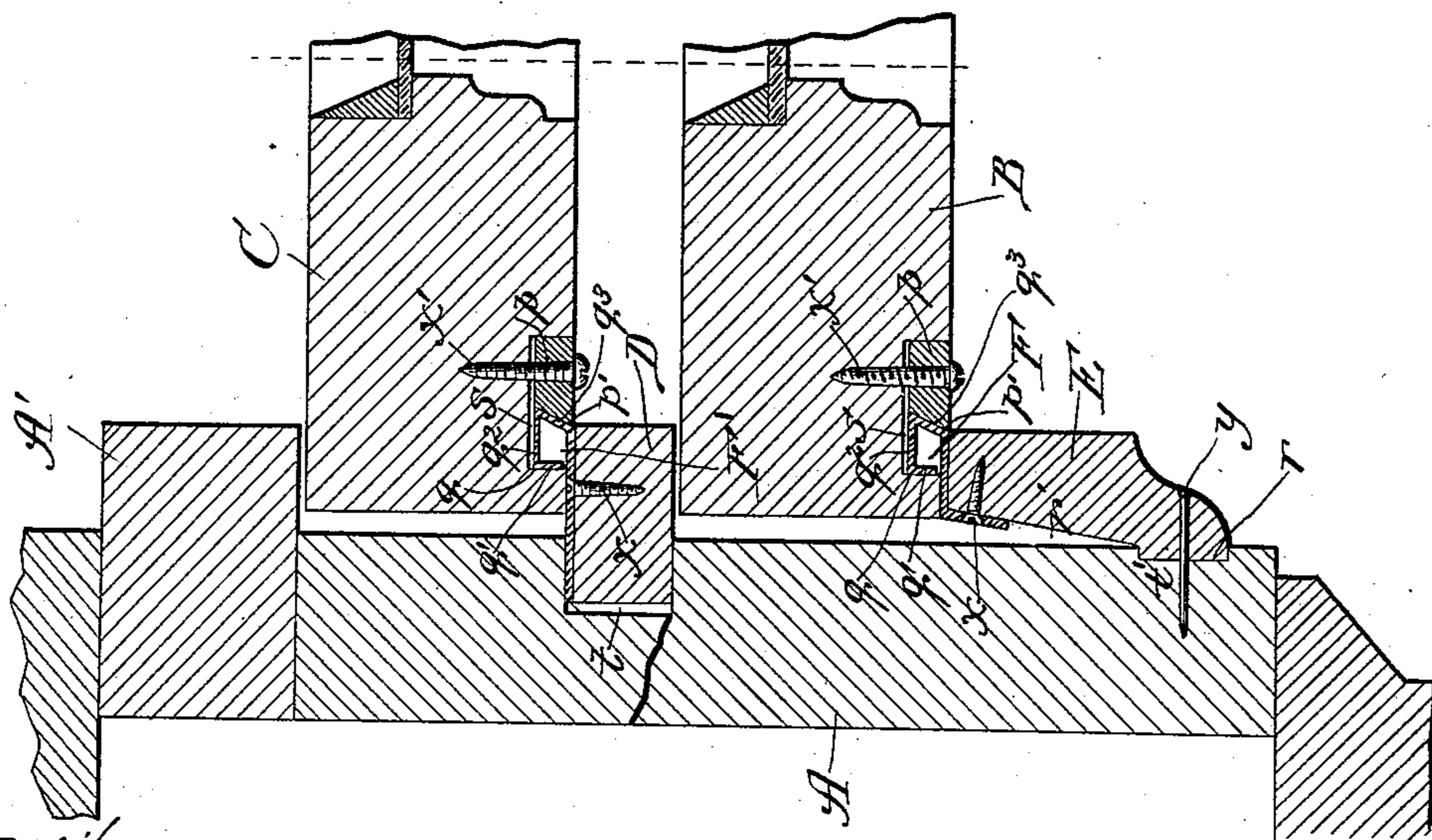


(No Model.)

J. ORT.
WINDOW.

No. 529,134.

Patented Nov. 13, 1894.



Witnesses:
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JACOB ORT, OF WAHOO, NEBRASKA.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 529,134, dated November 13, 1894.

Application filed June 9, 1894. Serial No. 514,040. (No model.)

To all whom it may concern:

Be it known that I, JACOB ORT, a citizen of the United States, residing at Wahoo, in the county of Saunders and State of Nebraska, have invented a new and useful Improvement in Windows, of which the following is a specification.

My invention relates to improvements in window sashes and their casings, of the class in which the window is opened and closed by raising and lowering the sash in guides on the casing.

My object is to provide improvements in the construction of windows and casings of the class described, which shall cause the sashes to move with comparatively little friction in raising and lowering and at the same time prevent their rattling; and cause them to be dust and draft excluding.

The drawings show a broken section, on two horizontal planes at different elevations, of the upper and lower sashes and casing at one side of the window, and showing my improvements in their preferred form.

A is the window casing; B, the lower sash, and C the upper sash. Forming part of the casing is the blind-stop or outer guide-rail A'.

D is a parting-strip or stop, forming with the outer rail A' the guide for the upper sash, and which is set into a groove *t* in the jamb of the casing, in the usual manner; and E is the inner window-stop.

In the preferred construction the side-rails of each sash are provided on their inner faces near the edges with, preferably, rectangular grooves *s*. The stop E is formed with a tongue portion *r* on its inner forward side, and an inner beveled surface *r'*. The stop E fits at its tongue portion *r* in a shallow groove *t'* in the casing, being fastened in place preferably with nails *y*, and it flares at its surface *r'* in the backward direction, away from the adjacent surface of the casing.

F is a metal guide or weather strip, angular in cross-section to extend across the rear edge of the stop E and overlap the surface *r'* at which it is attached by means, preferably, of screws *x*. At its free edge the strip is shaped to form a longitudinal tongue or box-portion *q* presenting a straight side-surface *q'*, a straight rear-surface *q''*, and an inclined

side-surface *q'''*. The tongue *q* extends into the groove *s* of the sash-rail at the outer side of the latter; and fitting in the groove *s* is a retaining strip *p* of wood, soft vulcanized rubber, or the like, having an inclined edge *p'* which fits the inclined surface *q'''*. The strip *p* may be fastened in place with screws *x'*, as shown.

It is to be understood that the stop E and sash rail at the opposite side of the window are provided with a guide or weather-strip F and retaining-strip *p*, the same as at the side shown. The inwardly yielding tendency of the stops E, and of the strips *p*, if of rubber or the like, will prevent binding of the lower sash, at the tongues *q*; and the degree of pressure of the retaining strips *p* against the surfaces *q'''* of the tongues *q*, may be increased or diminished as desired, by tightening or loosening the screws *x'*. The upper sash C is also provided on its inner face near the edges of its side-rails with grooves *s*; and on the parting-stops D are metal guide pieces F' having tongues *q* formed with the surfaces *q'* and inclined surface *q'''* the same as the guide pieces F. The only difference between the guide-pieces F and F' is that while the former are bent to extend around the under inner corners of the window-stops, the latter are flat and fit the outer surfaces of the parting-stops, to which they are secured by means of screws *x*. In the grooves *s* of the upper sash are placed retaining strips *p*, the same as in the lower sash.

The tongues *q* should fit closely in the sockets formed by the grooves *s* and retaining strips *p*, but not so closely as to interfere with the ready sliding of the sashes; and the construction renders the joints between the sashes and the casing and between the sash meeting-rails absolutely dust proof and draft excluding. If the sashes should swell, the screws *x'* which hold the retaining strips in place, may be loosened to cause the strips to bear more gently against the tongues *q*.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a window, a sash-frame having window-stops, metallic weather-strips F, on the stops, provided with tongues *q* formed with inclined faces *q'''*, grooves *s*, in the faces of the

sash side-rails, into which the said tongues extend, and retaining-strips *p* in said grooves having inclined faces to engage the faces q^3 of the tongues, substantially as described.

- 5 2. In a window, a sash-frame having stops E and parting-stops D, upper and lower vertically sliding sashes provided on the inner faces of their side-rails with grooves *s*, metallic weather-strips F on the stops D and E,

provided with tongues *q*, having inclined faces q^3 , and which extend into the sash-grooves *s*, and retaining-strips *p* in the grooves *s* having inclined faces to engage the faces q^3 of the tongues, substantially as described.

JACOB ORT.

In presence of—

G. I. MOYER,

V. L. HAWTHORNE.