(No Model.)

S. S. BRADSHAW.

RAILWAY CAR WINDOW.

No. 588,543. Patented Aug. 17, 1897.

Fig. 1.

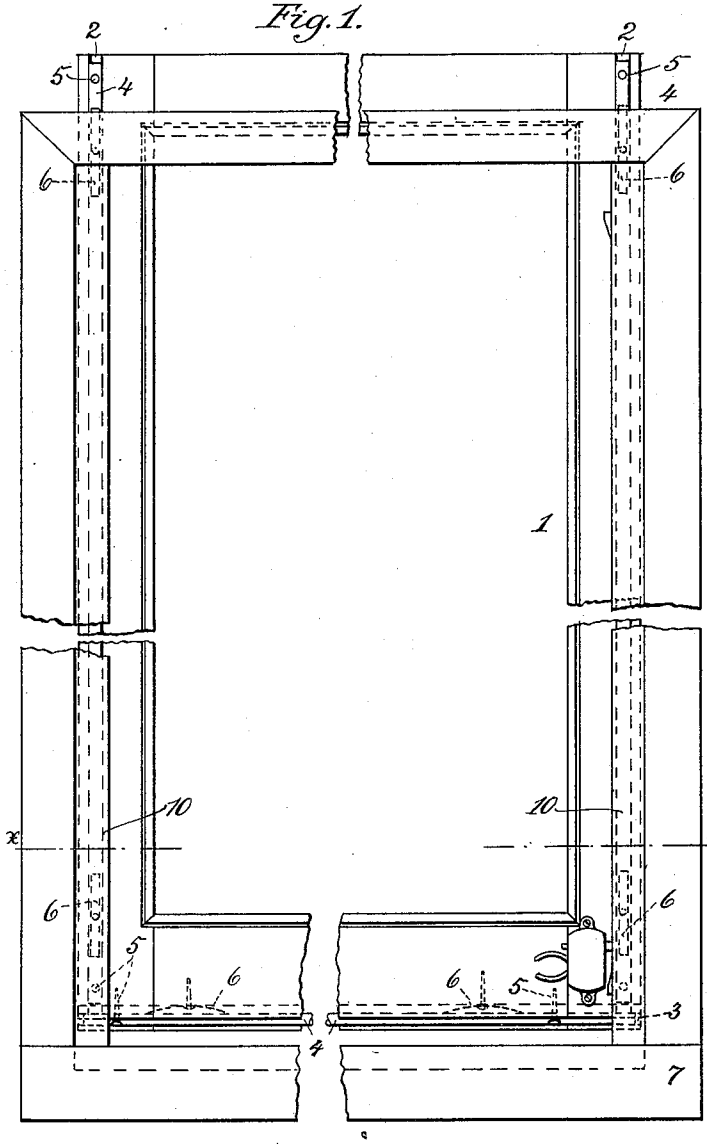
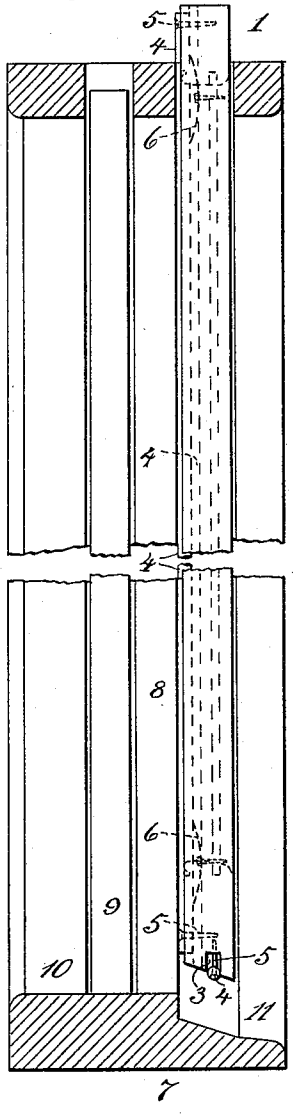


Fig. 2.



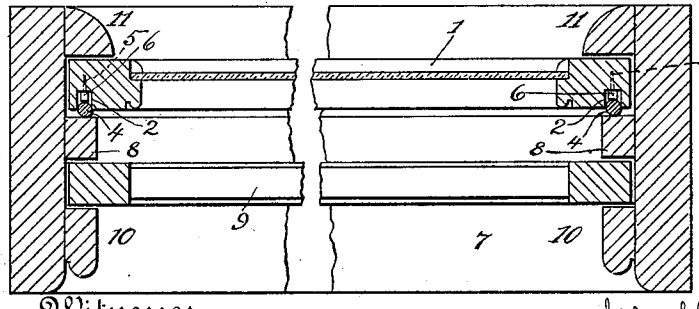


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

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RAILWAY-CAR WINDOW.

SPECIFICATION forming part of Letters Patent No. 588,543, dated August 17, 1897.

Application filed January 16, 1897. Serial No. 619,446. (No model.)

To all whom it may concern:

Be it known that I, SILAS S. BRADSHAW, a citizen of the United States, residing in Brooklyn, Kings county, and State of New York, have invented a new and useful Improvement in Railway-Car Windows, of which the following is a specification.

My invention relates especially to the construction and arrangement of car-window sashes, and has for its object the provision of means and mechanism which will prevent rattling or jarring of the sash and at the same time exclude dust, dirt, and drafts and permitting the sash to be raised and lowered with perfect ease, expansion and contraction of the wood of the sash and frame having no effect whatever upon my invention.

To attain the desired end, my invention consists, essentially, in certain novel and useful combinations or arrangements of parts and peculiarities or construction and operation, all of which will be hereinafter first fully described, and then pointed out in the claims.

In the accompanying drawings, forming a part hereof, Figure 1 is a front elevation of my improved sash, illustrating the same as applied to a car-window. Fig. 2 is a side elevation with a portion of the window-frame removed. Fig. 3 is a horizontal sectional view at line $x\,x$ of Fig. 1.

Like numerals of reference, wherever they occur, indicate corresponding parts in all the figures.

1 is a window-sash of the usual construction.

2 are grooves formed in each stile.

3 is a groove formed in the under side of the bottom rail of the sash.

4 are rods loosely held in place in the grooves 2 by pins, screws, or the equivalent 5, said rods 4 being normally forced outward by means of springs 6. The rod 4 is movably held in place in the groove 3 in like manner.

7 is the window-sill; 8, the parting or blind stop; 9, the blind; 10, the inner stop, and 11 the outer stop.

When constructed and arranged in accordance with the foregoing description, my improved car-window sash will be found very efficacious, while extremely simple in construction and easy to apply. The spring-actuated rods at the sides will prevent all rattling, excluding dust, dirt, and drafts, and as it is not necessary to fit the sash tightly in the frame it may be raised and lowered with slight effort, and at the same time the expansion and contraction of the sash and frame caused by changes in the atmosphere will have no effect whatever upon my device. The rod in the lower rail of the sash will bear snugly against the sill when the sash is closed down, acting in substantially the same manner as the rods in the stiles.

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

1. The combination with a window-sash having grooves in the faces of the stiles and in the lower edge of the bottom rail, of spring-actuated rods or bars movably located in said grooves, substantially as shown and described.

2. In a car-window, a sash having grooves in the faces of the stiles, in combination with spring-actuated rods or bars movably mounted in said grooves, substantially as shown and described.

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Witnesses:

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