

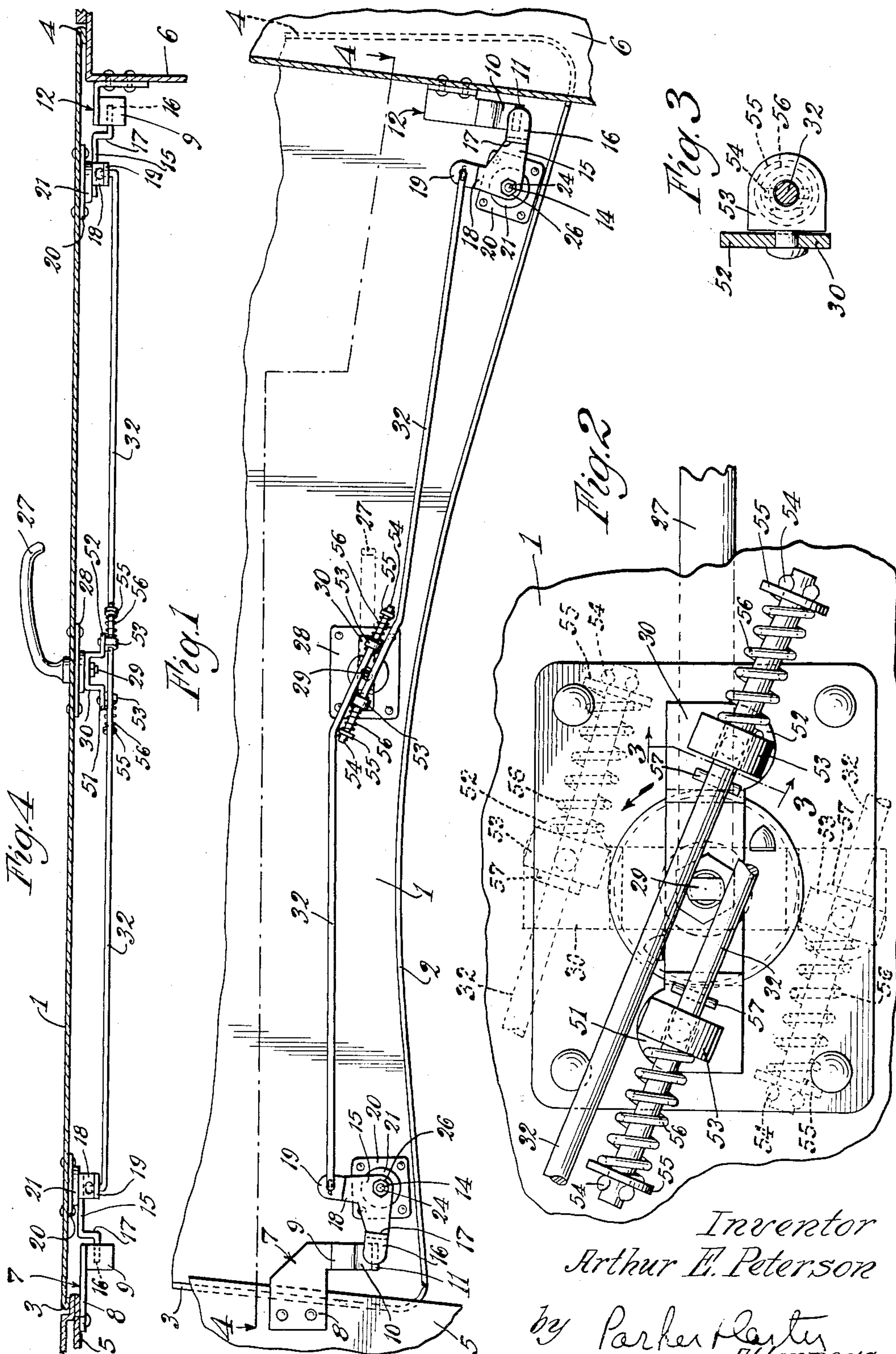
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HOOD LATCH

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2,183,621

HOOD LATCH

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4 Claims. (Cl. 292—48)

My invention relates to an improvement in hood latches and has for one purpose the provision of an improved hood latch mechanism adaptable, for example, for latching the hood closure of automobiles.

Another purpose is the provision of improved means for drawing hinged automobile hood closures downwardly and inwardly in tight and substantially rattle-proof engagement with the adjacent parts of the vehicles.

Another purpose is the provision of improved means for yieldingly thrusting hood latch members into securing position in response to the actuation of an exterior handle.

Other objects will appear from time to time in the course of the specification and claims.

The present application is a division of my co-pending application Serial No. 121,944, filed in the United States Patent Office on January 23, 1937, now Letters Patent No. 2,146,700, dated February 7, 1939.

I illustrate my invention more or less diagrammatically in the accompanying drawing wherein:

Fig. 1 is an inside elevation of the hood latch structure;

Fig. 2 is an inside elevation on an enlarged scale of a portion of the structure shown in Fig. 1;

Fig. 3 is a section on the line 3—3 of Fig. 2; and

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

Like parts are indicated by like characters throughout the specification and drawing.

Referring to the drawing, I generally indicates the closure proper which includes a lower edge 2, a forward edge 3, and a rear edge 4. 5 indicates a portion of the automobile radiator or other adjacent part and 6 a portion of the cowl or other adjacent part of the vehicle. 7 indicates a locking bracket mounted on the radiator or other adjacent part, and including for example a base portion 8 and an arm 9 which includes an offset inclined cam portion 10, terminating in an extension 11 generally parallel with the body of the bracket 7. A similar bracket generally indicated as 12 is mounted on the cowl or other adjacent part.

Pivoted at each end of the closure 1, for example as at 14, is a locking member which generally resembles in form a bell crank lever. The member may be generally described as including a body portion 15, an outwardly latching offset 16 connected to the body 15 as by the angular portion 17, and a second lever 18 having an apertured ear 19.

The member is pivotally mounted upon a base plate generally indicated as 20, which may be suitably secured to the closure 1. Member 20 may include an offset generally cylindrical portion 21. Any suitable pin 24 may be employed to secure the parts in rotatable relationship, headed as at 25. The head 25 may, for example, be a lock nut threaded upon one end of the pin 24.

In order to impart locking and unlocking movement to the members 15, of which one is mounted at each end of the hood closure, I provide an exterior handle 27. It is mounted upon a suitable base plate 28 and is provided with an inwardly extending portion 29 secured to which is a lever 30. At each end of the lever 30 is a terminal portion or offset 51 or 52 in the nature of an enlargement of the lever. Although the details of the form of lever may be widely varied, some enlargement is advantageous.

Pivotally mounted upon these offsets 51 and 52 are apertured ears 53 through which pass the ends of the rods 32. Each such rod may be provided with a terminal portion or abutment 54, provided with a washer 55 and springs 56, compressed between the washers 55 and the ears 53. 57 indicates any suitable pin or distorted portion adapted to limit the penetration of the rod 32 into or through the ear 53, which may be swiveled if necessary. The other end of the rod 32 may be pivoted to a simple lever 15 without any spring connection.

It will be understood that the springs 56 provide a resiliency whereby, when the latching members 16 are moved into latching position, they are yieldingly held and can give in order to provide a take-up for wear and a prevention of rattling. However, when the rods 32 are moved out of latching position by the rotation of the lever 30, the members 16, 17 are positively moved out of latching position.

It will be realized that whereas I have described and illustrated a practical and operative device, nevertheless many changes may be made in the size, shape, number and disposition of parts without departing from the spirit of my invention. I therefore wish my description and drawing to be taken as in a broad sense illustrative or diagrammatic, rather than as limiting me to my precise showing.

I claim:

1. In a hood latch for automobile vehicles, a hinged closure, a single exterior handle therefor, an interior double arm crank located in the closure and mounted for rotation in unison with the exterior handle, the axis for rotation of the han-

dle and crank being generally perpendicular to the face of the closure, a bearing member swiveled upon each arm of said crank, a latch actuating rod slidable in the aperture of each said bearing member, interior latch members movably mounted upon the hinged closure, and an actuating connection between one of said latch members and the outer end of each said rod, a coil spring surrounding the inner end of each said rod and an abutment member adjacent the inner end of each said rod, one of said coil springs being compressed between each said abutment member and one of said swiveled bearing members.

2. In a hood latch for automobile vehicles, a hinged closure, a single exterior handle therefor, an interior double arm crank located in the closure and mounted for rotation in unison with the exterior handle, the axis for rotation of the handle and crank being generally perpendicular to the face of the closure, a bearing member swiveled upon each arm of said crank, a latch actuating rod slidable in the aperture of each said bearing member, interior latch members movably mounted upon the hinged closure, and an actuating connection between one of said latch members and the outer end of each said rod, a coil spring surrounding the inner end of each said rod and an abutment member adjacent the inner end of each said rod, one of said coil springs being compressed between each said abutment member and one of said swiveled bearing members, each said rod being generally rectilinear and having an inner end portion inclined to the rectilinear body of the rod, such inclined portion being slidable in one of said swivel members.

3. In a hood latch for automobile vehicles, a hinged closure, a single exterior handle therefor, an interior double arm crank located in the closure and mounted for rotation in unison with the exterior handle, the axis for rotation of the handle and crank being generally perpendicular to the face of the closure, a bearing member swiveled upon each arm of said crank, a latch actuating rod slidable in the aperture of each said bearing member, interior latch members movably mounted upon the hinged closure, an actuating connection between one of said latch members and the outer end of each said rod, a coil spring surrounding the inner end of each said rod and an abutment member adjacent the inner end of each said rod, one of said coil springs being compressed between each said abutment member and one of said swiveled bearing members, and means for limiting the movement of the rods through said bearing members in response to the expansion of said springs.

4. In an actuating member for automobile hood latches, in combination with a hinged closure, an exterior handle, a double arm crank located within the closure and movable in unison with the handle, swiveled bearing members at each end of each arm of the crank, latch actuating rods slidable in said swiveled members, yielding means urging them normally in a given direction in relation to said swiveled members, and limit means adapted to limit their sliding movement through said members, in response to the action of said yielding means.

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