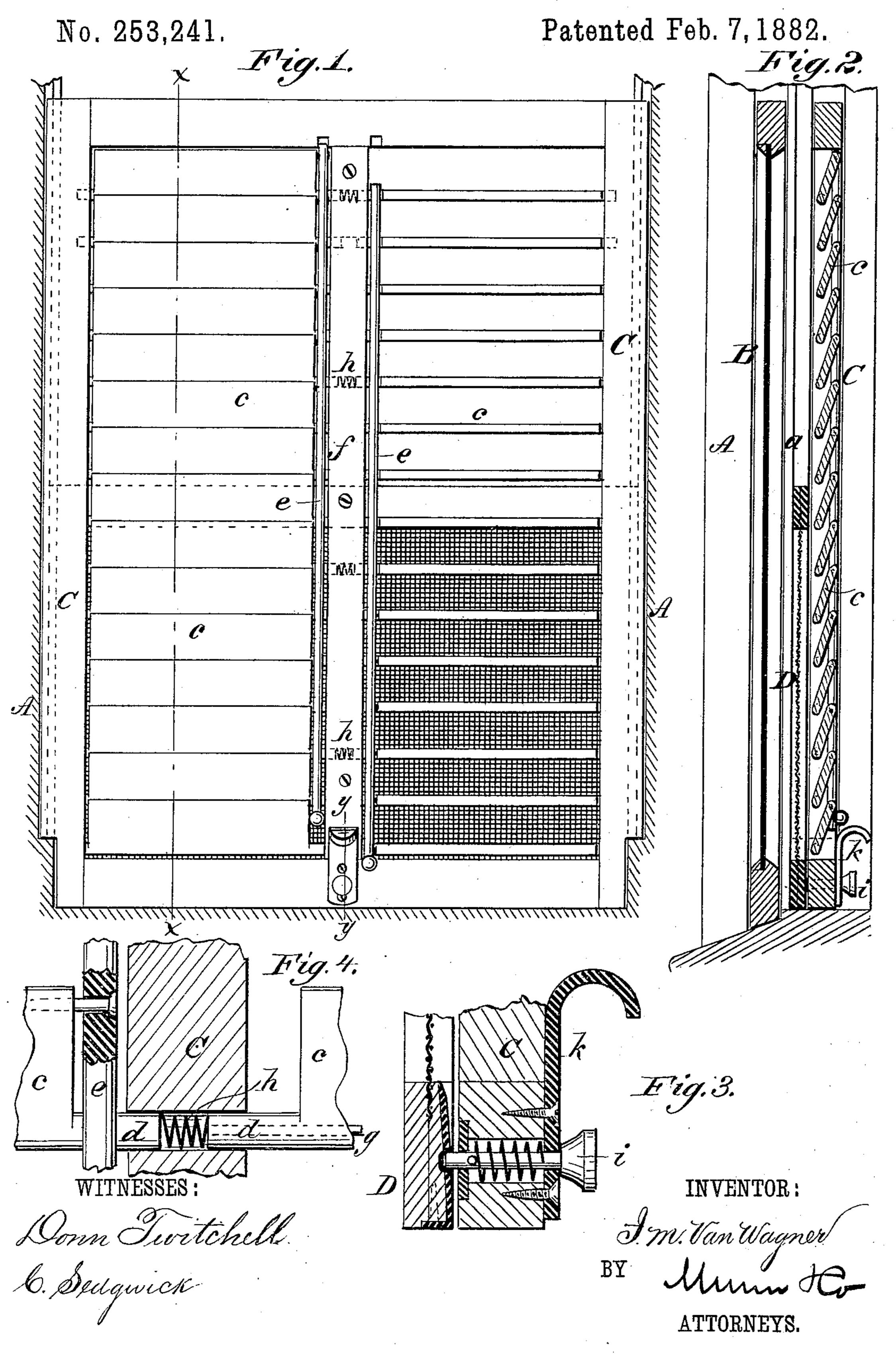
I. M. VAN WAGNER.

SCREEN AND BLIND FOR CAR WINDOWS.



United States Patent Office.

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SCREEN AND BLIND FOR CAR-WINDOWS.

SPECIFICATION forming part of Letters Patent No. 253,241, dated February 7, 1882.

Application filed September 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, ISAAC M. VAN WAGNER, of Nyack, in the county of Rockland and State of New York, have invented certain new and useful Improvements in Screens and Blinds for Car-Windows, of which the following is a specification.

The object of my invention is to provide for exclusion of smoke and dust from cars while to the windows are open, and also to apply wire screens to car-windows of ordinary construction without material changes.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

In the drawings, Figure 1 is a face view at the inside of the car of a window provided with my blind and screen, the window-frame being in section. Fig. 2 is a vertical section on line x x of Fig. 1. Fig. 3 is a detail section, in larger size, on line y y of Fig. 1; and Fig. 4

is a detail section of one slat-pivot.

A is the window-frame, provided with sash 25 B and blind C, sliding in grooves, as usual, separated by the parting-strip a. Between the sash and the blind is the screen D, fitted in grooves formed in strip a, next to the blind, such grooves being extended down to the sill 30 of the window. The blind C is provided with slats c, hung by pivots d in the line of one edge, and connected by a bar, e, in the line of the other edge, for simultaneous operation of the slats. The slats are in two rows, separated 35 by a center bar that is provided with a removable face-plate, f, which covers the slat-pivots. The face-plate is held by screws to allow its removal for convenient insertion of new slats to take the place of broken ones. The pivots 40 d are strengthened by a wire, g, passing into or wholly through from end to end of the slat, and between the contiguous pivots in the center bar there are spiral springs h, for imparting friction to retain the slats in position as 45 turned. The side bars of the blind-frame are recessed at the lower end, as shown in Fig. 1, so that the bottom of the blind may close down on the sill. This is essential in the combined blind and screen, and the recess avoids

the necessity of cutting the blind-groove out 50 to the sill. The screen D is connected to the blind C by a sliding spring-bolt, i, fitted in the lower bar of the blind-frame and entering a recess in the screen-frame. I prefer to fit the bolt i in connection with the raising-hook k of 55 the blind, as shown most clearly in Fig. 3. By means of this bolt the two frames will remain connected and move together usually. When it is desired to use the screen alone the bolt i will be drawn out and the blind raised, which 60 will leave the screen down and covering the window-opening.

It will be seen that to apply the screen to a frame of ordinary construction only the parting-strip has to be grooved. The screen can 65 then be put in, and the blind also put in place, covering the screen. The blind-slats, being movable, can be set more or less open or entirely closed. The knob on the end of bolt i will be attached by a screw-thread, so that at any time 70 it is desired to lock the blind and screen together the knob can be removed and the lock-

ing thus effected.

I am aware that a blind-frame has heretofore been adjustably secured in grooves in a screen-75 frame, and the latter also adjustably secured in grooves in the window-opening, whereby the blind can be raised or lowered independently of the screen-frame, or both raised simultaneously; but the screen cannot be raised inde- 80 pendently of the blind, as in my invention; and I am also aware that swinging blinds hinged to a window casing and covering the opening, which opening is also provided with screenframes hinged to the window-casing, the blinds 85 and screen frames being adapted to be connected with and disconnected from each other, whereby they may be operated simultaneously with or independently of each other, have heretofore been employed, and I therefore lay no 90 claim to such construction, my invention being confined to a blind and screen adapted both to slide simultaneously with or each independently of the other in a window-frame.

Having thus fully described my invention, I 95 claim as new and desire to secure by Letters

Patent—

1. In a car-window, the combination of a blind.

and a screen fitted to slide in grooves in a window-frame, and connected together by a removable fastening for simultaneous movement, or disconnected from each other by removing the fastening from the screen, so that they can be moved separately, substantially as described.

2. The combination of sliding blind C, screen D, and spring-bolt i, substantially as and for

ro the purposes set forth.

3. The wire g, inserted through the pivots of slats c, substantially as and for the purposes set forth.

ISAAC M. VAN WAGNER.

Witnesses:

HENRY L. GOODWIN, C. SEDGWICK.