

UNITED STATES PATENT OFFICE.

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CAR-DOOR FASTENER.

SPECIFICATION forming part of Letters Patent No. 682,530, dated September 10, 1901.

Application filed February 2, 1901. Serial No. 45,777. (No model.)

To all whom it may concern:

Be it known that we, JOHN L. CLARK and FRANK G. HAMILTON, citizens of the United States, residing at Stevens Point, in the county of Portage and State of Wisconsin, have invented certain new and useful Improvements in Car-Door Fasteners; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in car-door fasteners.

The invention consists in certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

One object of our invention is the production of a simple and effective means for securing a door in a closed condition and at the same time use the same means, with the addition of a seal or padlock, for permanently locking the door.

Another object of our invention is to provide a fastening for a car-door which will act as a gravity-lock and which will be free from springs and other complicated mechanism which will render the construction expensive and objectionable to railroad officials and which will not be obstructed in its successful operation by dirt or snow and ice getting in between the parts of the same.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a car, showing our improved fastening means in position upon the same and holding the door in a closed condition. Fig. 2 is a perspective view of a portion of a car with our improved fastening means applied to the same and showing the hasp as it would appear when about to be entered into the slot in the keeper, and Fig. 3 is a horizontal section through the door and the door post or frame of the car with our improved fastening means applied thereto and showing the door in a locked condition.

1 in the drawings represents a car-door of ordinary construction, which may be mounted on the car 2 in any suitable or approved manner—as, for instance, by being suspended from above by means of hangers 3, which are adapted to travel on a rod or track 4, extend-

ing along the outside of the car. The door 1 may be guided in its sliding movement at its bottom or lower end in any suitable manner, as by guides 5. Upon the door 1 is pivoted or hinged a hasp 6 by means of a plate 7, provided with a hook or eye 8. The hasp 6 is provided at its outer end with an engaging lug 9 and an upwardly-extending apertured projection 10. On the vertical door post or framing 11 is provided a keeper 12, which latter is provided with a slot 13, which latter is preferably slightly curved, as shown, and is enlarged at its upper end, as at 14, to facilitate the insertion and removal of the engaging lug 9. The bottom of the slot 13 is made of such a width as to be smaller than the engaging lug, so that in order to remove the said lug from the slot 13 it must be moved upwardly toward the enlarged portion 14. The post 11, directly beneath or back of the keeper-plate 12, is cut away, as at 15, so that the lip or projection of the engaging lug 9 will be adapted to engage the under or rear surface of the keeper-plate 12. This cut-away portion also serves to keep the slot 13 free from dirt and becoming clogged, the keeper being practically self-cleaning. To facilitate this self-cleaning action, the bottom of the cut-away portion 15 is formed on a slant or bevel, as at 15^a, and the cut-away portion left open at the side or edge of the post 11, against which the door 1 abuts when in a closed condition.

The keeper-plate 12 is provided at the lower end of the slot 13 with an extension 16, provided with an aperture, which latter coincides or registers with the aperture of the head or extension 10 on the hasp 6. It will be observed that the lower bottom wall of the slot 13 acts as a stop and prevents the further descent of the hasp 6, so that when the hasp is in its lowest position in the slot 13 it will be horizontal, as shown in Fig. 1, and also that the eye of the head or extension 10 on said hasp will register with or be in alinement with the eye of the projection or extension 16 on the keeper-plate 12. When the hasp is in this condition, the door will be fastened against a sliding movement, and if it is desired to further secure the door it can be readily accomplished by securing a padlock or wiring a seal through the apertures in the extensions or projections 10 and 16.

When it is desired to slide the door to an open position, it is simply necessary to move the engaging head of the hasp 6 upwardly in the incline slot 13 of the keeper-plate until
5 the said head rests in the largest portion of the slot, whereupon it can be readily disengaged from said slot, and by holding the hasp in the hand the door can be readily slid back and in like manner closed.

10 We have found from experience that the necessity for a lock of this character is very great, as much complaint is made against the ordinary means of fastening now in common use, and we believe the fastening means which
15 we have just described possesses all the features essential to a device of this character for the purpose for which it is intended.

While we have shown and described our invention in connection with a car-door and
20 while it is particularly adapted for such use, we do not wish to limit our invention to such doors, as it might be used to advantage in other doors, such as barn-doors, grain-doors, and the like.

25 Having now described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A car-door fastener comprising a flat metallic hasp or bar secured to the car-door and
30 adapted to lie flush with the outer surface

thereof and hold the same flush with the locking-plate, a locking-plate secured on the jamb of the door and arranged flush with the surface thereof, and provided with a segmental curved slot formed with an enlarged portion
35 at its upper end, the woodwork of the jamb beneath the plate being cut away and left open to form a discharge for the dirt which would tend to collect in the slot, a hook portion formed on the free end of the hasp or
40 bar, and extending inward and backward upon the same for engaging the segmental slot, an apertured lug on the end of said bar adapted to be brought into coincidence with
45 a corresponding apertured lug formed on the edge of the locking-plate at the lower edge of the slot formed therein, the lower edge of said slot limiting the downward movement of the hasp, and causing the said apertures to
50 register when the hasp is in its lowest position, said apertures being designed to receive a seal or other locking means.

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

JOHN L. CLARK.

FRANK G. HAMILTON.

Witnesses:

FRANK B. LAMOREUX,

B. B. PARK.