June 15, 1937. S. F. RUGGIERO 2,083,963

AUTOMOBILE HOOD LATCH MECHANISM

Filed Jan. 18, 1934

Fig. 1.

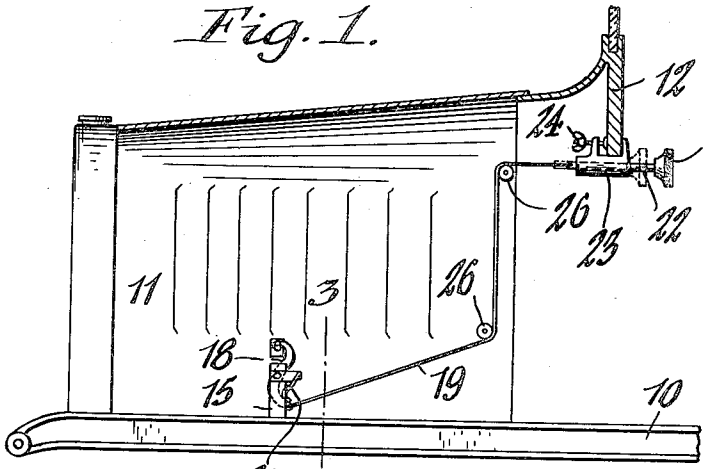


Fig. 2.

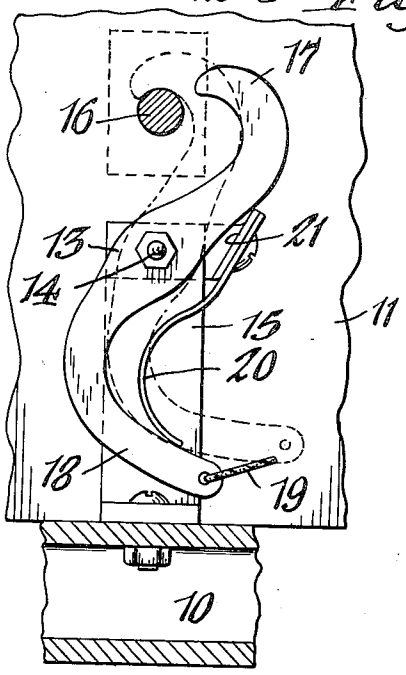


Fig. 3.

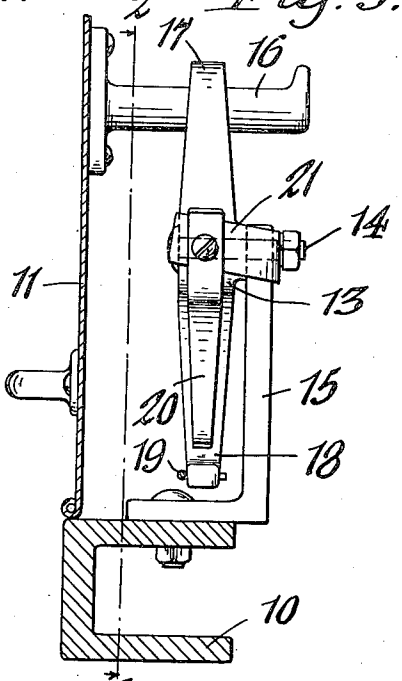


Fig. 4.

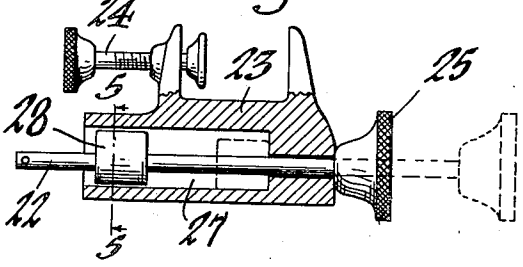
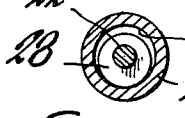


Fig. 5.



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AUTOMOBILE HOOD LATCH MECHANISM

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1 Claim. (Cl. 292—129)

This invention relates to an automobile hood fastening means of the type to prevent access to parts under the hood by unauthorized persons.

It has for one of its objects to provide a latch mechanism for this purpose which is simple, reliable and inexpensive in construction, and which is under the control of the car driver, so that when the doors of the vehicle are locked it is impossible for unscrupulous persons to release the latch mechanism and open the hood.

Another object of the invention is to provide simple and readily controlled means for effecting the latching and unlatching of the hood from the driver's-seat.

In the accompanying drawing:—

Figure 1 is a fragmentary longitudinal section through the hood of an automobile showing my invention applied thereto. Figure 2 is an enlarged vertical section taken in the plane of line 2—2, Figure 3. Figure 3 is a enlarged transverse vertical section taken on line 3—3, Figure 1. Figure 4 is a sectional elevation of the latch-controlling element. Figure 5 is a cross section taken on line 5—5, Figure 4.

Similar characters of reference indicate corresponding parts throughout the several views.

Referring now to the drawing, 10 indicates a channel frame of an automobile, 11 the hood and 12 the dash or instrument board. The improved latch mechanism is applied to the opposite side walls of the hood but for the purpose of illustration it has been deemed sufficient to show its adaptation to one of such walls.

In the preferred embodiment of my invention, it consists of a vertically-swinging latch member or lever 13 pivoted intermediate its ends at 14 to a bracket 15 attached to the channel 10 and disposed inwardly of and adjoining the side wall of the hood 11 for latching engagement with a stud or locking pin 16 secured to and projecting inwardly and horizontally from the hood side wall. This latch member is of substantially reversed S-shape in form, being provided at its upper end with a forwardly-facing hook 17 engageable with the locking stud 16 in the closed position of the hood, and terminating at its lower end in a rearwardly-facing arm 18 to which a cable or like flexible connection 19 is attached for swinging the latch member into and out of locking engagement.

Carried by the bracket 15 is a flat spring 20 which bears against the latch member 13 and serves to normally urge it to swing in a direction to release the same from the locking pin 16, it being necessary when latching the hood to swing the latch member against the tension of the spring. To limit the swinging of the latch member to its open position, I provide a stop or abutment 21 which is attached to the bracket 15 and which is disposed in the path of the hooked arm 17 of the latch member. This abutment also serves as a fixture to which the spring 20 is secured, as shown in Figure 2 and 3.

The latch member 13 is operated from the dash or instrument board 12 or from any other convenient part of the vehicle readily accessible from the driver's-seat. The preferred means for thus actuating and controlling the latch member consist of a sliding rod or plunger 22 guided in a casing or fitting 23 secured to the instrument board 12 by a clamping screw 24 or the like and having its forward end connected to the cable 19 while its rear end is provided with a knob or handle 25. If desired, between the latch 13 and the actuating plunger 22, the cable may pass around suitable guide rollers 26. In order to hold the actuating plunger in its operative latched position, the casing 23 is provided with a bore 27 disposed eccentric to the axis of the plunger and fixed to the latter is a cam or eccentric 28 which in one radial position thereof shown by full lines in Figure 4, is adapted to freely slide in the bore 27 and which in another position thereof shown by dotted lines in the same figure is adapted to frictionally bear against the bore to resist movement of the plunger out of its position in which the hood is latched. When the actuating plunger is turned to release the eccentric from frictional engagement with the bore 27, the spring 20 automatically swings the latch member 13 to its released position, thereby exerting a pull on the cable 19 and drawing the plunger forwardly to the position shown by dotted lines in Figure 1 and full lines in Figure 4. When it is desired to latch the hood, the plunger is drawn rearwardly to swing the latch member into locking engagement with the hood-bearing pin 16, after which the plunger is turned a fraction of a revolution to bring the eccentric into frictional engagement with the fixture-bore 27, thereby positively retaining the hood in a closed, latched position.

I claim as my invention:—

An automobile hood-latching mechanism, comprising a bracket, a substantially inverted S-shaped latch member pivoted to said bracket and terminating at its upper end in a latch hook and at its lower end in an actuating arm, a stop element disposed on said bracket and adjacent its pivot for limiting the movement of the latch member to its released position, a spring applied to said stop element and in bearing contact with said actuating arm for urging the latch member to its released position, and actuating means operatively connected to the arm of said latching member for controlling its latching and unlatching movements.

SALVATOR F. RUGGIERO.