(No Model.)

T. C. KENNEDY.

CAR DOOR FASTENER.

No. 546,541. Patented Sept. 17, 1895.

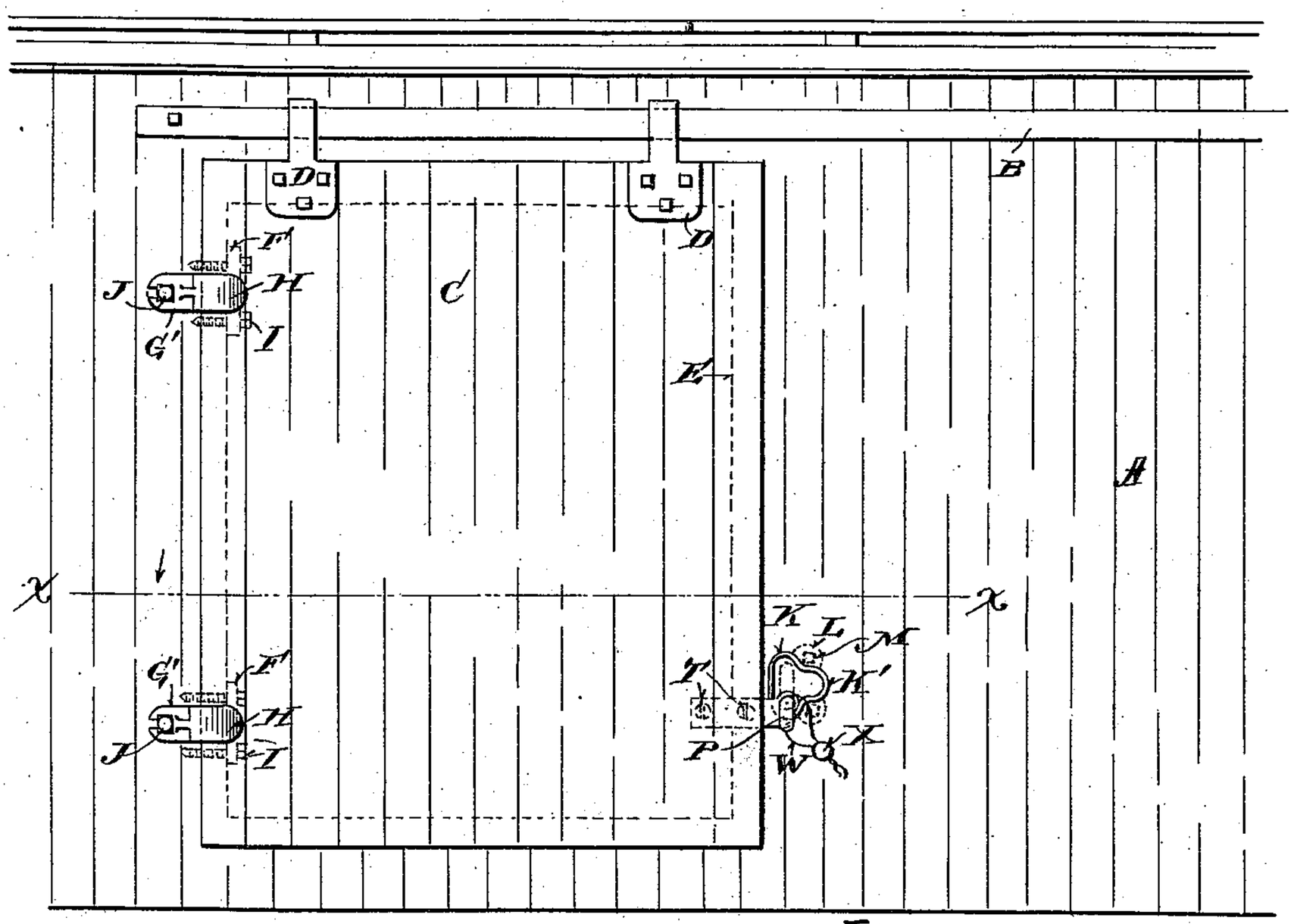

Fig. 1.

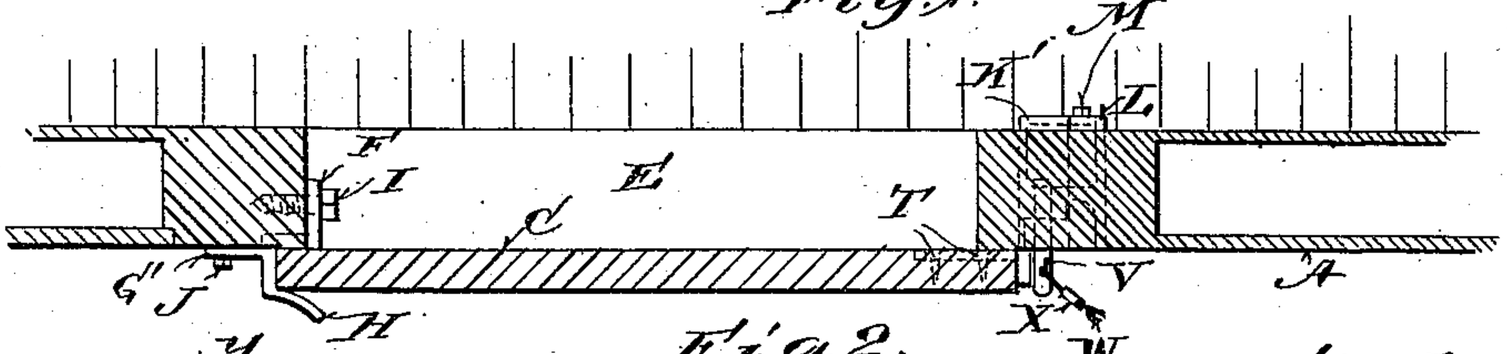

Fig. 2.

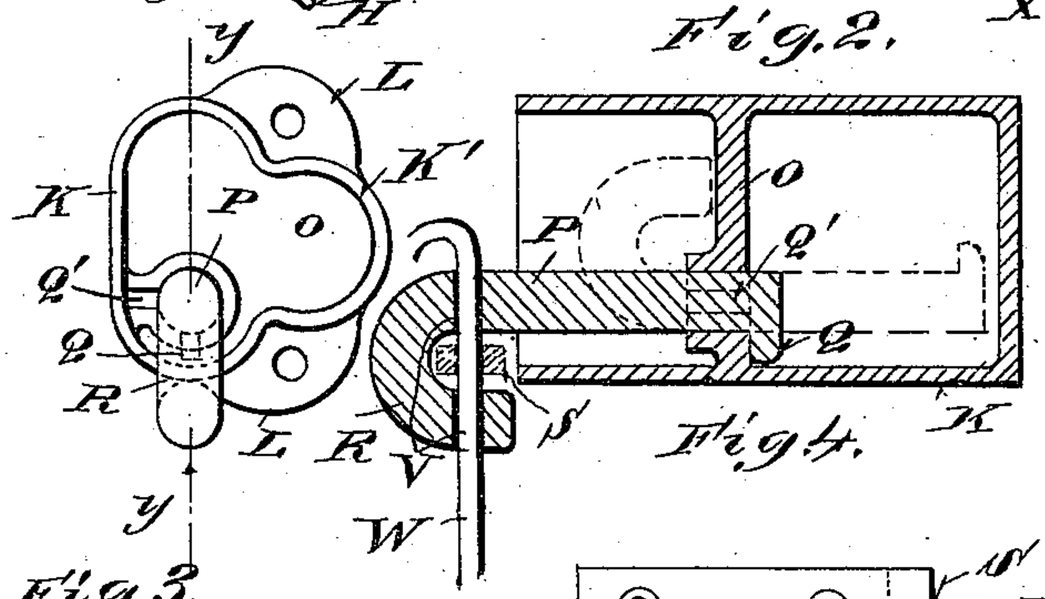

Fig. 3.

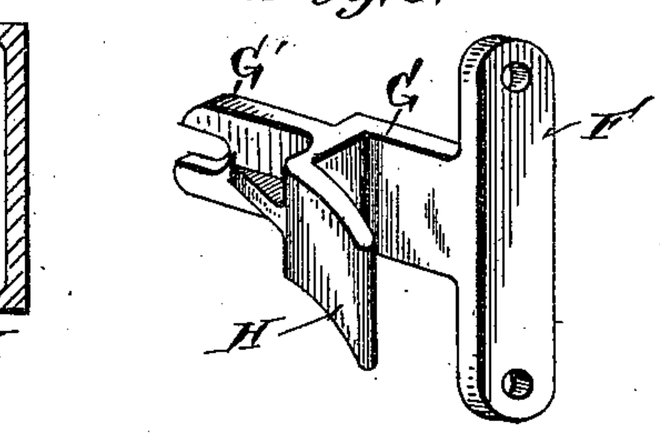

Fig. 4.

Fig. 5.

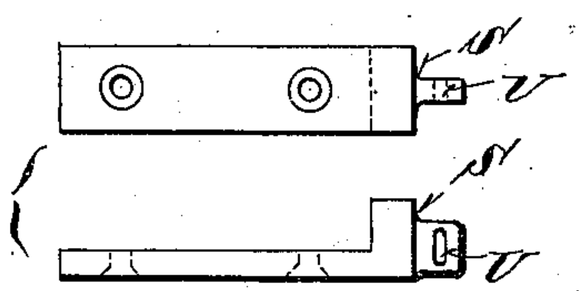

Fig. 6

Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS C. KENNEDY, OF DAYTON, OHIO.

CAR-DOOR FASTENER.

SPECIFICATION forming part of Letters Patent No. 546,541, dated September 17, 1895.

Application filed April 20, 1895. Serial No. 546,449. (No model.)

To all whom it may concern:

Be it known that I, THOMAS C. KENNEDY, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Car-Door Fasteners, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in car-door locks.

The leading object of my invention is to provide a car-door lock in which all of the parts which constitute the fastenings shall be located inside of the car or behind the door, and thereby be wholly inaccessible from the outer side, to prevent removal of the parts and the opening of the door without disturbing or breaking the usual seal.

Another object of my invention is to provide a lock proper which, when in unlocked position, will leave the exterior surface of the car perfectly free and unobstructed.

With these objects in view my invention consists of the organization, combination, and devices hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, on which like reference-letters indicate corresponding parts, Figure 1 is a side elevation of a portion of a freight-car and its door with my improvements applied thereto; Fig. 2, a horizontal sectional view on the line *x x* of Fig. 1; Fig. 3, a detail front view of the lock proper; Fig. 4, a sectional view of the lock proper on the line *y y* of Fig. 3; Fig. 5, a detail perspective view of one of the door-keepers, and Fig. 6 detailed views of the lock-stud.

The letter A designates a portion of a railway-car, with the usual door-track B and usual door C hung upon the track by hangers D.

At one side of the doorway E, I place my lock proper and at the other side I secure certain keepers for the door. These keepers consist of a plate F, a shank G, and a prong or hook H. The plate F is perforated to receive fastening-bolts I, and the keeper is arranged as shown in Figs. 1 and 2, so that the plate F and bolt I stand within the doorway and behind and inside of the door C. A part of the link-shank G is fitted into a recess in the car timber or side, while the end G′ of the shank is bolted or fastened by a screw J. This latter fastening, however, is not of special importance, and the bolts I make the keeper perfectly secure. The hook or prong H forms, in connection with the shank G, a socket, into which the edge of the door fits when closed. The door cannot be drawn outward from the car when behind this hook or projection. It is there firmly held.

Referring now to the lock proper, it consists of a shell or case K, with flanges L, which are bolted or screwed to the car-frame. The case or shell K is fitted to a socket in the side of the car and the flanges L to the inner face of the car, and the bolts or screws M are wholly inside of the car and inaccessible and out of view from the outside. The case or shell K is enlarged at one side, as shown at K′, so as to readily facilitate withdrawing the tumbler by the fingers when the latter is pushed back in the case. The case has a cross-partition O, which is strong and stout, and is bored out to receive the shank of the tumbler P, whose inner end has a lug Q to prevent it from being withdrawn. The outer end of the tumbler is formed into a hook R, adapted to fit over and embrace the stud S, which is fastened to the door. This stud is let into the inner face of the door, so as to be flush therewith, as seen in Fig. 2, and is held by screws or bolts T. The end of the stud is slotted or perforated, as seen at U, as is also the tumbler, as seen at V. A seal-wire W is passed through these perforations and united at its ends by the usual seal, as seen at X in Fig. 1. When the lock is unlocked, the tumbler is turned, so that the hook will pass from the stud S and stand in line with the upper part of the case, so that it may be pushed back into the case. In withdrawing the hook to again lock the door, the enlargement K′ affords access for the fingers, in order to more readily reach the hook and take hold of it to draw out the tumbler. Thus it will be observed that there are no outward projections on the surface of the door and no outward projections on the surface of the car-body along that part which is covered by the door when the latter is in open position. The lock-case with its tumbler are within or flush with the side of the car. Thus, also, all of the fastening

devices relied upon to hold the parts are inside and inaccessible. At Q′ the partition O is slotted to allow the lug Q to pass through in inserting or withdrawing the tumbler P; but this slot Q′ is next to the door, so that the lock will strike against the door before the tumbler can be turned far enough to bring the lug in line with the slot. Thus the tumbler cannot be withdrawn.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car door lock, the combination with a car and its sliding door, of a keeper secured by interior devices near one side of the door opening and adapted to receive the edge of the door and hold it from outward movement, a stud on the door near the other edge, and a tumbler mounted within the wall of the car and adapted to extend out and engage with said stud and to be forced back into the side, the fastening devices for the tumbler being interiorly placed.

2. In a car door lock, the combination with a car and its door, of a keeper consisting of a shank fastened back of the door and a hook embracing the outer edge and side of the door, and a case let into the car side and fastened interiorly, and a tumbler slidable in and out of the case, and a stud on the door adapted to be engaged by the tumbler.

3. In a car door lock, the combination with the car, and its door having a stud, of a case fitted into the side of the car and fastened by devices within the car, a partition or cross-piece in the case, and a tumbler slidingly fitted to said piece, with a stop-device on one end and a hook on the other, the hook being adapted to embrace the stud on the door, the hook and stud having openings for receiving a sealing wire.

4. In a car door lock, the case having a flange adapted to be interiorly secured to the car frame, a cross partition or piece, and a tumbler slidingly mounted therein and adapted to extend beyond the case in one position and within the case in the other position, with a hook on one end and a stop projection on the other.

5. In a car door lock, a lock proper consisting of a case, a partition across it, with a tumbler-hole and a slot, a tumbler fitted to slide in said hole, and having a stop-projection adapted to pass through the slot in inserting the tumbler, but to prevent the withdrawal of the tumbler when the tumbler is revolved to bring said stop-projection out of line with said slot.

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

THOMAS C. KENNEDY.

Witnesses:

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W. M. MCNAIR.