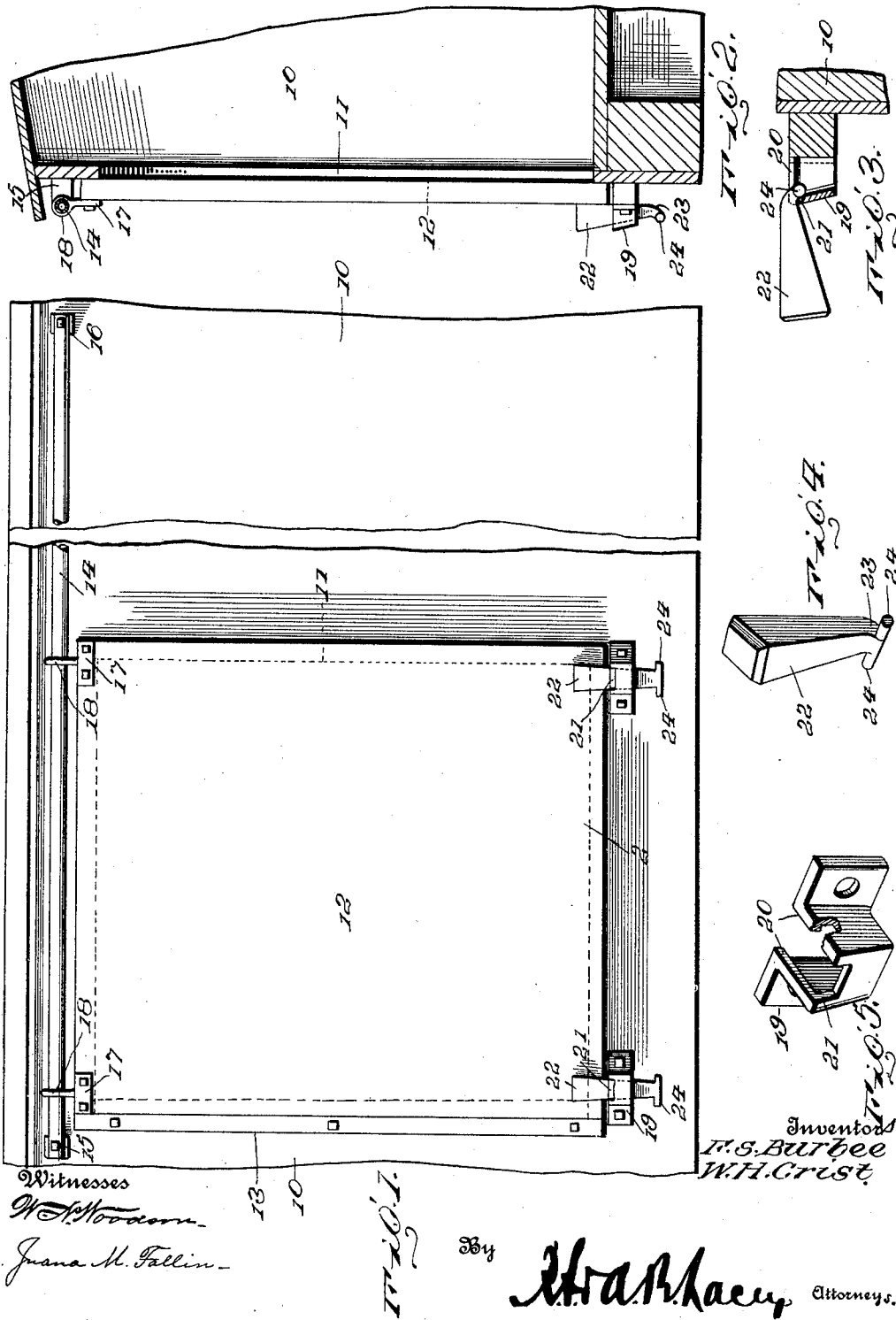


F. S. BURBEE & W. H. CRIST.
 CAR DOOR ATTACHMENT.
 APPLICATION FILED SEPT. 30, 1910.

997,039.

Patented July 4, 1911.



UNITED STATES PATENT OFFICE.

FRANK S. BURBEE, OF ROCK GLEN, AND WILLIAM H. CRIST, OF SILVER SPRINGS, NEW YORK.

CAR-DOOR ATTACHMENT.

997,039.

Specification of Letters Patent.

Patented July 4, 1911.

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To all whom it may concern:

Be it known that we, FRANK S. BURBEE and WILLIAM H. CRIST, citizens of the United States, residing at Rock Glen and Silver Springs, respectively, in the county of Wyoming and State of New York, have invented certain new and useful Improvements in Car-Door Attachments, of which the following is a specification.

10 This invention relates to car doors and to doors employed upon similar structures, and has for one of its objects to improve the construction and increase the efficiency and utility of devices of this character.

15 Another object of the invention is to provide a holding and supporting means for a car door in which means are provided for both slidably and swingingly supporting the door, and locking the door when in closed position.

20 With these and other objects in view that will more fully appear as the description proceeds, the invention consists in certain constructions and arrangements of the parts that we shall hereinafter fully describe and then point out the novel features of in the appended claims.

25 For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawings, in which:

30 Figure 1 is a side elevation of a portion of a car including one of the door-way openings and one of the doors with the improvements applied; Fig. 2 is a section on the line 2—2 of Fig. 1; Fig. 3 is a sectional detail showing one of the locking members in its inoperative position; Fig. 4 is a perspective view enlarged of one of the locking keys detached; and, Fig. 5 is a perspective view of one of the keepers detached.

35 Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

40 The improved device is designed more particularly for use in connection with car doors, but may be employed under some circumstances upon barn doors, warehouse doors and like structures, but for the purpose of illustration is shown applied to a conventional car and its door, and in the drawings a portion of a car is represented

conventionally at 10, one of the doorway openings at 11 and a door at 12. The door is of the sliding form, and the car is provided with a stop 13 at one side of the door-way opening of usual form.

60 Located above the door-way opening is a horizontal track 14, preferably tubular and connected at the ends only, as represented at 15—16. Connected to the door 12 at two or more points are plates 17 each provided with an annular extension 18 which bears around the track 14, and thus suspends the door from the track both slidably and swingingly as will be obvious. By this arrangement the door may be readily moved laterally to uncover the door-way opening and likewise swing outwardly from the car at the lower end. By this means the door is readily movable both in opening and closing, and effectually prevents the door becoming clogged in its opening or closing operations.

75 Connected to the car at two or more points below the door-way opening are keepers 19, each keeper being formed with inwardly directed ribs 20 at its upper side and with a recess 21 in its outer side. Movably disposed within each keeper 19 is a wedge key 22, each wedge key being formed with a curved offset 23 at its smaller end and with lugs 24 extending laterally from the offset portion. The wedge key fits between the confronting edges of the ribs 20 while the lugs 24 are slightly less than the distance between the ends of the keeper. By this arrangement when the keeper is elevated the lugs 24 will pass upwardly into the keeper and engage beneath the stop ribs 20. And then by means of the curved portion 23 of the wedge key the latter can be turned outwardly substantially at right angles to the body of the car or into the position shown in Fig. 3. When thus arranged no portion of the wedge key projects above the lower line of the door 12 so that when the wedge keys are in their withdrawn position, as shown in Fig. 3, the door may be swung outwardly above them. By this arrangement the keepers 22 when in open or inoperative position as shown in Fig. 3 will lie wholly below the lower line of the door 12 and will not interfere with the outward swinging of the same. The upper thicker portions of the wedge keys project above the lower line of the door and bear against the same, and

thus form an effectual holding device which will retain the door rigidly in position and automatically adapt itself to any variations in the thickness of the door, and thus prevent all looseness and rattling no matter how much the doors may vary in thickness.

The improved device is simple in construction, may be inexpensively manufactured and applied to doors already in use and without making any change whatever in the door, and may be applied irrespective of other fastening devices which may be employed upon the door.

The keeper and its wedge key are constructed wholly of metal, preferably of steel, or may be of malleable iron, or of other metal if preferred.

Having thus described the invention, what is claimed is:

20 1. A car door holder comprising a keeper adapted to be connected to a car and provided with inwardly directed stop ribs, a wedge key movable through said keeper and

adapted to engage a car door when in one position, and stop lugs carried by said key and engaging beneath said stop ribs when the key is in another position. 25

2. A car door holder comprising a keeper adapted to be connected to a car and provided with inwardly directed stop ribs and with a recess in its upper rim, a wedge key movable through said keeper and offset at the smaller end and with lateral lugs extending from the offset portion, said key adapted to engage a car door when in one position and to engage by its offset portion in the keeper recess and with its lugs beneath said stop ribs when the key is in another position. 30 35

In testimony whereof, we affix our signatures in presence of two witnesses. 40

FRANK S. BURBEE. [L. S.]

WILLIAM H. CRIST. [L. S.]

Witnesses:

CHAS. NATZKE,

FRANK BAKER.

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