G. G. MARX.

AUTOMATIC HOOD CLAMP.

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1,385,568. Patented July 26, 1921.

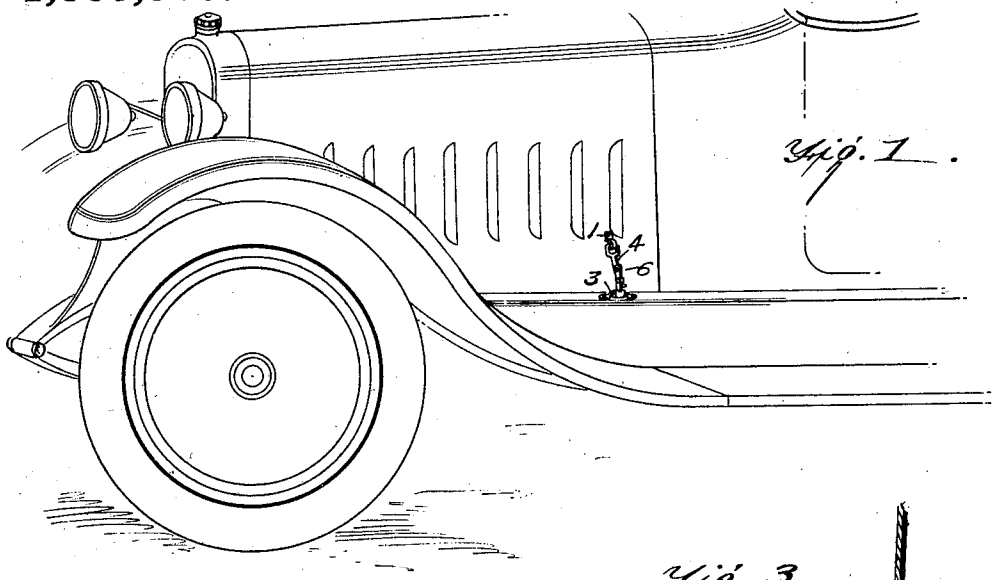


Fig. 1.

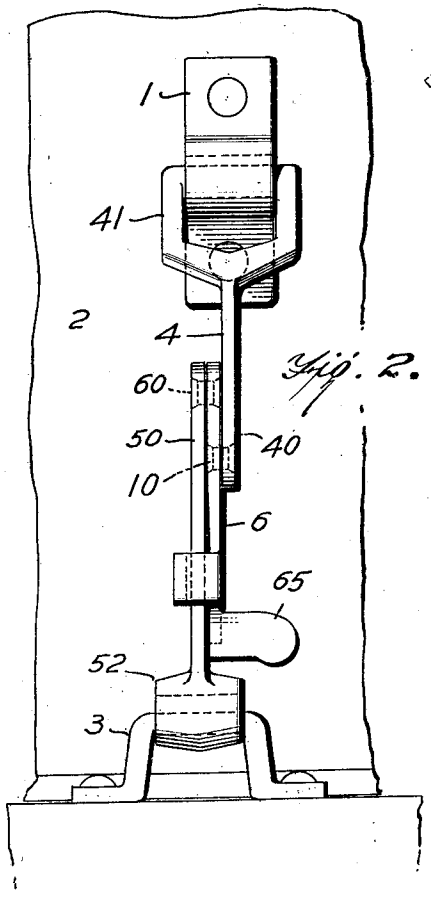
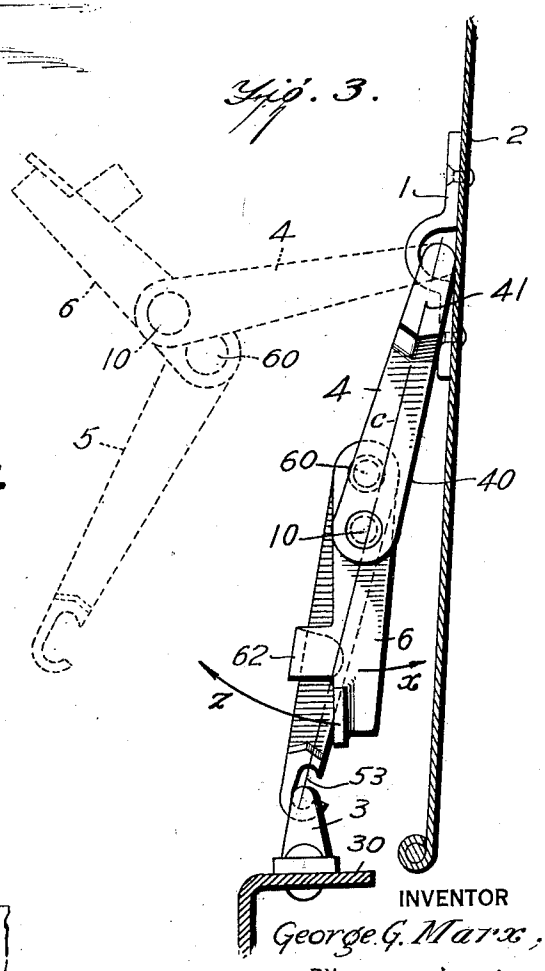


Fig. 2.

Fig. 3.



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AUTOMATIC HOOD-CLAMP.

1,385,568. Specification of Letters Patent. Patented July 26, 1921.

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To all whom it may concern:

Be it known that I, GEORGE G. MARX, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented a new and Improved Automatic Hood-Clamp, of which the following is a specification.

My invention has special reference to devices that are particularly designed for clamping automobile hoods secure upon the bed frame and primarily my invention has for its object to provide a clamping device of the general character stated, of a simple, compact and inexpensive construction in which the parts are so assembled and coöperatively connected whereby, when shifted for holding the hood down onto the bed frame, they automatically assume an interlocked position without the aid of special spring devices incident in the use of other hood clamp devices heretofore provided.

Another object of my invention is to provide a springless clamp device for holding down automobile hoods and other like closures, that can be expeditiously and conveniently tripped to the unlocked position for releasing the hood and as readily restored to their interlocked engagement for securing the hood in place and which may be conveniently applied to any of the modern types of automobile hoods and frames without in any manner changing their present structure.

With the above objects in view and which will become more apparent when the detail arrangement of parts are better understood from the following description, the specific features thereof are pointed out in the appended claims and illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of my construction of hood clamp, so much of a hood and the bed frame, upon which it rests, being shown as is necessary to illustrate the practical application of my invention.

Fig. 2 is a front elevation of my improved hood clamp, the parts being at their interlocked position.

Fig. 3 is a side elevation thereof, the parts being shown at their interlocked position, in full lines, and at the released or unlocked position in dotted lines.

In the practical application of my invention, a bail-like member 1 is bolted or otherwise made fast to the hood 2, at a suitable point near the lower edge thereof, and a like bail member 3 is bolted to the top of the bed frame 30 adjacent the point where the lower edge of the hood rests, when placed at the closed position.

The said bail members 1 and 3 are relatively projected at right angles to one another and as best shown in Fig. 3.

The body of my improved clamp device comprises essentially but three parts, an upper link 4, which includes a flat portion 40 that is merged at the upper end, with a loop 41 transversely disposed with respect to the part 40 and which, when the clamp is fitted on the hood is pivotally secured within the bail member 1 before the latter is bolted or otherwise made fast to the hood.

5 designates, what I term, the bottom link, and which includes an upper flat portion 50 that is held in parallelism with the portion 40 of the upper link 4, the purpose of which will presently appear.

At the lower end, the bottom link terminates in a cross head 52 that is formed with a clamping claw 53 whose function is to engage with the bail member 3, when the parts are adjusted to the locked position, as is clearly shown in Figs. 2 and 3.

6 designates an intermediate link that constitutes the locking and unlocking lever. This link 6 is also a flat member and, in practice, has its upper end fitted flatwise between the adjacent lower and upper ends of the two links 4 and 5.

The upper end of the link 6 is pivoted, by a rivet connection 60 to the upper end of the link 5 and the lower end of the upper link 4 is pivotally joined by a rivet connection 10 with the link 6, the two pivotal connections of the upper and lower links with the intermediate locking and unlocking link 6 being such that, when the said link 6 is swung inwardly, see the arrow x, the strain on the clamp along the broken line c tends to hold the claw 53 tightly interlocked with the lower bail 3.

To hold the link 6 from passing too far inwardly, in the direction of the arrow x, it has a lateral hook-shaped heel 62 that closes over and engages the outer edge of the lower link 5 and for effecting convenient and expeditious movement of the link 6 to either the locking or releasing position, its lower end is formed with a finger piece 65, as shown.

By reason of forming the several links 4, 5 and 6 and connecting them, as stated, and providing for pivotally joining the upper link to the hood bail 1 and the lower link with a claw for catching onto the lower bail 3, the operation of locking the claw in place can be almost instantly effected by simply pushing the parts inwardly in the direction of the arrow *x*, such movement tending to cause the several links to become automatically interlocked against loose play by reason of the peculiar arrangement of the lock joint connections, it being understood that by gripping the finger piece 65 and applying sufficient pull, see arrow *z*, to break the lock joint, the parts can be readily swung out to the released position shown in dotted lines on Fig. 3.

While I have illustrated and described my clamp connection as especially designed for holding down automobile hoods, it is obvious that it may be as readily utilized for securing other parts of automobiles or other members that need be relatively fixedly attached to each other, at times.

From the foregoing description taken in connection with the drawings, the complete construction, the manner of its use and the advantages of my invention will be readily understood by those familiar with the use of hood securing means.

What I claim is:

1. In combination with the frame bail and the hood bail of an automobile; of a toggle link and lever connection carried by the hood bail and comprising a link relatively permanently pivotally connected to the hood bail, a toggle lever pivoted to said link, a second link pivoted to the toggle lever and having a hook to removably engage the frame bail, said toggle lever having a stop adapted to engage said hook link when the parts are in the holding position, substantially as shown and described.

2. In combination with the frame and the hood of an automobile, and a hood bail secured to the vertical wall of the hood and a frame bail secured to the top of the frame; a toggle link and lever connection comprising a flat link having an eye hinged to one of said bails, a flat toggle lever hinged to said link, a second flat link hinged to said toggle lever and having a hook to engage the other bail, said toggle lever having a finger piece and a stop, the latter adapted to engage said hook link when the parts are in the securing position, said links and said lever adapted to lie with their adjacent flat surfaces in close proximity substantially as shown and described.

GEORGE GUSTAV MARX.