No. 649,795. Patented May 15, 1900.

F. A. BAIER.

ATTACHMENT FOR RAILWAY CARS.

(Application filed Oct. 7, 1899.)

(No Model.)

Fig. I.

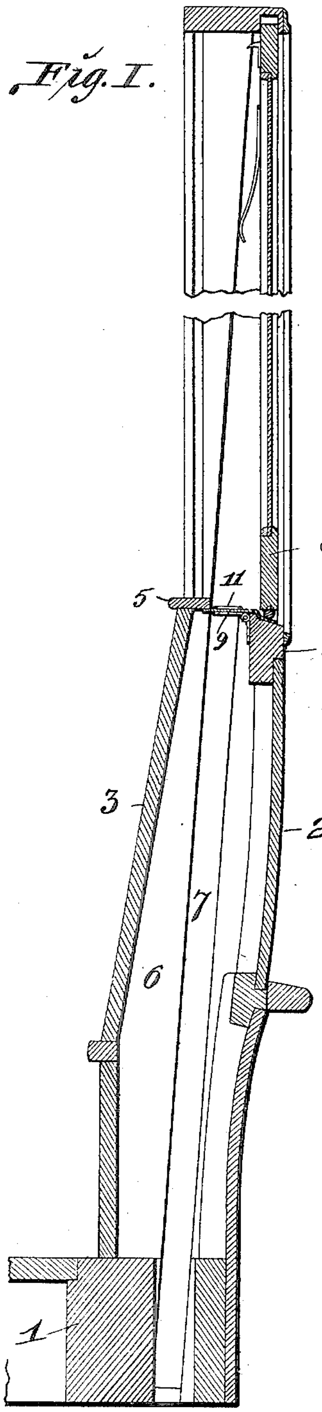


Fig. II.

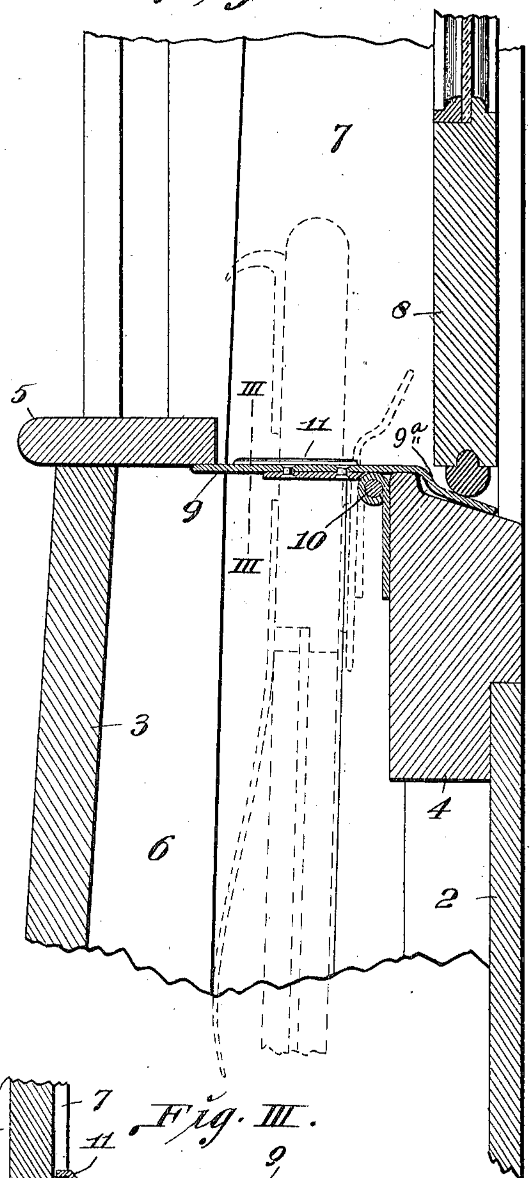
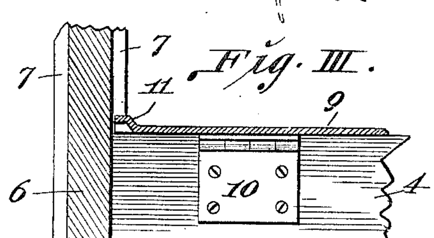


Fig. III.



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UNITED STATES PATENT OFFICE.

FREDERICK A. BAIER, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE BROWNELL CAR COMPANY, OF SAME PLACE.

ATTACHMENT FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 649,795, dated May 15, 1900.

Application filed October 7, 1899. Serial No. 732,843. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK A. BAIER, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Attachments for Railway-Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to provide simple, inexpensive, and automatically-operating means for closing the space in which the sash fits when the window is open while the sash is in a raised position to close the window. Ordinarily this space is open and often the occupants of the cars accidentally drop small articles through or pass waste paper and other refuse into said space. The recovery and removal of these articles and refuse is difficult and require much time and labor, and it is the purpose of my invention to obviate these difficulties by forming and hinging a plate in such a manner as that it will automatically close the space referred to when the car-window is closed and which will automatically fold downwardly into the window-space when the window is lowered or opened.

To the above purpose my invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a vertical sectional view taken through the center of a car-window and the side of the car below the window. Fig. II is an enlarged detail sectional view of the lower portion of a window-sash, the inner window-ledge, and the space-closing plate. Fig. III is a detail sectional view taken on the line III III, Fig. II.

Referring by numerals to the accompanying drawings, 1 indicates one of the floor-timbers of the car-frame, 2 the outer side wall of the car-body, and 3 the inside wall of said body.

4 designates the longitudinally-extending rail on top of the wall 2, which rail serves as the outer window-sill, the inner sill or ledge 5 being positioned on top of the inner wall 3. The top side of the rail 4 is beveled outwardly, and the lower side of the inner sill 5 is in horizontal alinement with the top edge of said rail 4. Extending vertically upward from the timber 1 between the walls 2 and 3 are the timbers 6, which extend to the top portion of the car and in which are formed the grooves or ways 7, in which the window-sash 8 operates.

9 indicates the space-closure, which consists of a plate of suitable material sufficient in length to extend from one timber 6 to another and of such width as that when its inner edge rests beneath the outer edge of the sill 5 its outer edge extends over the beveled top of the rail 4. The outer edge of this plate or closure is bent slightly at 9^a in order that when the plate is in a horizontal position its outer edge will bear directly on the beveled top surface of the rail 4. The plate or closure 9 is held in operative position by hinges 10, one of the wings of each pair of hinges being fixed to the inner face of the rail 4, the opposite wing being secured in any suitable manner to the under side of the plate 9. Extending upwardly from the body at each end of the plate 9 is a transversely-arranged rib 11, the same acting as bearings for the window-sash when the latter is raised and lowered past the closure, thus preventing said sash from frictionally engaging the entire top surface of the plate.

When the window is closed, the lower edge of the sash bears directly on the outer bent edge of the plate 9, causing said plate to assume a horizontal position, its inner edge being engaged beneath the under side of the sill or ledge 5, thus completely closing the space between the sill 5, the rail 4, and vertical timbers 6. When the window is lowered, the lower portion of the sash is pulled forward, then the entire sash moved downwardly in its grooves or guideways, and as said movement takes place the plate or closure swings upon its hinges into an approximately vertical position, (see dotted lines, Fig. II,) and as the sash moves downwardly the outer surface of its side edges bear upon the ribs 11, thus preventing abrasion to the finish of the main portions of the sash 8 and top of the plate 9. Thus it will be seen that when the window is closed the plate 9 completely closes the space between the rail 4, sill 5, and vertical

timbers 6, and it will be impossible to drop or pass anything through said space.

In some instances I find it preferable to form the bearing-ribs of separate pieces of material and secure them by rivets or other suitable means to the ends of the plate 9. The bent portion 9^a of the plate 9 is of such a width as that it cannot swing upwardly from beneath the lower end of the sash when said sash is lifted to its upper limit of movement.

I claim as my invention—

1. In a device of the class described, a hinged plate for closing the space between the inner and outer sills of a car-window, and which is provided with an extension to receive the window-sash when the sash is raised to its closed position, substantially as described.

2. In a device of the class described, a hinged plate for normally closing the space between the inner and outer sills of a car-window projecting beyond its hinge and beneath the window when the latter is closed and bearing-ribs formed on said plate, substantially as described.

3. In a device of the class described, a plate hinged to the outer sill of a car-window for closing the space between said sill and the inner sill and provided with an extension beyond its hinge overlapping the outer sill, and beneath the window when the latter is closed, substantially as described.

4. In a device of the class described, a plate hinged to the outer sill of a car-window for closing the space between said sill and the inner sill, closing upwardly beneath said inner sill, and projecting outwardly beyond its hinge beneath the window when closed, and bearing-ribs formed integral with said plate adjacent the ends thereof, substantially as described.

5. In a device of the class described, a plate hinged to the outer car-window sill, a portion of which plate projects over said sill, bearing-ribs integral with the ends of said plate, the free end of which plate when in a horizontal position engages against the inner window-sill in the manner set forth and for the purpose stated.

6. A closure for the window-pockets of railway-cars, comprising a plate provided with a hinge adapted to be attached to the outer window-sill, and upon which hinge the plate may swing across the opening left by the window when raised, and provided with an extension beyond its hinge, adapted to rest over the outer sill and formed with the bend 9^a near the point where the window rests; substantially as and for the purposes set forth.

FREDERICK A. BAIER.

In presence of—
E. S. KNIGHT,
N. V. ALEXANDER.