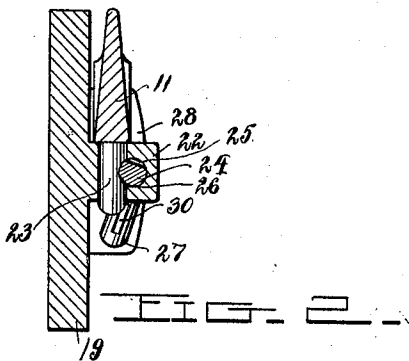
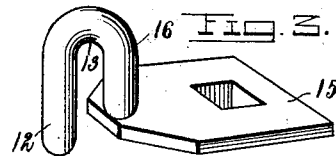


APPLICATION FILED SEPT. 10, 1911.

Patented Dec. 10, 1912.

III. I.



John A. Sawyer

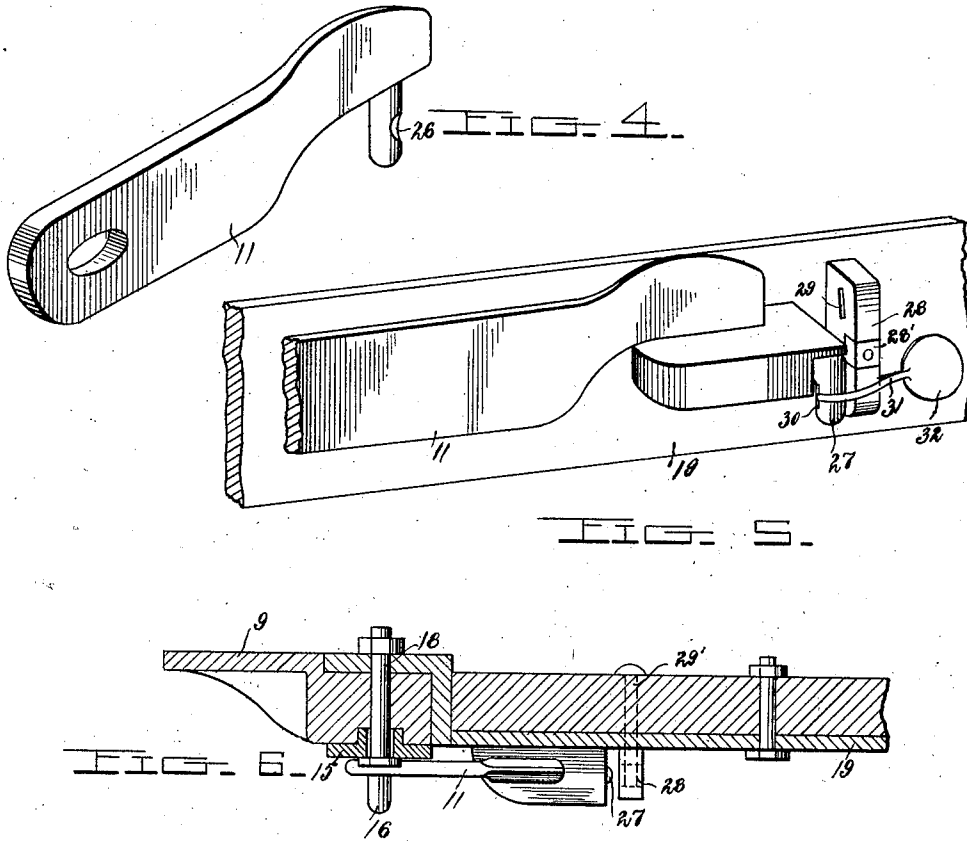
W. J. Victor J. Evans
Attorney

C. L. ALDEN.
CAR DOOR LOCK.
APPLICATION FILED SEPT. 19, 1911.

1,046,930.

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2 SHEETS—SHEET 2.



Witnesses
Carroll Bailey
M. F. Gamm & Co.

Inventor
C. L. Alden.

By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

CHARLES L. ALDEN, OF ALBANY, NEW YORK.

CAR-DOOR LOCK.

1,046,930.

Specification of Letters Patent.

Patented Dec. 10, 1912.

Application filed September 19, 1911. Serial No. 650,287.

To all whom it may concern:

Be it known that I, CHARLES L. ALDEN, a citizen of the United States, residing at Albany, in the county of Albany and State of New York, have invented new and useful Improvements in Car-Door Locks, of which the following is a specification.

The general object of the invention is to interlock a car door latch with a keeper and lock the latch against movement, and lock the means for locking the latch with the ordinary sealing device.

Other objects will appear and be better understood from the following description taken in connection with the accompanying drawings, in which,

Figure 1 is a front elevation of a portion of the side of a car including the door showing my device in operative position. Fig. 2 is a detail vertical section of the engaging end of the latch and keeper showing the parts in locked position. Fig. 3 is a similar view of the staple. Fig. 4 is a similar view of the latch. Fig. 5 is an enlarged detail perspective of the means for locking the door. Fig. 6 is a sectional plan on the line 7-7 of Fig. 1.

Referring to the drawings, A indicates a door frame having the door 8 slidable therein, said door frame having connected thereto the latch 11, said latch being pivotally supported at one end by the limb 12 of a staple 13. The staple 13 is connected to the plate 15 which is secured in any preferred manner such as by a bolt 18 to the door frame.

The tie strap 19 is suitably secured to the door such as by pins or bolts 20, and serves as an auxiliary tie for the various door partitions 21 to which it is secured. The keeper 22 is adapted to receive the nose 23 of the latch 11 and carries a locking pin, which has a side portion 24 rotatable in the keeper 22. The said side portion 24 has a segmental recess 25 the floor of which alines with one side of the hole in the keeper for the nose 23 of the latch when the pin is turned into one position, whereby, to permit the nose 23 to enter the keeper. The nose 23 has a recess 26 which alines with the recess 25 when the said nose first enters the keeper 22. When the portion 24 is turned so as to move its recess 25 away from the recess 26 of the nose 23, the portion of the side 24 opposite to the recess 25 will move into the recess 26 of the nose, whereby, the latter will be

locked against outward movement from the keeper. The other side portion 27 of the locking pin depends substantially vertically downward when the latch is engaged by the portion 24 as previously described. When so positioned the side portion 27 is between the keeper and a lug 28 carried by the tie strap 19, the lug serving as an abutment to prevent longitudinal movement of the pin when the latch is disengaged from the keeper and has its side portion 27 extending downwardly. The lug 28 has a slot (not shown) which alines with a slot 30 in the side portion 27, and these slots receiving the wire 31 of a seal 32. The lug 28 also has a recess above the slot 29 which forms a passage through which the pin is introduced into the keeper. 29' indicates a bolt or abutment extending through the car door and screwed into a nut 28' which prevents removal of the pin. 32' indicates an overhang portion on the keeper which limits the turning movement of the side 27 of the pin.

From the foregoing it will be evident that when the several parts of the device are arranged as shown in Fig. 6 the latch will be held from flying upwardly and outwardly and exerting any strain on the sealing device. From these positions, the parts, after removing the seal, may be unlocked by turning the locking pin in the proper direction when the cars bump together. It will be further observed that the parts are interchangeable, that is to say, the parts shown in Fig. 1 as applied to a door, which closes by a sliding movement toward the left in Fig. 1, may be also applied to a door sliding in the opposite direction to closed position.

Although I have shown and described one embodiment of my invention it is to be understood that I am not to be limited to the specific structure herein shown nor to the particular arrangement of the parts, since it will be seen that various changes may be made, within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim as new is:

1. In a car door lock, in combination with a door and door frame, of a recessed seal holder carried by the door, a keeper arranged adjacent to the seal holder, a latch pivoted to the door frame and adapted to interlock with the keeper, means associated

with the keeper for locking the latch therein, and having a recess to aline with the recess of the seal holder.

2. In a car door lock, a pivoted latch having a nose, a keeper for receiving the nose, a rotary bolt carried by the keeper, and means carried by the nose and the bolt adapted to interlock when the nose is in the keeper and the bolt turned in one direction.

3. In a car door lock, a latch, a keeper for receiving the latch, a rotary bolt for locking the latch in the keeper, a seal holder positioned at one end of the bolt and forming a stop for the bolt when the same is turned into one position and moved longitudinally and having a recess to admit of the passage of the bolt therethrough when the same is turned into another position and moved longitudinally.

4. In a car door lock, a latch, a keeper for receiving the latch, a rotary bolt for locking the latch in the keeper, a seal holder positioned at one end of the bolt and forming a stop for the bolt when the same is turned into one position and moved longitudinally and having a recess to admit of the passage of the bolt therethrough when the same is turned into another position and moved longitudinally, and an abutment located in the recess and removably secured to the seal holder for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES L. ALDEN.

Witnesses:

SARAH M. WILSON,
HARRY McNARY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."