

J. A. TARKINGTON.
 DOOR LATCH.
 APPLICATION FILED JULY 21, 1917.

1,249,553.

Patented Dec. 11, 1917.

Fig. 1.

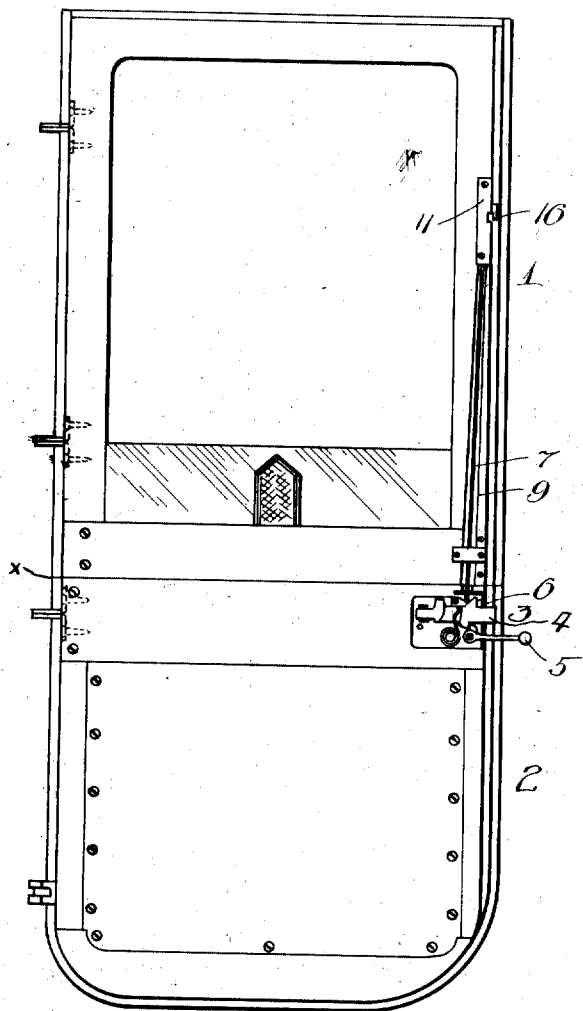


Fig. 2.

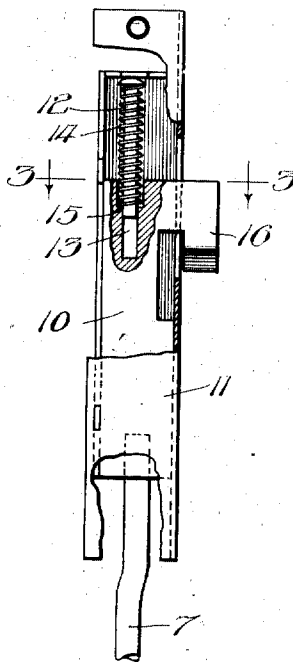


Fig. 3.

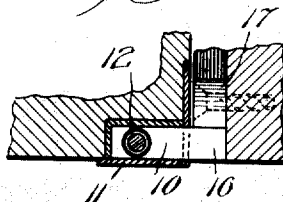


Fig. 4.

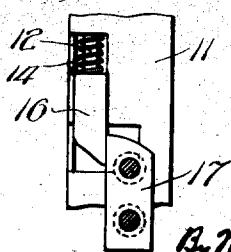


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOSEPH ARTHUR TARKINGTON, OF HARTFORD, WISCONSIN, ASSIGNOR TO KISSEL MOTOR CAR COMPANY, OF HARTFORD, WISCONSIN, A CORPORATION OF WISCONSIN.

DOOR-LATCH.

1,249,553.

Specification of Letters Patent. Patented Dec. 11, 1917.

Application filed July 21, 1917. Serial No. 181,995.

To all whom it may concern:

Be it known that I, JOSEPH A. TARKINGTON, a citizen of the United States, residing at Hartford, in the county of Washington and State of Wisconsin, have invented certain new and useful Improvements in Door-Latches, of which the following is a specification.

This invention relates to door latches and particularly to latches for sectional doors, such, for example, as the door disclosed in application Serial No. 182,027, filed July 21, 1917, by William L. Kissel and John Frederick Werner.

The object of the invention is to provide a latch for each section of the door, said latches being operable by means of a single handle, and the connection between the latches being of such character that the door sections may be readily connected and disconnected.

In the accompanying drawings, Figure 1 is an inner side view of a door provided with a latching mechanism embodying the features of my invention. Fig. 2 is an enlarged fragmental view of the latch for the upper door section. Fig. 3 is a sectional view taken in the plane of dotted line 3-3 of Fig. 2. Fig. 4 is a fragmental view showing the latch for the upper door section and the keeper therefor. Fig. 5 is a detail view of a guide for the actuating connection between the latches.

In Fig. 1, I have shown a door for an automobile body similar to the one fully disclosed in said Kissel & Werner application. Herein the joining line of the door sections 1 and 2 is indicated at *x*. Each section is provided with a latch. The latch 3 for the lower door section may be of any suitable or well-known construction and, therefore, I have deemed it unnecessary to illustrate said latch in detail. The bolt 4 is arranged to be slid by means of a handle 5. Upon the bolt 4 is a cam surface 6 against which rests the lower end of a rod 7. This rod extends through a guide opening 8 (Fig. 5) in the latch casing and through a groove 9 in the upper door-section. The upper end of the rod is attached to a slide 10 which is inclosed within a casing 11 secured to the upper door section. A pin 12 extends slidably into an opening 13 in the slide. A coiled spring 14 interposed between the head of said pin and a shoulder 15 on the slide

10 tends to move said slide and the rod 7 downwardly. Upon the slide is a projection 16 adapted to lie at one side of a keeper 17 secured to the door frame. The adjacent ends of the projection 16 and the keeper 17 are rounded at one side to cause the projection 16 to be forced upwardly as the door is closed. As soon as the projection 16 has passed the keeper, the coiled spring 14 moves the slide downwardly to place the projection 16 behind the keeper 17, as shown in Fig. 4.

As fully explained in said Kissel & Werner application, the door-sections 1 and 2 are separated from each other by sliding the upper door-section toward the right as viewed in Fig. 1. This may be done without bending the rod 7, as the groove 9 in which said rod lies is wide enough to allow for the necessary relative movement between the door-sections. The door-sections may then be moved apart, the rod 7 being withdrawn from its guide opening 8. When desired, the door sections may be united by a reversal of the operations just described.

It will be seen that when the bolt 4 is moved inwardly to release the lower door-section, the slide 10 is simultaneously moved upward to disengage the projection 16 from the keeper 17. The bolt 4 and the projection 16 serve to hold the door firmly closed.

I claim as my invention:

1. A vehicle door transversely divided to form a lower section and an upper section, a latch for the lower section including a bolt, a spring normally holding said bolt in operative position, a lever for moving the bolt out of operative position against the action of said spring, said bolt having a cam surface on its rear portion, a latch on the upper section normally held in operative position, and an actuating rod carried by the upper section with its lower end bearing on said cam surface, said rod being movable by said cam surface when the bolt is moved out of operative position to move the latch for the upper section out of operative position.

2. A vehicle door transversely divided to form a lower section and an upper section, a latch for the lower section including a member movable transversely of the door and having its forward end normally held in operative position, a latch for the upper section including a member movable longitudinally of the door and having a projection normally held in operative position, and a

rod operatively connected to said latch members and adapted to be moved by the transversely movable member to move the projection on said longitudinally movable member out of operative position, said rod being disconnected from but movable by said transversely movable member.

3. A vehicle door transversely divided to form a lower section and an upper section, latches for said sections each having a member normally protruding from the same edge of the door, one of said latch members being movable transversely and the other longitudinally of the door, and a member operatively connected with said latches and arranged to be moved longitudinally of the door by one latch as it is moved out of latching position, to move the other latch out of latching position, said latch-moving member being disconnected from the latch by which it is moved.

4. A vehicle door having two latches, each having a member normally protruding from the same edge of the door, one of said latch members being movable transversely and the other longitudinally of the door, and an operating connection between said latches for transmitting movement from one to the other.

5. In combination with a vehicle door having a lower section and an upper section relatively movable on said lower section for disengagement therefrom, a latch upon each of said sections, and a rod extending between said latches for transmitting motion from one latch to the other, said rod being disconnected from the latch by which it is moved, and there being a guide opening for the rod in one section and a groove for the rod in the other section, said rod being laterally movable relatively to one of the door sections to permit relative movement between said door sections.

6. In combination with a vehicle door having a lower section and an upper section relatively movable on said lower section for disengagement therefrom, a latch upon each of said sections, and a rod extending between said latches for transmitting motion from the lower latch to the upper latch, said rod being disengageable from the lower latch, and there being a groove in the upper door section in which said rod is movable laterally to permit relative movement between said door sections.

In testimony whereof, I have hereunto set my hand.

JOSEPH ARTHUR TARKINGTON.