

(No Model.)

G. W. LEWIN.

COMBINED WINDOW SPRING AND WEATHER STRIP.

No. 336,575.

Patented Feb. 23, 1886.

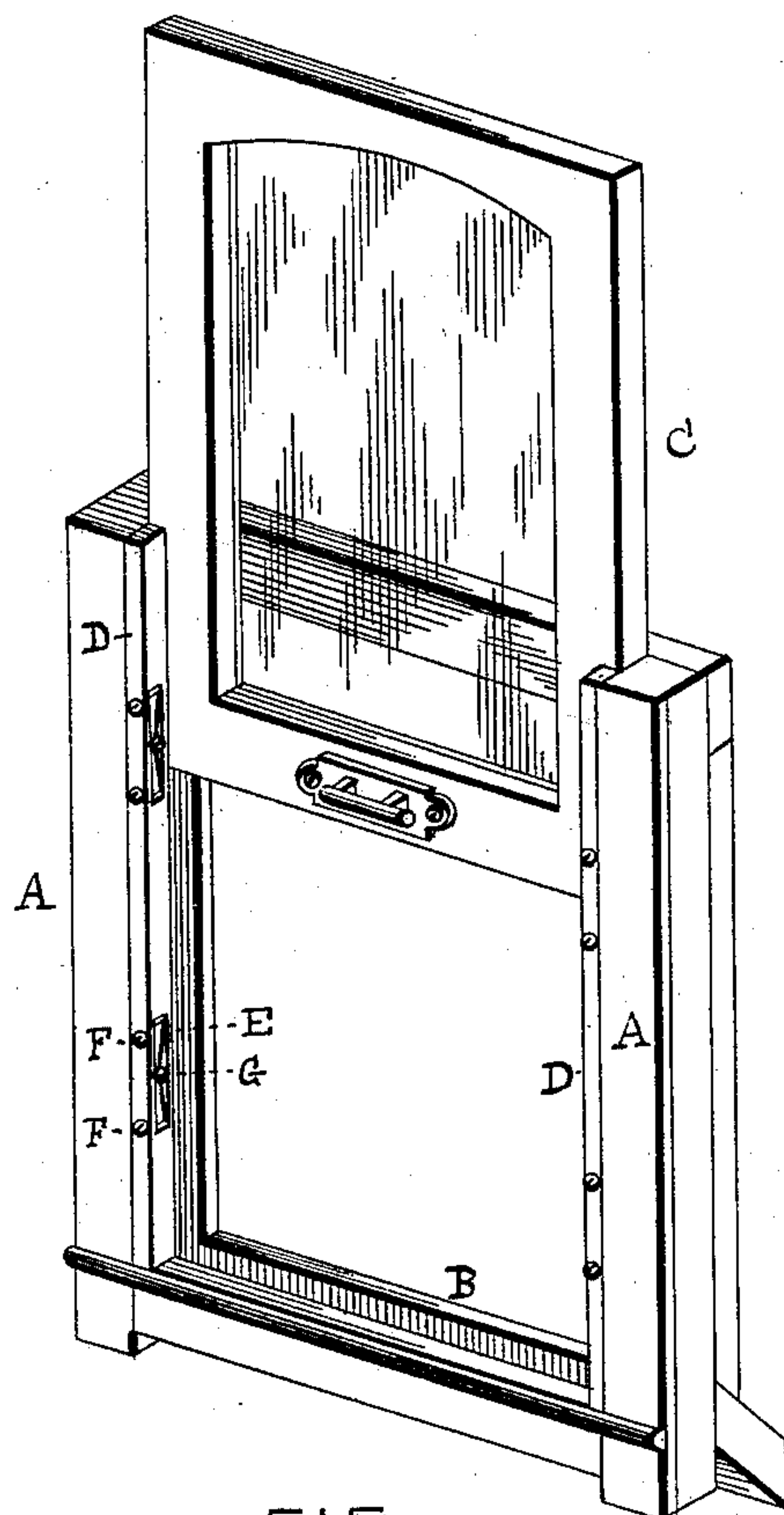
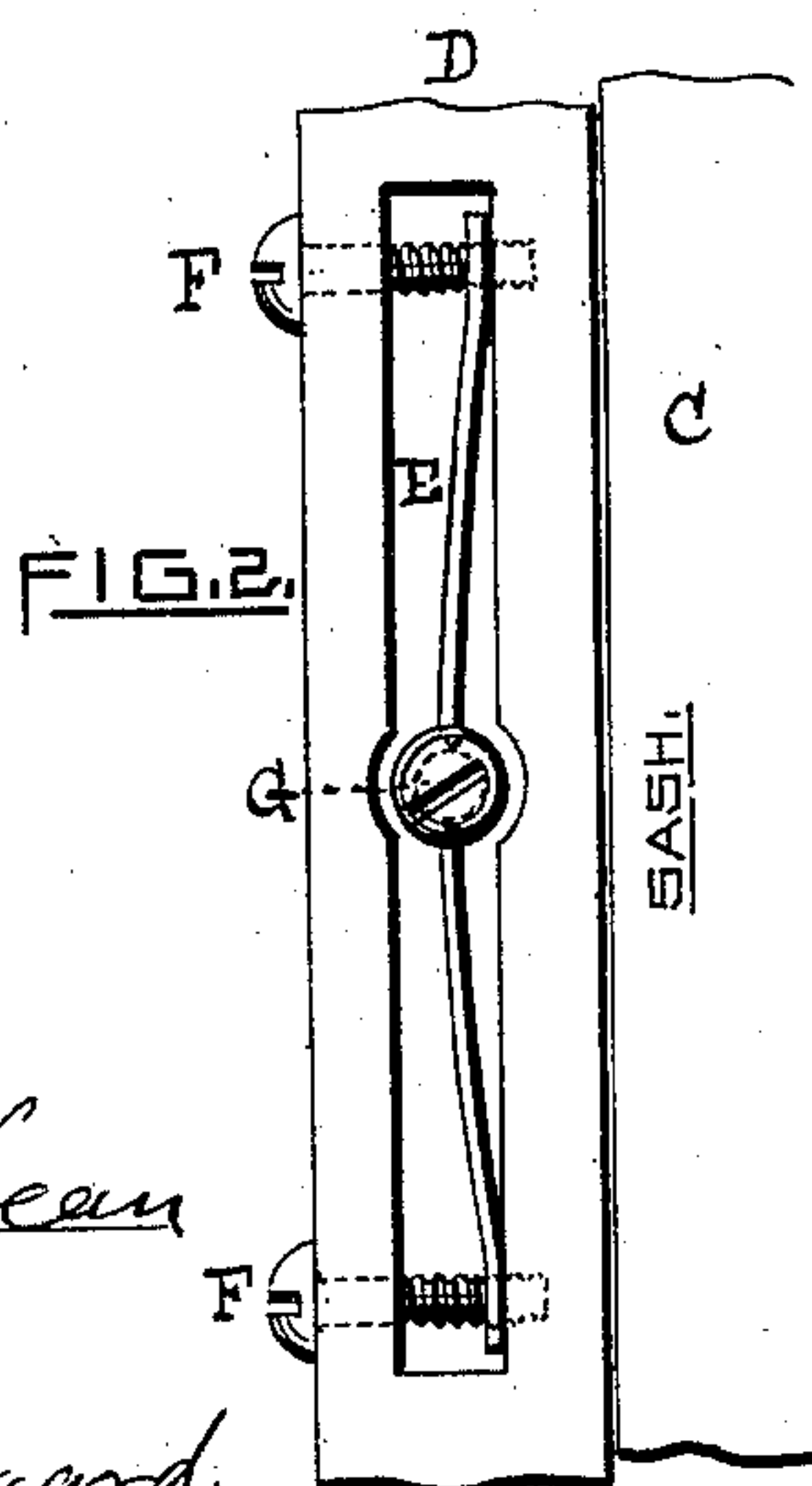


FIG. 11



WITNESSES.

James H. Dean

Irving L. Leonard

INVENTOR:

George W Lewin

UNITED STATES PATENT OFFICE.

GEORGE W. LEWIN, OF FALL RIVER, MASSACHUSETTS, ASSIGNOR OF ONE-FOURTH TO CLOTHIER PIERRE HASKINS, OF SAME PLACE.

COMBINED WINDOW-SPRING AND WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 336,575, dated February 23, 1886.

Application filed July 10, 1885. Serial No. 171,247. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. LEWIN, of Fall River, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in a Combined Window-Spring and Weather-Strip; and I declare the following to be a specification thereof, reference being had to the accompanying drawings.

Like letters indicate like parts.

Figure 1 is a perspective view of my invention. Fig. 2 is a side elevation of the same.

My invention is especially adapted to the windows of railroad-cars, but is applicable also to other windows.

It consists of a window-stick properly mounted upon the window-frame and kept in forcible contact with the sash by means of an adjustable spring, which gives said stick a regulated bearing throughout its entire length against said sash, as hereinafter set forth.

In the drawings, A represents the window-frame, B the sill, and C the sash. On each side of the frame A, and bearing against the inner side of the sash C, is a window-stick, D. Two or more springs, E, are placed within suitable slots in each window-stick. The spring E, its bearings, and the means of its adjustment are shown in Fig. 2. The spring E is bent at its center into a semicircular bow, and at each end has a screw-threaded hole, through which a screw, F, having a square end, passes from the front of the window-stick D, as shown in Fig. 2. A screw, G, passing through the bow of the spring E, enters the frame A, and the spring E has its central bearing upon the screw G. The window-sticks D are thus secured to the frame A by the screws G, which engage with the bows of the springs E, to prevent any vertical or longitudinal displacement; but the window-stick D is capable of a slight transverse or horizontal motion in a direction at a right angle to the sash C by means of the springs E, which hold it in snug contact with the sash. Such contact may be made of any force desired by means of the screws F, which adjust the springs E to the requisite tension. By turning the screws F, the spring E, by its screw-threaded engagement thereon, moves along said screws, and is more or less bent or sprung over the screw G by such movement

until the desired degree of tension is obtained, to forcibly press the window-stick D against the sash C. Three results are secured by this pressure: First, a longitudinal friction is produced along the whole length of the window-stick D against the sash C, so that the sash, when raised to any height, is sustained in position and securely held, the friction being sufficient to overcome the weight of the window. On account of the adjustability of the springs E by the screws F, this friction is regulated and adapted to the weight of the sash, whatever it may be. The second advantage resulting from this construction is that I utilize the window-stick D as a weather-strip when the sash is closed. Its forcible contact with the sash along its whole length excludes the air, dust, cinders, and rain, which are forcibly driven through the loosely-fitting sashes of railway-cars as usually constructed. The utility of this improved weather-strip is not impaired by use, because its inner surface, though worn by the frequent sliding of the sash, is always by such wear made smooth and conformable to the sash itself along its whole length, and any loss of friction between them is compensated by the force of the springs, which must always be adjusted to such a tension as to make the window-stick available as a window-spring. Another advantage, of much importance for the comfort of the railway-traveler, is that this contrivance prevents all rattling of the window-sash in the frame. The pressure of the springs prevents any free movement of the sash, and the window-stick, so mounted and forced against the sash, is at the same time a window-spring, a weather-strip, and a window-spline, and performs perfectly the functions of each.

Heretofore rabbeted and slotted window-stops have been placed in grooves in the window-casing, with springs arranged to press them against the sash with sufficient force to keep the sash from rattling; but so far as I am aware such devices have not hitherto been provided with adjustable springs whereby the window-stick is given a regulated bearing against the sash.

I claim as a novel and useful invention and desire to secure by Letters Patent—

1. A combined window-spring and weather-

strip consisting of a window-stick mounted upon a window-frame in contact with the sash, and an adjustable spring by which said window-stick has a forcible and regulated bearing
5 throughout its entire length against said sash, substantially as described.

2. The combination of the window-frame A, having the screw G, the window-sash C, and the window-stick D, having the screws F, and

the bow-string E, mounted on said screw G, 10 and adjustable by a screw-threaded engagement with the screws F, substantially as described.

GEORGE W. LEWIN.

Witnesses:

JAMES H. DEAN,
IRVING L. LEONARD.

Corrections in Letters Patent No. 336,575.

It is hereby certified that the name of the assignee in Letters Patent No. 336,575, granted February 23, 1886, upon the application of George W. Lewin, of Fall River, Massachusetts, for an improvement in "A Combined Window-Spring and Weather-Strip," was erroneously written and printed "Clothier Pierre Haskins," whereas said name should have been written and printed *Clothier Pierce Haskins*; also, that an error appears in the printed specification requiring correction, as follows: In line 10, page 2, the word "bow-string" should be stricken out and the word *bow-spring* inserted instead; and that the said Letters Patent should be read with these corrections therein that the same may conform to record of the case in the Patent Office.

Signed, countersigned, and sealed this 16th day of March, A. D. 1886.

[SEAL.]

H. L. MULDROW,
Acting Secretary of the Interior.

Countersigned:

M. V. MONTGOMERY,
Commissioner of Patents.