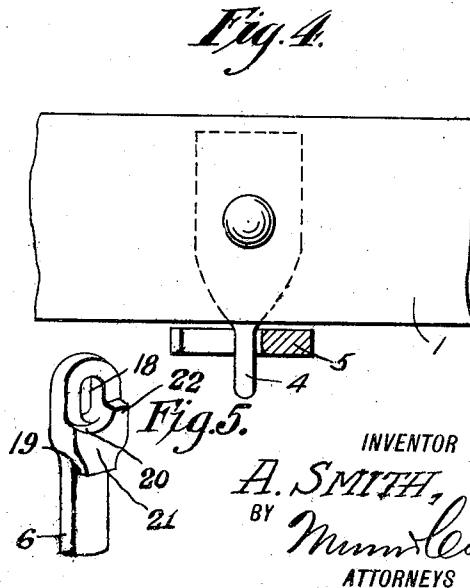
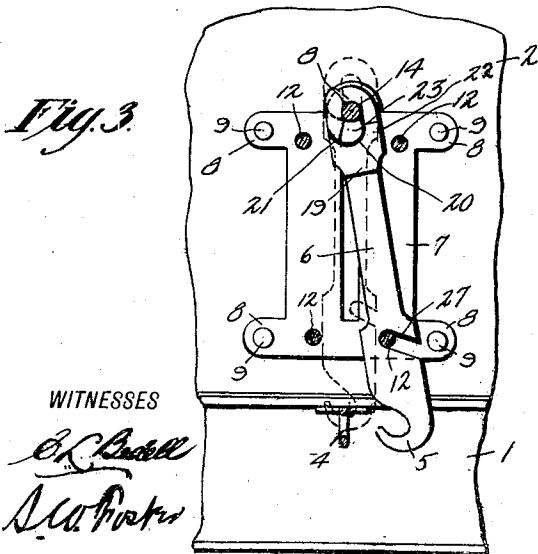
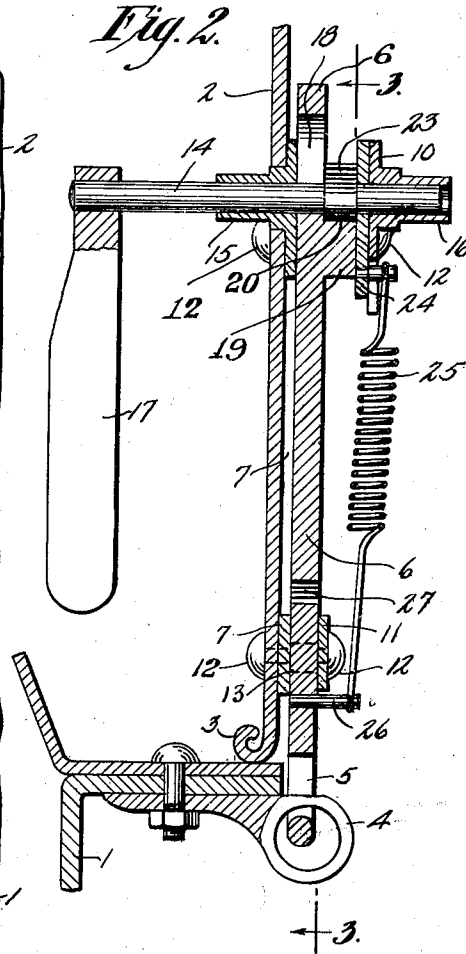
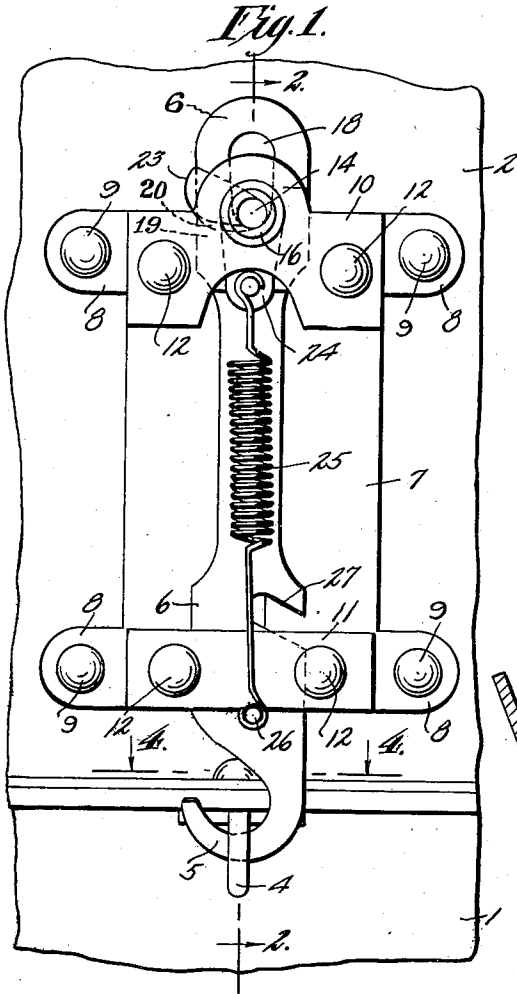


A. SMITH.  
 AUTOMOBILE HOOD FASTENER.  
 APPLICATION FILED MAR. 18, 1920.

1,369,713.

Patented Feb. 22, 1921.



# UNITED STATES PATENT OFFICE.

ADELBERT SMITH, OF WORCESTER, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF FIFTEEN ONE-HUNDREDTHS TO ORA E. REED, FIFTEEN ONE-HUNDREDTHS TO ELMON J. SKINNER, FIFTEEN ONE-HUNDREDTHS TO FLOYD VAN DUSEN, FIFTEEN ONE-HUNDREDTHS TO RAY W. VICKERS, AND FIFTEEN ONE-HUNDREDTHS TO J. S. WATERMAN, ALL OF WORCESTER, NEW YORK.

## AUTOMOBILE-HOOD FASTENER.

1,369,713.

Specification of Letters Patent. Patented Feb. 22, 1921.

Application filed March 18, 1920. Serial No. 366,821.

*To all whom it may concern:*

Be it known that I, ADELBERT SMITH, a citizen of the United States, and a resident of the city of Worcester, in the county of Otsego and State of New York, have invented a new and Improved Automobile-Hood Fastener, of which the following is a full, clear, and exact description.

This invention relates to improvements in automobile hood fasteners, an object of the invention being to provide an improved construction of spring catch and mounting therefor, which can be moved to unlocking position and held in such position until released, and then elastically spring into locking position.

A further object is to provide an improved device of the character stated which will be extremely simple in construction, and strong and durable in use.

With these and other objects in view, the invention consists in certain novel features of construction, and combinations and arrangements of parts as will be more fully described and pointed out in the claims.

In the accompanying drawings:

Figure 1 is a view in elevation of the inner portion of a hood showing my improved fastener in locked position.

Fig. 2 is a view in section on line 2—2 of Fig. 1.

Fig. 3 is a view in section on the line 3—3 of Fig. 2 showing in full lines the unlocked position of the catch bolt, and in dotted lines the locked position of the same.

Fig. 4 is a view in section on the line 4—4 of Fig. 1.

Fig. 5 is a perspective view of the upper end of the catch bolt 6.

1 represents the stationary portion of an automobile hood, and 2 the movable or hinged portion having a beaded lower edge 3 normally resting in the portion 1.

The hood member 1 is provided with an eye 4 adapted to receive the hook 5 on the lower end of the catch bolt 6 mounted on the hood member 2.

A plate 7 is made with perforated lugs 8 at its corners, which are secured by rivets 9 to the inner face of hood member 2 and

constitute an easy and effective means for attaching the fastener.

Bars 10 and 11 are secured to the plate 7 by rivets 12 and maintained in spaced relation thereby by shoulders 13 on the rivets.

A shaft 14 is mounted in bearings 15 and 16 on member 2 and bar 10 respectively, and projects outside of the hood where it is provided with a crank handle 17 to operate the same.

The upper portion of the catch bolt 6 is made with a longitudinal slot 18 to accommodate the shaft 14 and is provided with an enlargement 19 having a curved face 20 which forms the enlargement into a horizontal portion 21 and a vertical portion 22.

A cam 23 is fixed to shaft 14 and engages the curved face 20 of the enlargement 19.

A link 24 is supported on shaft 14 and is connected by a coiled spring 25 with a pin 26 on the lower portion of bolt 6 normally holding the bolt in elevated locking position with the pin 26 against bar 11, the latter limiting the upward movement of the bolt.

The lower pair of rivets 12 are positioned against the side edge of the bolt normally holding the bolt against lateral movement.

The spring 25 is positioned at an angle to the longitudinal plane of the bolt 6 and tends to move the lower end of the bolt laterally.

An inclined recess 27 is provided in one edge of the bolt 6 which when the bolt is in locked position has its entrance end spaced above the rivet 12 adjacent thereto.

When it is desired to unlock the bolt, the shaft 14 is given a partial turning movement, causing the cam 23 to first engage the horizontal portion 21 of enlargement 19 and imparting a downward movement to the bolt. The limit of such movement is reached when the cam 23 engages the vertical portion 22 of enlargement 19 where the cam will operate to hold the bolt in lowered unlocked position as shown in Fig. 3.

As the bolt 6 moves downward the entrance end of recess 27 will be brought into register with the rivet 12 at the lower right hand portion of Fig. 3 and will receive said rivet, the inclined upper wall of said re-

cess 27 compelling the bolt to move laterally far enough to release its hooked lower end 5 from the eye 4.

The parts will remain in this position 5 while the hood is opened and until the hood is closed, and the crank arm swung back to its former position when the spring 25 will cause an upward longitudinal movement of the bolt 6 and the lower inclined wall of recess 27 in engagement with the rivet 12 will 10 compel the lower end of bolt to move laterally and position its hook 5 in the eye 4.

Various slight changes might be made in the general form of the parts described 15 without departing from my invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and 20 scope of the appended claims.

I claim:

1. A device of the character described, comprising a support, a longitudinally and laterally movable bolt on the support, a 25 spring tending to move the bolt longitudinally and laterally, a fixed member on the support, said bolt having a recess therein adapted to receive the fixed member and compel the bolt to move laterally when it 30 is moved longitudinally, a hook on one end of the bolt, means preventing lateral movement of the bolt when in locking position, and means for moving the bolt longitudinally against the action of the spring.

35 2. A device of the character described, comprising a longitudinally and laterally

movable bolt having a hook-shaped end, a keeper adapted to be engaged by the bolt, means preventing lateral movement of the bolt when in locked position, and means 40 compelling lateral movement of the bolt when the latter is moved longitudinally.

3. A device of the character described, comprising a support, a longitudinally and laterally movable bolt on the support, a 45 spring tending to move the bolt longitudinally and laterally, a fixed member on the support, said bolt having a recess therein adapted to receive the fixed member and compel the bolt to move laterally when it is 50 moved longitudinally, a hook on one end of the bolt, an enlargement on the bolt having a horizontal and a vertical portion, and a cam engaging the horizontal portion of the enlargement to move the bolt longitudinally 55 and limited in its movement by the vertical portion of the enlargement.

4. A device of the character stated, comprising a support, cross bars on the support, devices holding the bars in spaced relationship to the support, a shaft mounted in the support, a bolt on the support held against lateral movement by the spacing devices, a cam on the shaft for imparting longitudinal movement to the bolt, a spring engaging the 65 bolt and tending to move the bolt both longitudinally and laterally, and said bolt having a recess in the edge to receive one of said spacing devices and permit lateral movement of the bolt when moved into register 70 with said spacing device.

ADELBERT SMITH.