

La R. S. STARRETT.
Car-Window.

No. 163,113

Patented May 11, 1875.

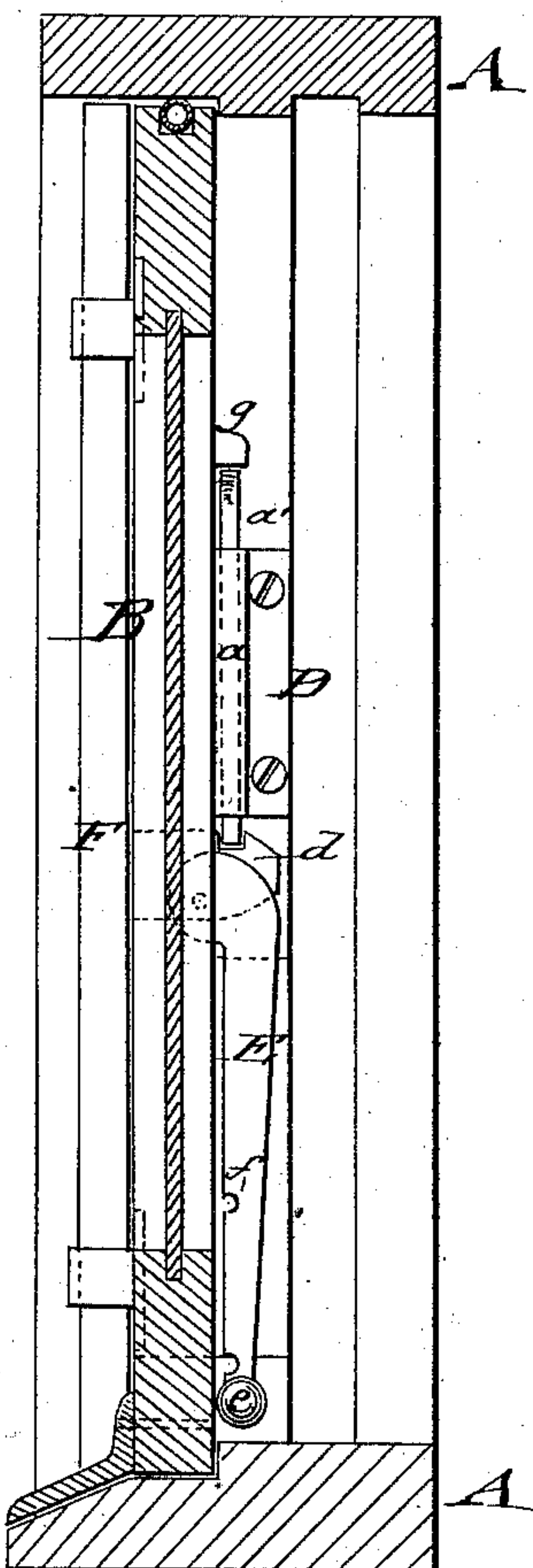
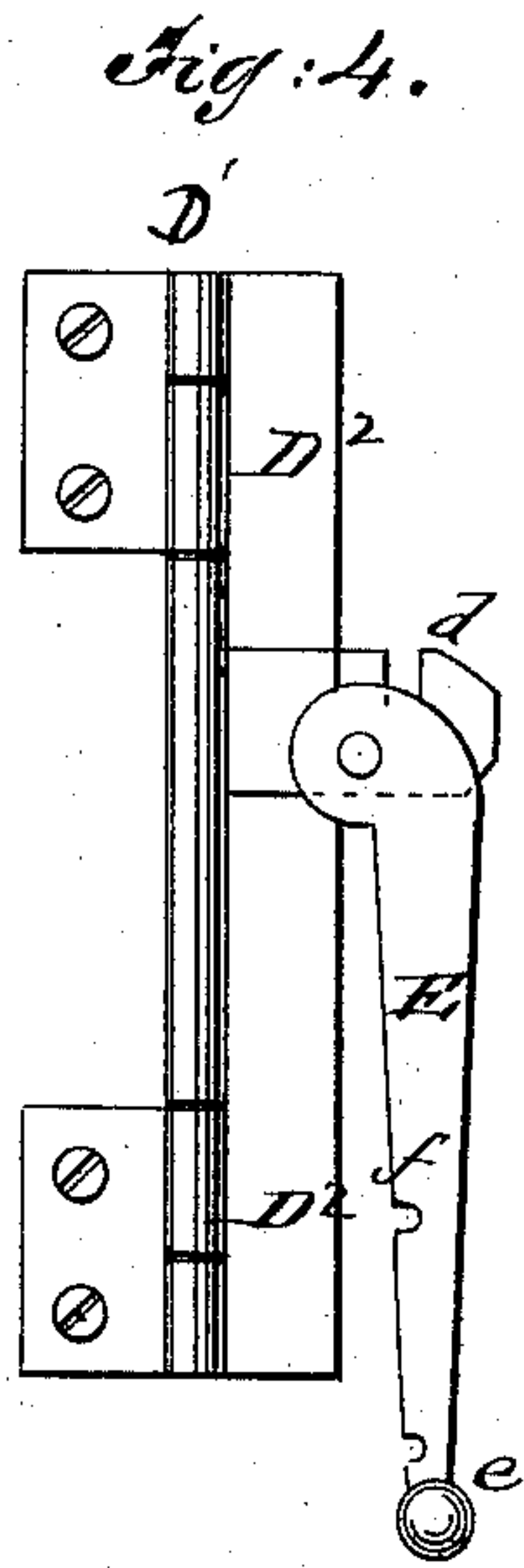
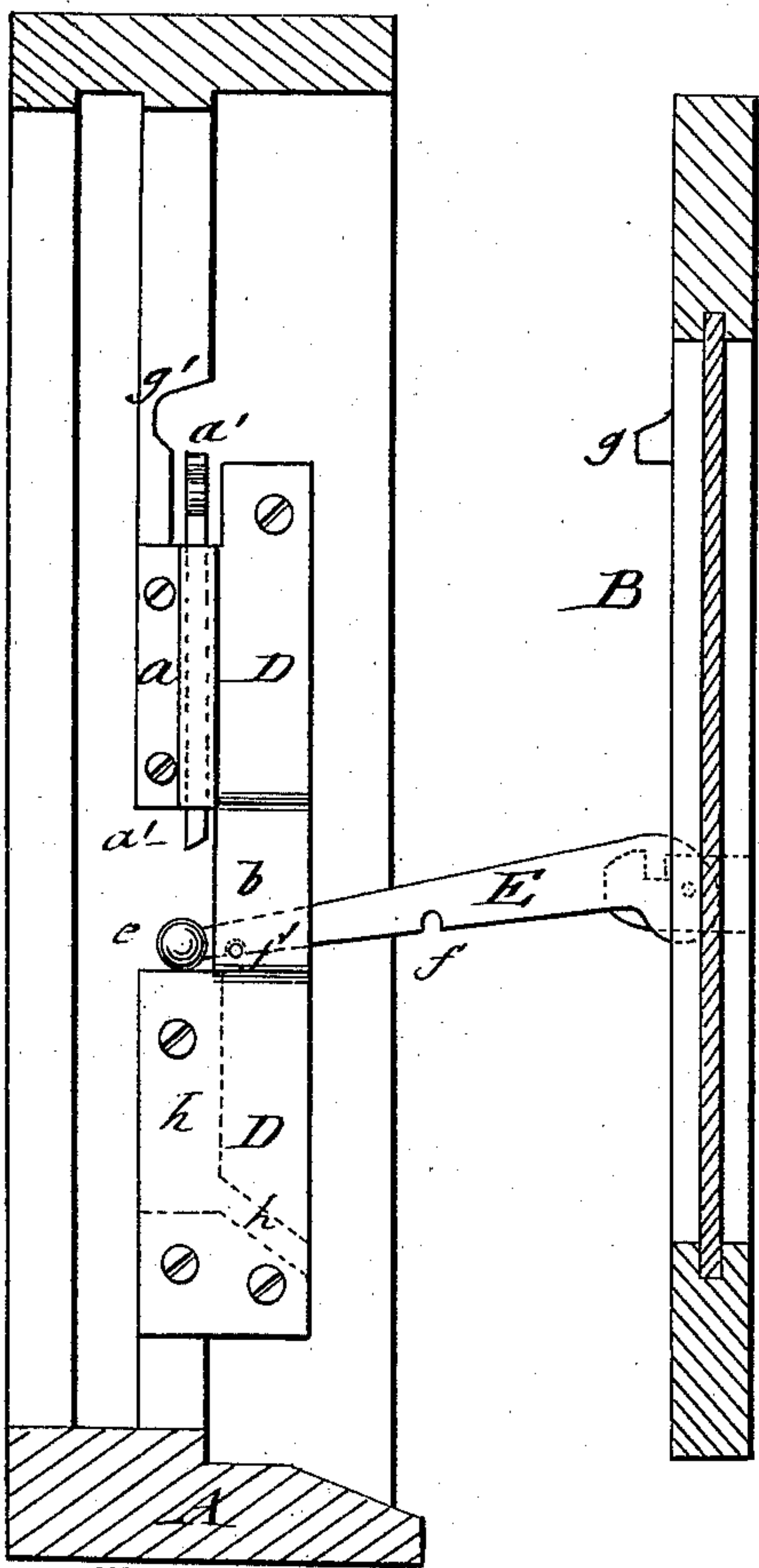
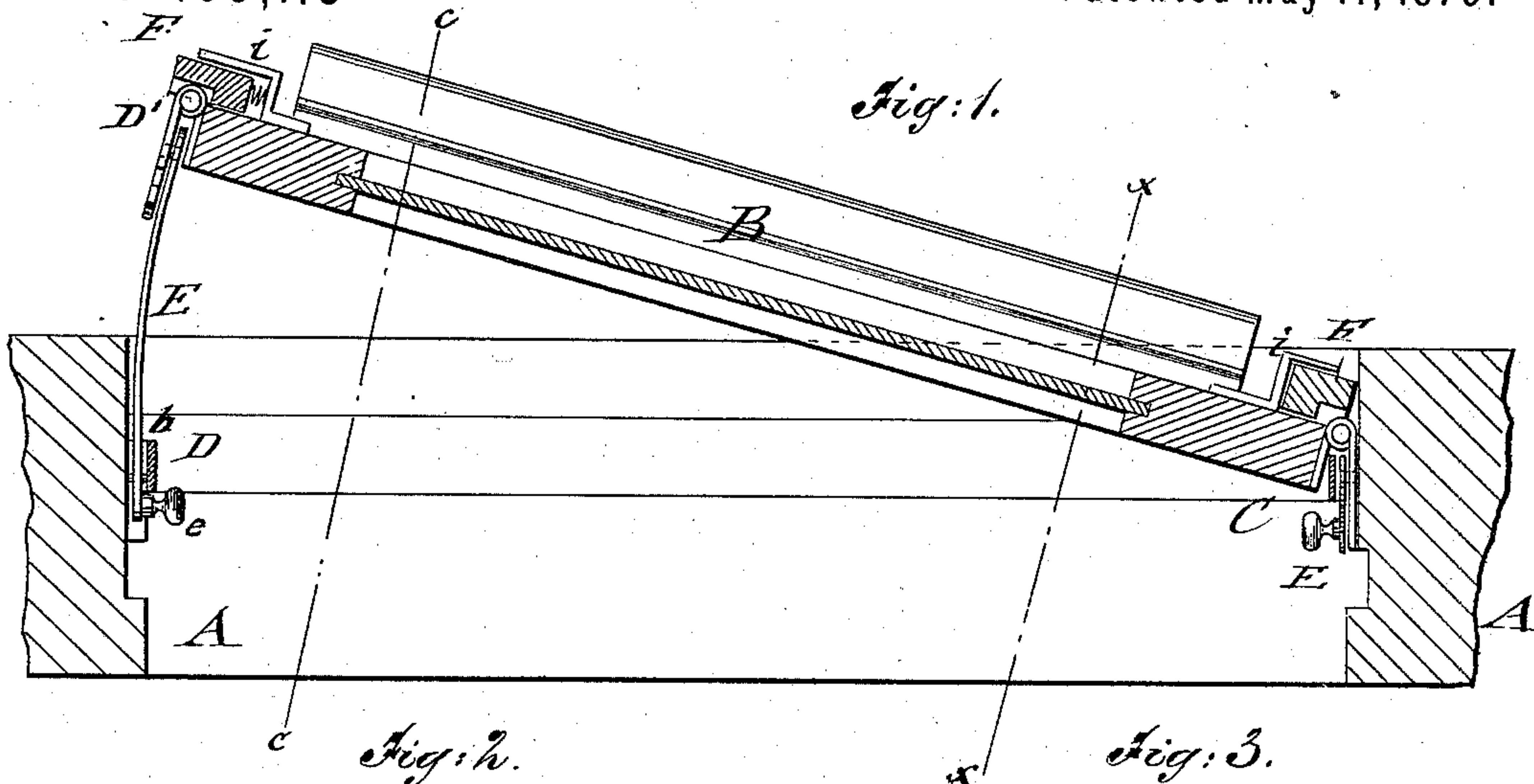
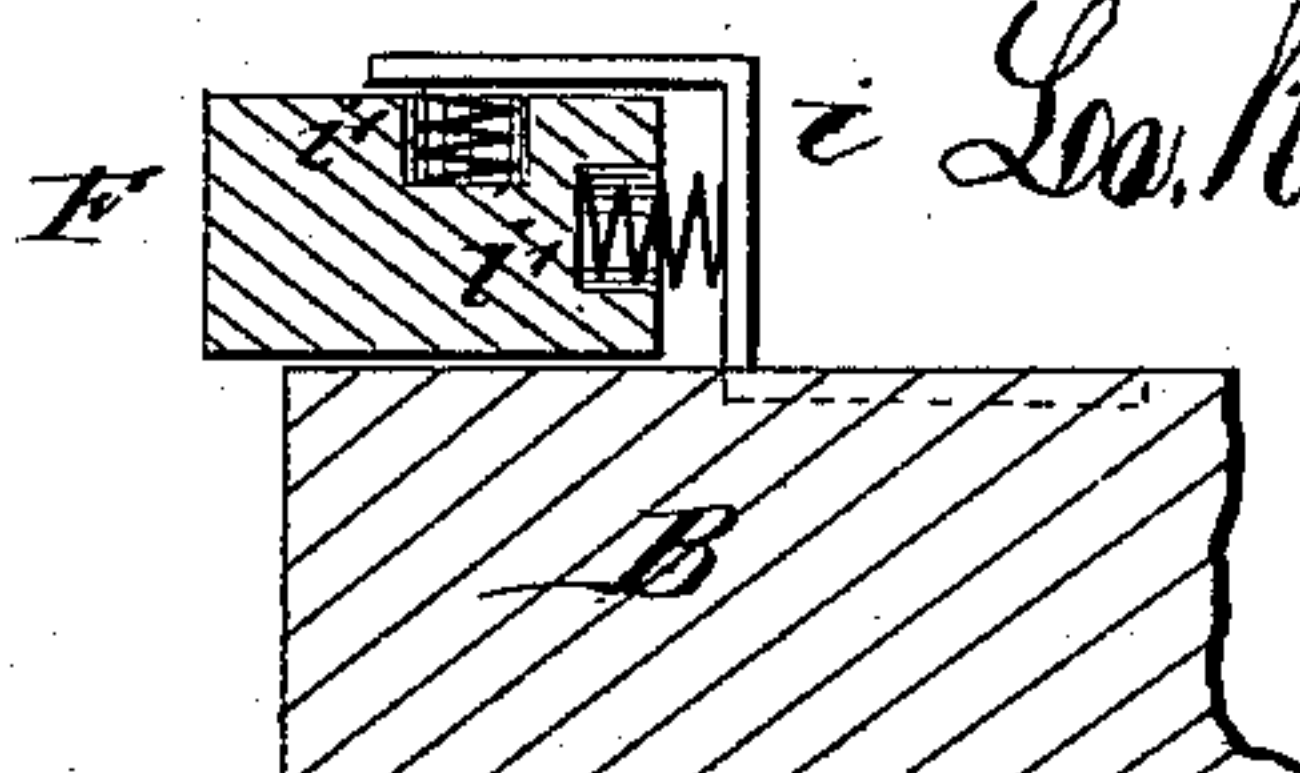


Fig: 5.



WITNESSES:

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LA ROY S. STARRETT, OF ATHOL DEPOT, MASSACHUSETTS.

IMPROVEMENT IN CAR-WINDOWS.

Specification forming part of Letters Patent No. 163,113, dated May 11, 1875; application filed March 20, 1875.

To all whom it may concern :

Be it known that I, LA ROY S. STARRETT, of Athol Depot, in the county of Worcester and State of Massachusetts, have invented a new and Improved Car-Window, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a horizontal section of my improved car-window. Figs. 2 and 3 are, respectively, vertical transverse sections of the same on the lines *c c* and *x x*, Fig. 1; Fig. 4, a detail side view of the sash-hinge and lever; and Fig. 5, a detail section of sash, showing attachment of adjustable side weather-strip.

Similar letters of reference indicate corresponding parts.

My invention relates to a new construction of car-windows, by which they may be thrown open for the admission of air by being swung in outward direction at either side like a door, serving also as a guard to prevent the admission of smoke, dust, and cinders, and also as a most effective means for thoroughly ventilating the car.

The invention consists of a car-window that is applied by a combined hinge and lock mechanism at both sides to the car-frame, in such a manner that it may be swung open at either end and retained in position, according to the direction of motion of the car. The window-sash is provided with top and bottom and adjustable side weather-strips for closing tightly, and the lock and hinge parts with suitable devices for carrying off any dust collecting therein.

In the drawing, A represents the car-frame, and B the window, which is attached thereto at both sides by a combined lock and hinge mechanism, C, for the purpose of swinging open at either side in the nature of a door, according to the direction in which the car is traveling. The lock and hinge mechanism C is made of two main parts—first, of a lock-plate, D, which is screwed firmly to the jamb of window-frame, and provided with guide parts *a* and *b* for spring bolt or latch *a'* and for the operating-lever; and, secondly, of a hinge, D¹, applied to the sash, and having a swinging plate, D², provided with recessed projecting lug *d*, and the pivoted sash-operating lever E. The slightly-curved lever E has

a knob, *e*, at the end, to be readily taken hold of for being slid in the guide part *b* of lock-plate D, and being locked by notches *f* to a shoulder or stop-pin, *f'*, of guide *b*. The operating-lever E serves in this manner to throw the window open at one end and lock it in this position while swinging on the hinge at the other end, whose face-plate D² is locked rigidly to the face-plate of the jamb by the spring-bolt *a'* entering the recessed lug *d* of plate D². The spring-bolt *a'* acts also, on closing the window, on the operating-lever E, so as to cause the dropping of the same into pendent position along the jamb. For opening the window, the lever E is swung up, which raises the spring-bolt *a'* from the lug *d*, so as to release the face-plate D² of the hinge, and admit the swinging open of the window by sliding the lever in its guide in outward direction. That side which forms the rear side of the window, according to the direction in which the car travels, is thrown open, and thereby the window used as a guard to keep out dust, smoke, and cinders, and at the same time to admit fresh air. The face-plate D² at the hinged side is still further secured to the lock-plate D by a lip, *g*, of the sash, that bears on the top end of spring-bolt *a'* when in open position, and fits into a recess, *g'*, of the jamb when closed. The dust gathering between face-plate and jamb is readily conducted off by an inner recess and downward-issuing channel, *h*, of the same, as indicated in dotted lines in Fig. 2. The sash is provided with rubber top and bottom weather-strips, in the usual manner, the top strip being seated into a corresponding groove, the lower being fitted to the inclined stool for preventing the formation of ice thereon, and its interference with the opening and closing of the sash. The outer side weather-strips F of the sash are fitted to the hinge D¹, and guided in staples or bands *i*, with cushioning-springs *i'* bearing on the side and top of the strips F, to produce the self-adjusting action of the strips when the sash is swung open on either hinge, and also an air-tight fitting against the sash and jambs, preventing thereby all rattling, and keeping out the dust.

The window is readily and quickly opened or closed at the required side, and forms an

improved and more convenient system than the present sliding car-windows in use.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A car-window provided with a hinged face-plate and operating-lever at each side, in combination with a lock and guide plate of the jamb of the window-casing, substantially as shown and described.

2. The combination of the spring-bolt of the jamb lock-plate with the recessed lug of the hinged plate of the sash, for locking sash-hinge at one side while sash is opened at the opposite side, substantially as specified.

3. The projecting lip of sash, in combination

with top part of spring-bolt of lock-plate, to secure still further locking of one side of window, as set forth.

4. The lock-plate of sash-casing, having recess and downwardly-inclined channel at inside for conducting off the dust particles gathering therein, as shown and described.

5. The car-window sash provided with outer self-adjusting side weather-strips, sliding in guide-bands with spring-cushions, for the purpose set forth.

LA ROY S. STARRETT.

Witnesses:

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G. W. WOODWARD.