

Aug. 9, 1938.

W. S. SAUNDERS

2,126,141

HOOD LATCH

Filed Nov. 9, 1936

2 Sheets-Sheet 1

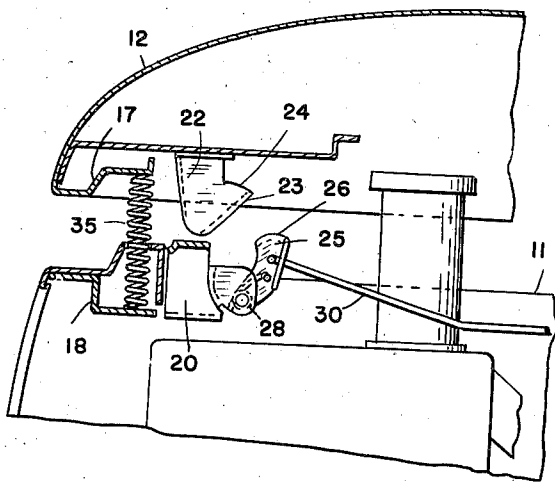


FIG. 2.

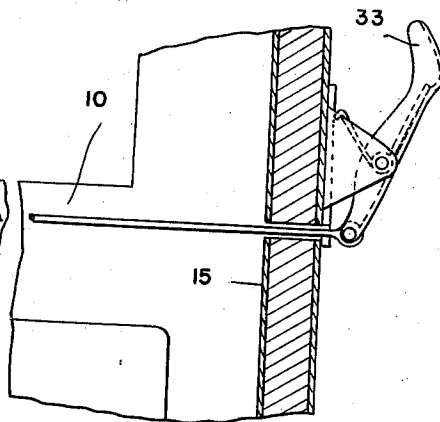
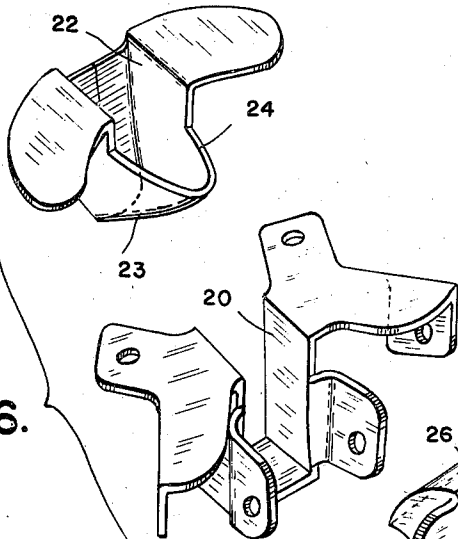


FIG. 6.

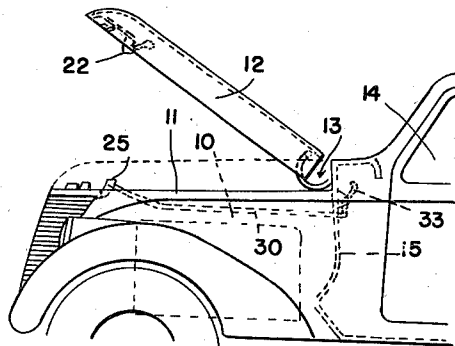


FIG. 1.

BY

INVENTOR
WALTER S. SAUNDERS

Swann, Page, Hardesty
ATTORNEYS

Aug. 9, 1938.

W. S. SAUNDERS

2,126,141

HOOD LATCH

Filed Nov. 9, 1936

2 Sheets-Sheet 2

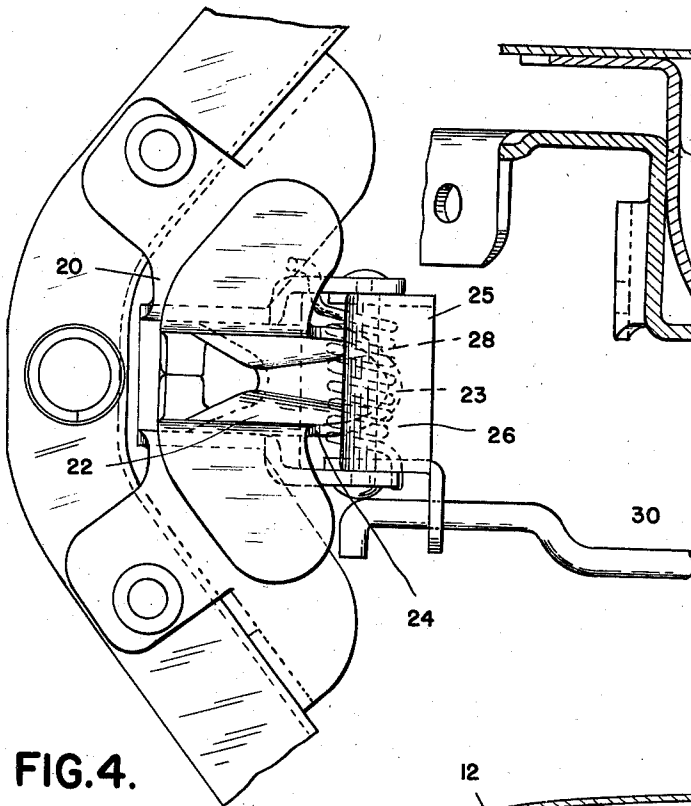


FIG. 4.

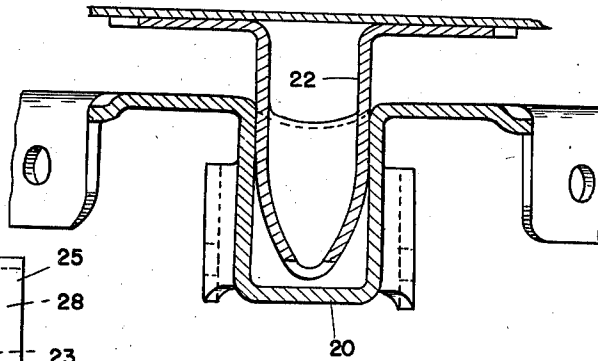


FIG. 5.

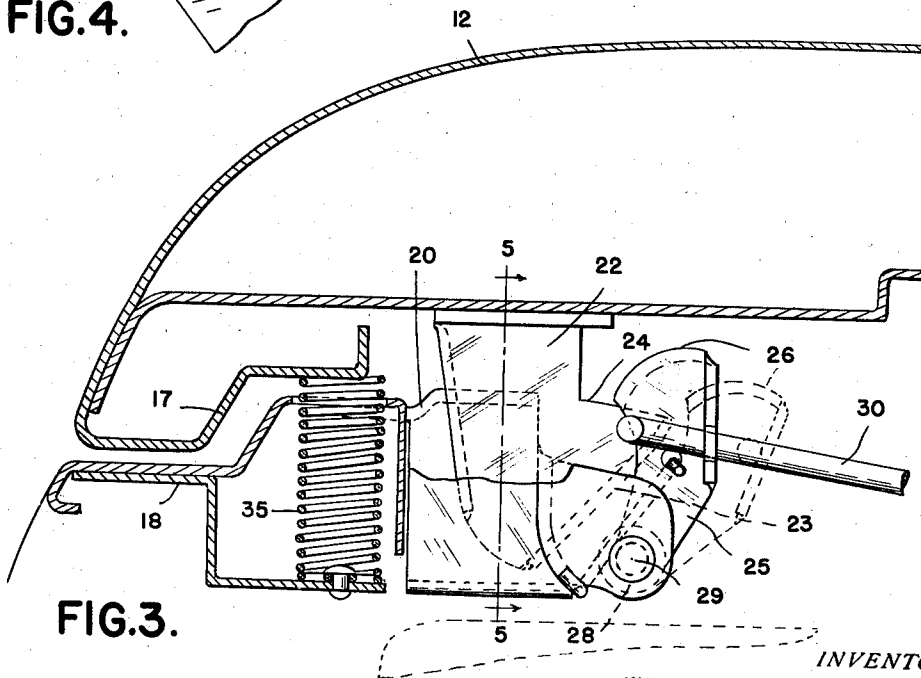


FIG. 3.

INVENTOR
WALTER S. SAUNDERS
BY *Wm. J. Hardy*
ATTORNEYS

UNITED STATES PATENT OFFICE

2,126,141

HOOD LATCH

Walter S. Saunders, Pontiac, Mich., assignor to
American Forging & Socket Company, Pontiac,
Mich., a corporation of Michigan

Application November 9, 1936, Serial No. 109,860

3 Claims. (Cl. 292—223)

This invention relates to remote controlled latches, and is particularly directed to the provision of an improved latch suitable for locking the hood or engine compartment of a motor vehicle.

An important object of the invention is the provision of an improved and simplified latch of this character adapted to prevent opening the hood unless the latch be first released from inside the vehicle.

Other important objects of the invention include the provision of such latching means for hoods of the "lid" type, that is, hinged upon a fixed horizontal axis, as well as the incorporation therewith of means for centering the hood, and for holding the same against rattling.

A further object is to provide such a remote-controlled latch construction of the character indicated formed entirely of sheet metal in a very simple and economical manner, yet adapted to very securely hold the hood or other latched part.

Other objects and advantages will be apparent from the following description wherein reference is made to the accompanying drawings illustrating preferred embodiments of my invention and wherein similar reference numerals designate similar parts throughout the several views.

In the drawings:

Figure 1 is a fragmentary side elevational view of the front and hood portions of an automobile having hood latching means incorporating the principles of this invention.

Figure 2 is an enlarged longitudinal section of the hood and appurtenant portions of the automobile, partly broken away, showing the latch released.

Figure 3 is a view similar to Figure 2, on a larger scale, showing the latch in closed position and partly broken away.

Figure 4 is a view showing the latch mechanism in plan, the hood lid being broken away.

Figure 5 is a vertical section taken substantially on the line 5—5 of Figure 3 and looking in the direction of the arrows.

Figure 6 is an exploded view showing in perspective the principal elements of the latch mechanism.

Referring now to the drawings, reference character 10 designates the engine compartment of a vehicle, shown provided with a hood having side walls 11, and a top or lid section 12 hinged at its rear edge, as at 13, in such manner that it may be lifted from the front. The engine compartment is shown separated from the passenger compartment 14 by a dash panel 15. The meet-

ing edges of the lid section and hood walls are framed and reenforced by flange elements 17—18, respectively, each of such frame flanges carrying one portion of my improved latch. The body or keeper 20 is attached to the fixed flange 18, and the rid bolt element 22 to the lid flange 17.

Both the body and bolt elements are formed of sheet metal, drawn to generally U-contour. Each is flanged for securance to the frame member by which it is carried. The keeper body is fastened to the under-side of flange 18, and provided with an opening created by its U-shape, adapted to accommodate the downwardly projecting bolt element 22, which extends thereto when the lid is closed. The bolt element 22 is rigidly carried by the lid, being secured to the bottom of flange 17 in position to register with the opening in the keeper body. Both the opening and bolt are tapered in such manner that the bolt and so the lid are centered by the keeper during closing of the lid.

Viewed from the side, the bolt member 22 will be seen to be shaped to provide an inclined nose 23, which forms an overhanging latching shoulder 24 engageable by the swingable latching dog 25 carried by the keeper 20. The dog has a nose portion 26 swingable to overhang the latching shoulder 24, and is normally urged toward such latched position by a torsion spring 28 wrapped about the pivot pin 29 upon which the dog is swingably mounted.

The dog is releasable by means of a pull rod 30 articulated thereto and extending through the dash into the passenger compartment, where it may be connected to a foot pedal as 33 operable to retract the dog and so free the lid.

The coil spring 35, mounted in the frame member 18, acts directly upon the lid when closed, urging the same toward opened position with enough force, when the dog is released, to move the lid upward a short distance, freeing the bolt member from the dog, whereafter the lid may be raised by hand, from outside. The spring thus resists closing of the lid and cushions the closing thereof, and in addition tends to hold the lid and the body of the hood apart and under stress, even when the lid is closed and latched, so preventing rattling.

While it will be apparent that the illustrated embodiment of my invention herein disclosed is well calculated to adequately fulfill the objects and advantages primarily stated, it is to be understood that the invention is susceptible to variation, modification and change within the spirit and scope of the subjoined claims.

What I claim is:

1. Remotely controllable latching means for releasably securing a lid or the like to the support, comprising latch keeper and bolt portions, one carried by the lid section and the other by the support, each of said portions having a substantially U-shaped sheet metal section, said sections interfitting when the lid is closed, the bolt portion having a shoulder extending transversely to the path of movement of said sections into and out of interfitted relation, a latch member movably carried thereby said keeper portion and movable to and from an overlying position with respect to said shoulder in which it holds the bolt portion, spring means yieldably urging said latch member toward such overlying position, and an elongated operating member connected to said latching element.

2. Latching means as defined in claim 1 in

which the U-shaped section of the bolt portions fits into the U-shaped section of the keeper portion, the latch member also being of substantially U-shape and facing in a direction opposite to the bolt portion, said latch member being pivoted upon the keeper portion and retractible by engagement of the bolt portion thereagainst.

3. Latching means as defined in claim 1 in which said keeper and bolt portions projecting substantially in the same direction and the bolt portion slides into the keeper portion when the lid is closed, said shoulder portion extending transversely from the tapered interfitting portions, and the latch member is movably supported by the keeper portion and engageable and disengageable with respect to said shoulder portion.

WALTER S. SAUNDERS.