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G. HALINKA

1,989,801

DOORLATCH

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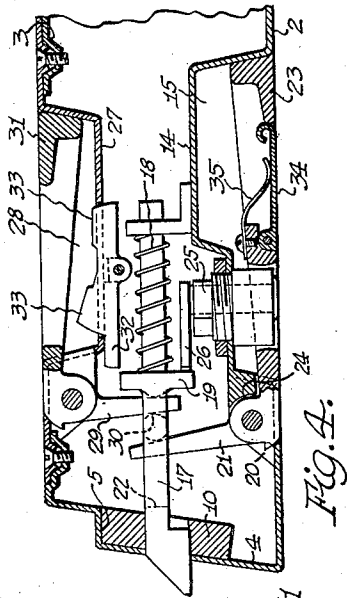


Fig. 4.

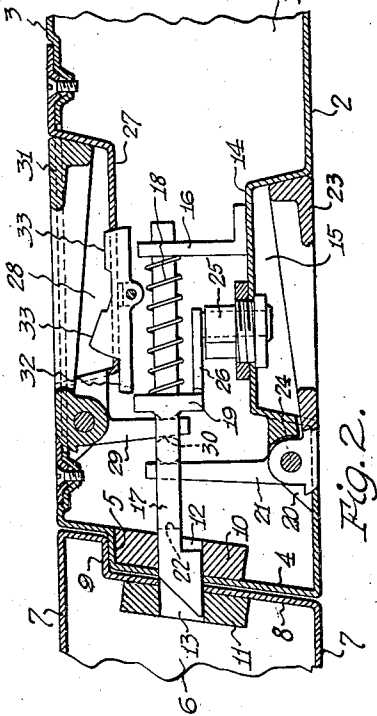


Fig. 2.

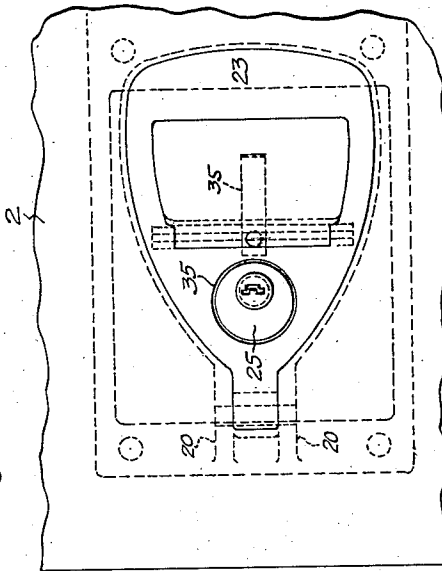


Fig. 3.

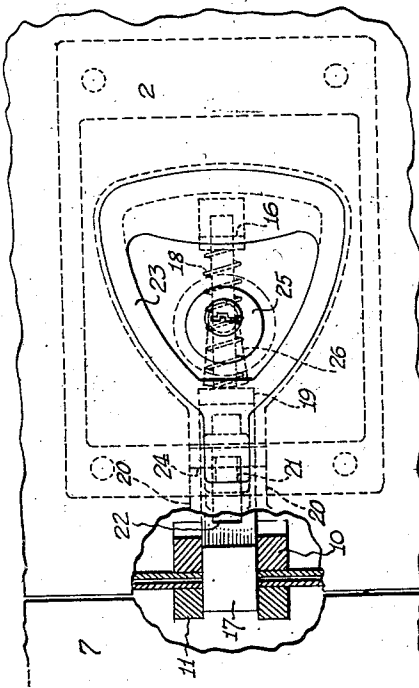


Fig. 1.

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DOORLATCH

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1 Claim. (Cl. 189—46)

The present invention pertains to locks and more particularly to latching and locking mechanisms for automobile doors and the like.

The primary object of the present invention is to provide means for holding a door in a closed position, which means may be released by an operating handle which, in its inoperative position, is disposed with its outer face flush with the outer face of the door, and which means may be operated to secure the door in a closed position so that the same can only be opened by a special key.

Another object of the present invention is to provide a lock including a latch bolt adapted for insertion in a door to be operated to engage a keeper supported adjacent the door by means mounted in a recess in the inside face of the door, in combination with dual locking means whereby the latch bolt may be locked against movement by manipulation of a key in locking mechanism accessible from the outside of the door, or by manipulation of a lever located to be accessible only from the inside of the door.

With the above and other ends in view the invention consists in matters hereinafter set forth and more particularly pointed out in the appended claim, reference being had to the accompanying drawing, in which

Figure 1 is a fragmentary front elevation;
Fig. 2 is a transverse cross section thereof;
Fig. 3 is a fragmentary front elevation of a modification, and

Fig. 4 is a transverse cross section thereof.
Like characters of reference are employed throughout to designate corresponding parts.

In the drawing the numeral 1 indicates a door which is formed of sheet metal with a front wall 2 and rear wall 3 joined by an integral web 4, the latter being stepped as at 6 to provide a shoulder. A fragment of an automobile body is designated at 6 and comprises front and rear walls 7 joined by an integral web 8 that is stepped to provide an abutment 9 which is engaged by the shoulder 5 when the door 1 is in its closed position illustrated in Fig. 1. Welded or otherwise secured to the web 4 is a reinforcing block 10, and similarly secured to the web 8 is a reinforcing block 11. The block 10 and web 4 are provided with an opening 12 which registers with a similar opening 13 in the block 11 and web 8 when the shoulder 5 engages the abutment 9.

The front wall 2 is depressed as at 14 to provide a recess 15 for a purpose which will appear, and secured to the depressed portion 14 is a

supporting post 16. A latch bolt 17 has one end slidably received in the post 16 and its other end extends into the opening 12. A coiled spring 18 is sleeved on the latch bolt 17 between the post 16 and a shoulder 19 and normally urges movement of the latch bolt in a direction to cause the forward end thereof reextend through the opening 12 and into the opening 13, in which position it prevents opening of the door.

Adjacent the depressed portion 14 are provided brackets 20 that pivotally support a lever 21 whose free end extends through an elongated slot 22 in the latch bolt. Integral with the lever 21 is provided a handle 23 which extends through an opening 24 in the front wall and which is normally disposed within the recess 15. When the handle 23 is pulled out of the recess 15 by manual pressure it causes pivotal movement of the lever 21 which engages the end of the slot 22 and moves the latch bolt 17 so that its outer end is withdrawn from the opening 13, in which position the door is free to open.

In order to lock the latch bolt against retraction as above described there is provided a key operated lock mechanism in a barrel 25 which is mounted in the depressed portion 14 and which is equipped with a dog 26 that is adapted to be moved, by manipulation of a key within the lock, into the path of movement of the shoulder 19 to prevent retraction of the latch bolt 17.

The rear wall 3 is provided with a depressed detachable plate 27 having a recess 28 adjacent which is pivotally mounted a lever 29 that projects through a slot 30 in the latch bolt 17. Secured to the lever 29 is a handle 31 which is normally received in the recess 28 and which may be moved by manual pressure to pivot the lever 29 and retract the latch bolt.

Pivotally mounted in the depressed portion 27 is a rocking lever 32 having finger pieces that extend into the recess 28 so that manual pressure may be applied thereto to move the lever 32 into or out of the path of movement of the shoulder 19 on the latch bolt 17.

It becomes apparent that the above described mechanism constitutes latching means which may be operated from the outside or inside of the door, and which may be locked by a key operated mechanism accessible from the outside of the door, or by a manually operable rocking lever accessible from the inside of the door.

In reference to the embodiment shown in Figs. 3 and 4 like reference numerals apply. In this form the handle 23 is provided with a flap 34 that is held by a spring 35 in a position closing the

opening in the handle. The spring exerts sufficient pressure to normally maintain it in a position closing the opening in the handle 23, but not sufficient pressure to prevent the same to be manually moved to permit a person to grasp the handle in order to move the latch bolt 17. The purpose of the spring pressed flap is to provide a smooth exterior at that portion of the door where the handle is located so that no eddying takes place in the air while the automobile is in motion. The eddying in the air, which would otherwise result, would tend to set up a retarding effect and at the same time create undesirable sounds which this construction aims to avoid. In other words this construction provides for stream lining which is in keeping with the modern trend of automotive vehicle design.

In this form the handle 23 is provided with an opening 36 into which the lock barrel 25 extends so that a key may be conveniently inserted in the latter.

Although specific embodiments of the present invention have been illustrated and described it is to be understood that various changes may be made in the details of construction without departing from the spirit of the invention as defined in the appended claim, and such changes are contemplated.

What I claim is:—

A door construction for the reception of locking means comprising a door formed of sheet metal and including inner and outer walls joined by a transverse web, said outer wall being formed with a depression and a slot adjacent to one end of said depression, means on the inside of a wall of said depression adapted to support a bolt so that one end thereof extends through a slot in said web, means adjacent to said slot in said outer wall and adapted to support a handle so that a part thereof is disposed in said recess and another part engages said bolt, said inner wall being formed with an opening therein in opposed relation to the depression in said outer wall, a cover plate secured over said opening, said cover plate being formed with a depression and a slot adjacent to one end of said depression, means adjacent to said cover plate slot and adapted to receive a handle so that a part thereof is disposed within said cover plate depression and a part thereof engages said bolt, a wall of said cover plate depression being formed with a slot, and a rocking lever pivotally mounted in said slot and adapted to engage said locking bolt.

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