaded into the other plate for drawing said plates into parallelism.

3. In a gripping device, telescoping members, oppositely disposed apertured plates surrounding each of said members, means for normally holding said plates in gripping contact, a bolt swiveled at its head in one of said plates and having its opposite end threaded into the opposite plate, and an operating device carried by said bolt between said plates.

4. In a device of the class described, the combination with the pivotally mounted wind guard of an automobile, of telescoping members connecting said guard to the base of the machine, clamping plates connected to each other at one end by a spring portion and each embracing one of said telescoping members, and means mounted in the plates for adjusting said plates toward and from each other.

5. In a device of the class described, the combination with the pivotally mounted wind guard of an automobile, of telescoping members connecting said guard to the base of the machine, clamping plates connected to each other at one end by a spring portion and embracing said telescoping members, a connecting bolt mounted in the free ends of the plates for adjusting said plates toward and from each other, a pivotal connection between one of said telescoping members and the wind guard, and a pivoted connection between the opposite member and the base of the machine.

6. A clamping device comprising a U-shaped spring body to normally support its apertured free ends to grip opposite telescoping members, and an adjusting bolt extending between said free ends to retain them in adjusted position and release the same.

7. In a clamping device, a U-shaped spring body having apertured free ends to receive telescoping members, and means connecting and mounted upon said free ends for holding or adjusting the same toward and from each other.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY H. McGIFFIN.
EDWARD H. McCAULEY.

Witnesses as to Henry H. McGiffin:
DAVID M. JONES,
HENRY F. HOFFMAN.

Witnesses as to Edward H. McCauley:
JOHN L. FLETCHER,
ALFRED T. GAGE.