

(No Model.)

2 Sheets—Sheet 1.

W. WALLACE.

WINDOW.

No. 390,270.

Patented Oct. 2, 1888.

Fig. 1.

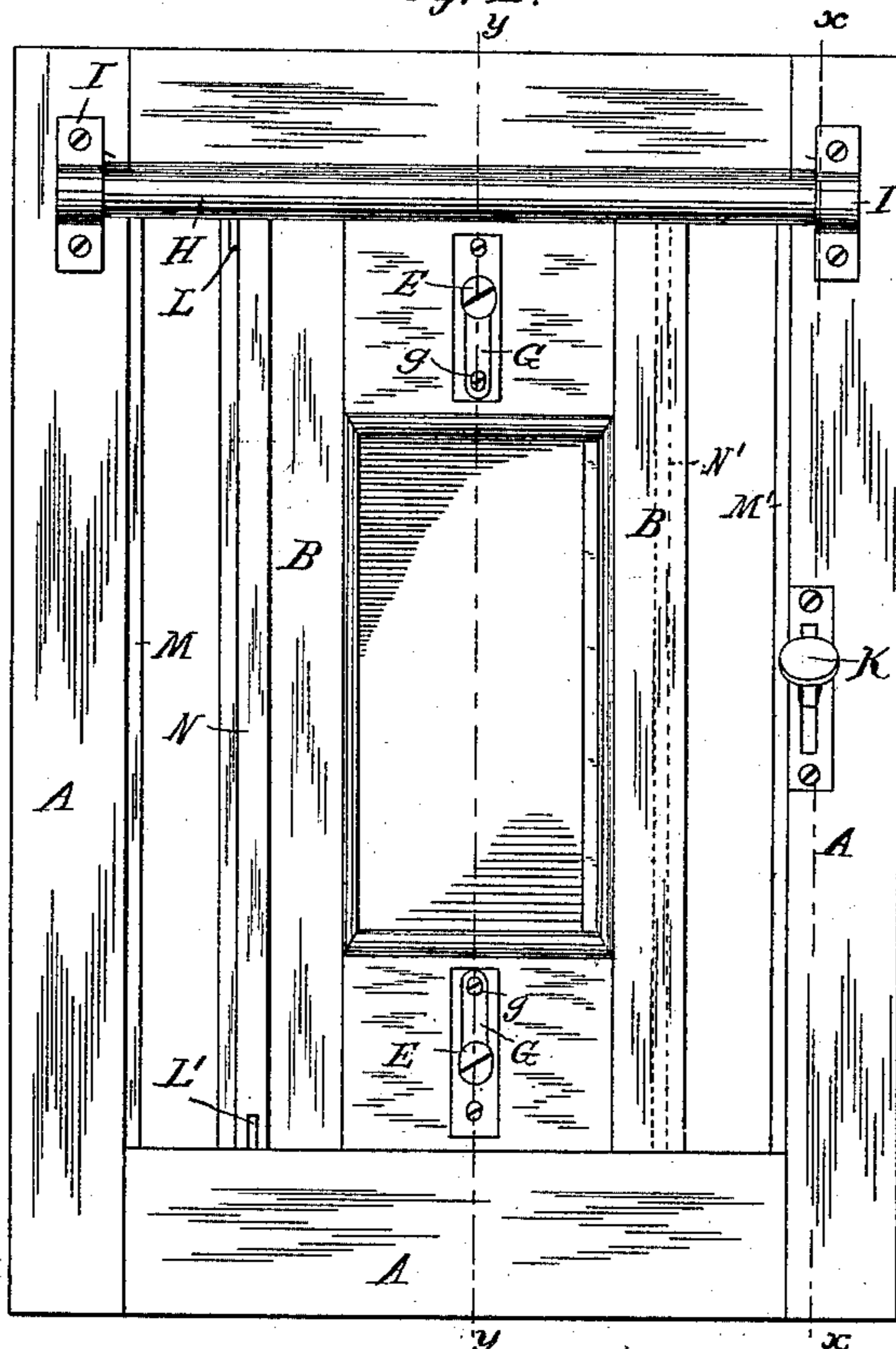


Fig. 2.

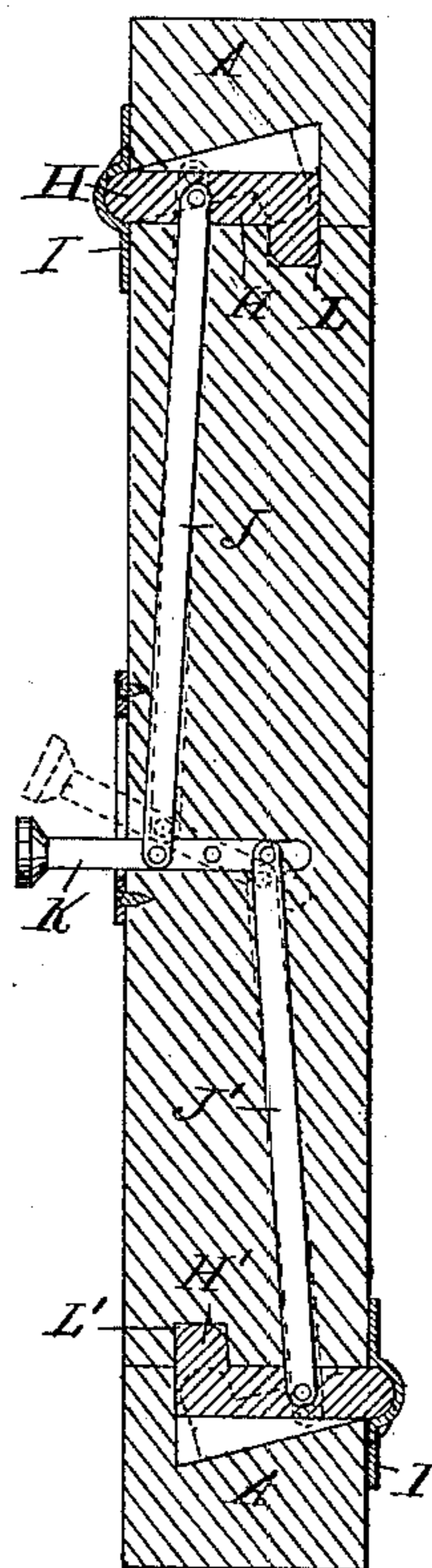
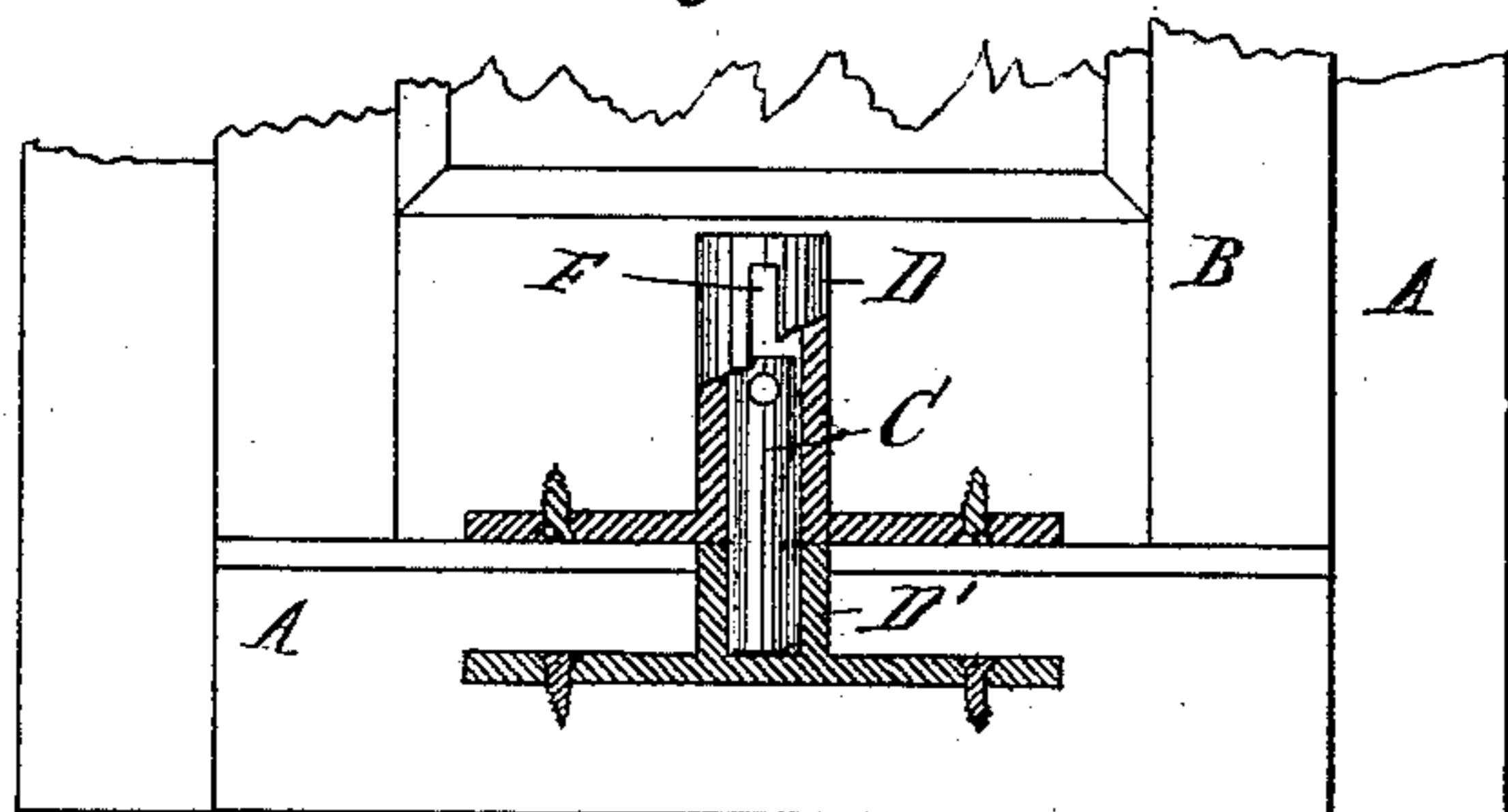


Fig. 4.



WITNESSES:

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William Wallace
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ATTORNEY

(No Model.)

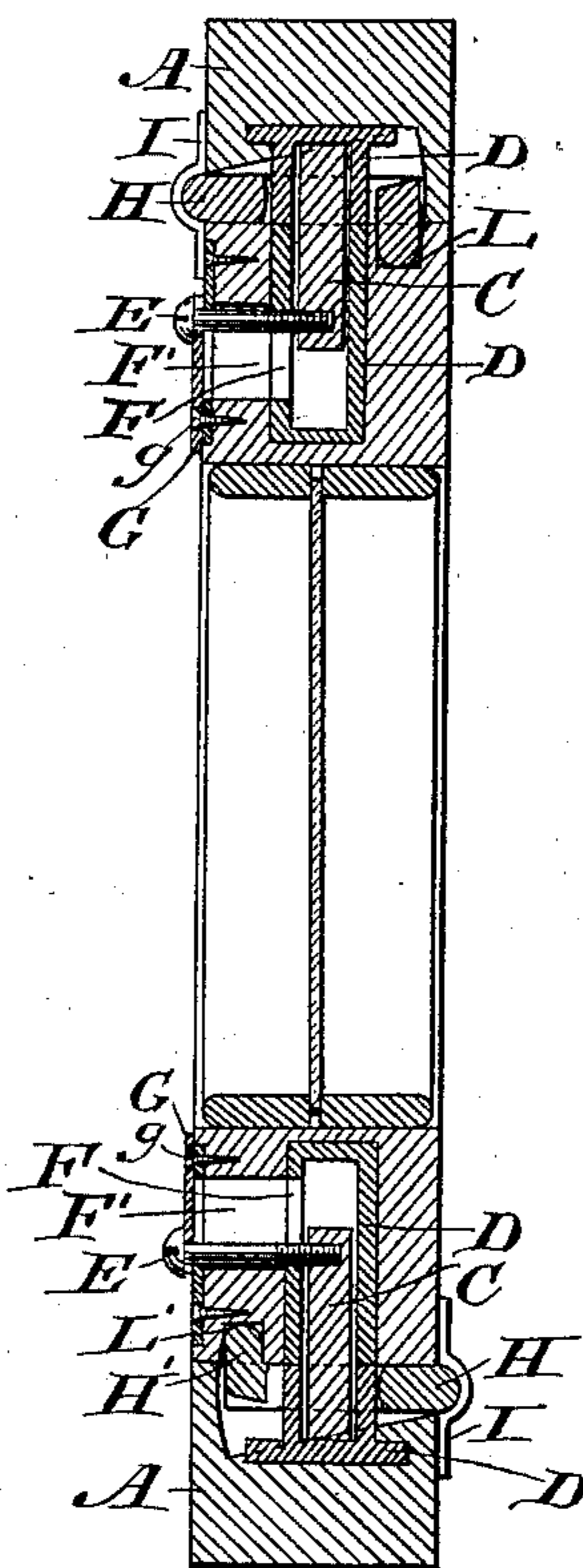
2 Sheets—Sheet 2.

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Fig. 3



WITNESSES

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INVENTOR

William Wallace,

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UNITED STATES PATENT OFFICE.

WILLIAM WALLACE, OF NEW-YORK, N. Y.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 390,270, dated October 2, 1888.

Application filed January 24, 1888. Serial No. 261,710. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WALLACE, of the city, county, and State of New York, have invented a certain new and useful Improvement in Windows, of which the following is a specification.

The object of my invention is to so construct a window as to render it air, water, and burglar proof; and it consists of a window-sash hung at its top and bottom to the frame by means of adjustable pintles, said sash being provided at its upper and lower ends, respectively, with a groove and at its sides with a rabbet, which fits another rabbet in the frame, forming a rabbet-joint on each side of the sash. The frame at top and bottom is provided with adjustable flanged weather-strips, which are locked in the grooves at the top and bottom of the sash and operated by means of a compound lever located in one side of the frame.

In the accompanying drawings, Figure 1 is a front view of my improved window. Fig. 2 is a sectional view on line *x x* of Fig. 1, showing the adjustable strips in position. Fig. 3 is a sectional view on line *y y* of Fig. 1, showing the pintles by which the window is hung in the frame; and Fig. 4, a detail view showing the pintle and its manner of attachment.

A indicates an ordinary window-frame, and B a sash, which is swung in the frame by means of adjustable pintles C, which loosely fit in boxes D, and when properly adjusted extend into corresponding boxes, D', which extend through the weather-strips H H' into the window-frame, thus forming a hinge upon which the sash can be swung at any angle.

Each pintle is provided with an arm, E, extending at right angles to it and through a slot, F, in the box D, and a corresponding slot, F', in the side of the sash, by the operation of which the pintle can be adjusted for the purpose of removing or replacing the sash. The pintles are secured in position by means of an adjustable plate, G, which bears against the projecting arm of the pintle, covering the slot F' in the sash, and being attached thereto by means of a screw, *g*. This plate when in place prevents the pintle from moving in the box.

H H' are flanged weather-strips at the top and bottom of the frame, which are journaled at their rear sides in suitable brackets, I, in

the frame. These weather-strips are so arranged that the journaling of the one at the lower end of the frame is on one side thereof, while the journaling of the one at the upper end of the frame is on the opposite side thereof, as shown in Fig. 2. These weather-strips are operated by means of connecting-rods J J' and a lever, K, which extends through a slot in the window-frame and is operated from the inside of the building. The upper connecting-rod, J, is connected to the lever K on one side of the fulcrum, and the other connecting-rod, J', is connected to the lever K on the other side of the fulcrum. By moving the lever K down it causes the flanged weather-strip H at the top of the frame to fall into the groove L on one edge of the upper end of the sash B, and the lower flanged weather-strip, H', to rise into the groove L' on the opposite edge of the lower end of the sash, thus locking the sash securely within the frame at its top and bottom. The weather-strips H H' are perforated, as shown, to allow them to work over the boxes D D'.

M M' indicate rabbets situated upon the opposite inside edges of the frame, which, in connection with corresponding rabbets, N N', situated upon the opposite outside edges of the sash, produce a rabbet-joint on each side of the sash. These joints, in connection with the flanged weather-strips, produce a burglar, air, and water proof window-frame.

It will readily be seen that in order to open the window it is only necessary to depress the lever K in the frame, which causes each flanged weather-strip to be released from the groove in the sash, allowing the sash to be swung on the pintles at any angle to the frame.

It will further be noticed that a window constructed in this manner will render unnecessary the use of rabbet-pieces at the top and bottom of the sash, which are ordinarily employed for the purpose of making a closely-fitting window, and will enable the window to be washed upon both sides without being removed from the frame or necessitating the washing to be done from the outside of the building. The weather-strips not only form a close joint for excluding wind, &c., but serve to lock the window in place.

I claim as my invention—

1. The combination of the window-frame, the sash, the pintles which secure the sash to the frame at top and bottom and form a pivot for the sash, the boxes for the pintles in the
5 sash and frame, and the operating-arms extending through openings in the boxes and in the sash for raising and lowering the pintles, substantially as set forth.

2. The combination of the window-frame,
10 the sash, the pintles which secure the sash to the frame at top and bottom and form a pivot for the sash, the boxes for the pintles in the sash and frame, the operating-arms extending through openings in the boxes and in the sash
15 for raising and lowering the pintles, and the plates for holding the pintles in position, substantially as set forth.

3. The combination of the window-frame, the flanged weather-strips, the brackets on the
20 frame in which the weather-strips are journaled, the sash provided with grooves into which the flanged weather-strips enter, devices for moving the weather-strips into and out of the grooves, and the pintles on which
25 the sash is pivoted at top and bottom, substantially as set forth.

4. The combination of the window-frame, the flanged weather-strips, the brackets on the frame in which the weather-strips are journaled, the sash provided with grooves into
30 which the flanged weather-strips enter, and devices for moving the weather-strips into and out of the grooves, substantially as set forth.

5. The combination of the window-frame, the flanged weather-strips pivoted on the
35 frame, the sash having grooves into which the flanged weather-strips enter, and a compound lever by which the flanged weather-strips are operated, substantially as set forth.

6. The combination of the window-frame
40 provided with rabbets, the sash provided with corresponding rabbets engaging with the rabbets on the frame to form a rabbet-joint, the flanged weather-strips which enter grooves in the top and bottom of the sash, and devices
45 for raising and lowering the weather-strips, substantially as set forth.

WILLIAM WALLACE.

Witnesses:

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WM. FRIEND.