

(No Model.)

N. HAYNES.
Sash Fastener.

No. 229,884.

Patented July 13,

Fig. 1

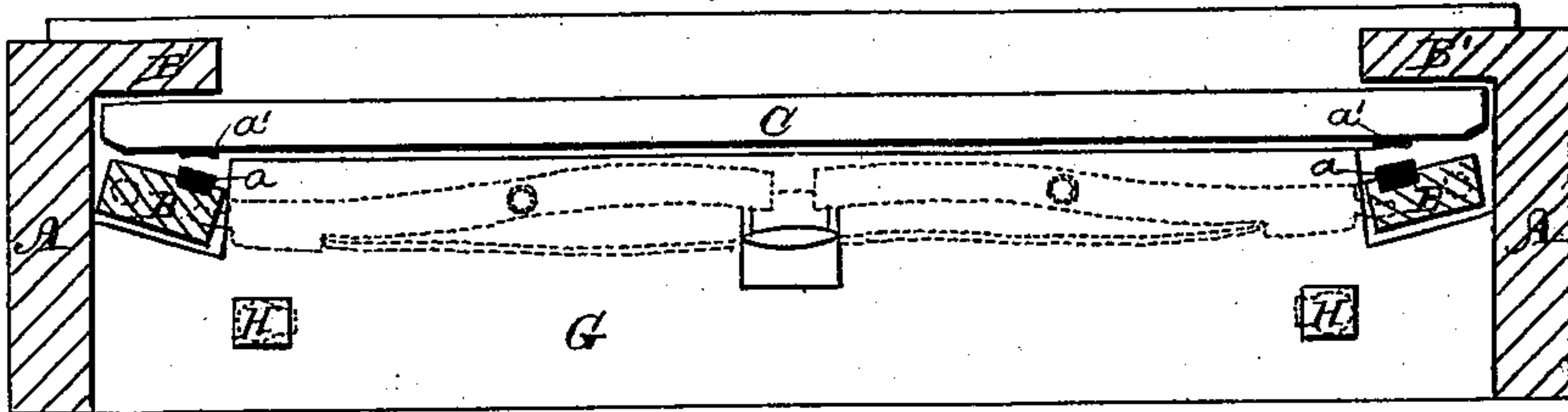


Fig. 2

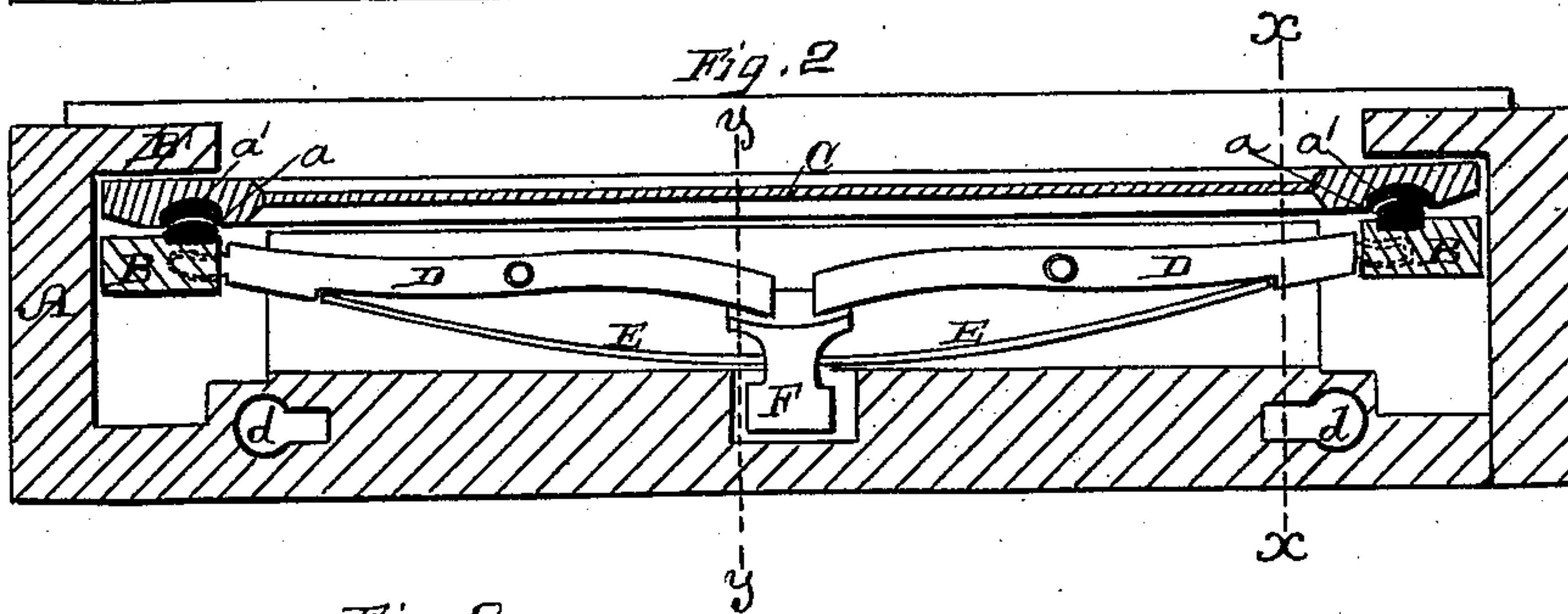


Fig. 3.

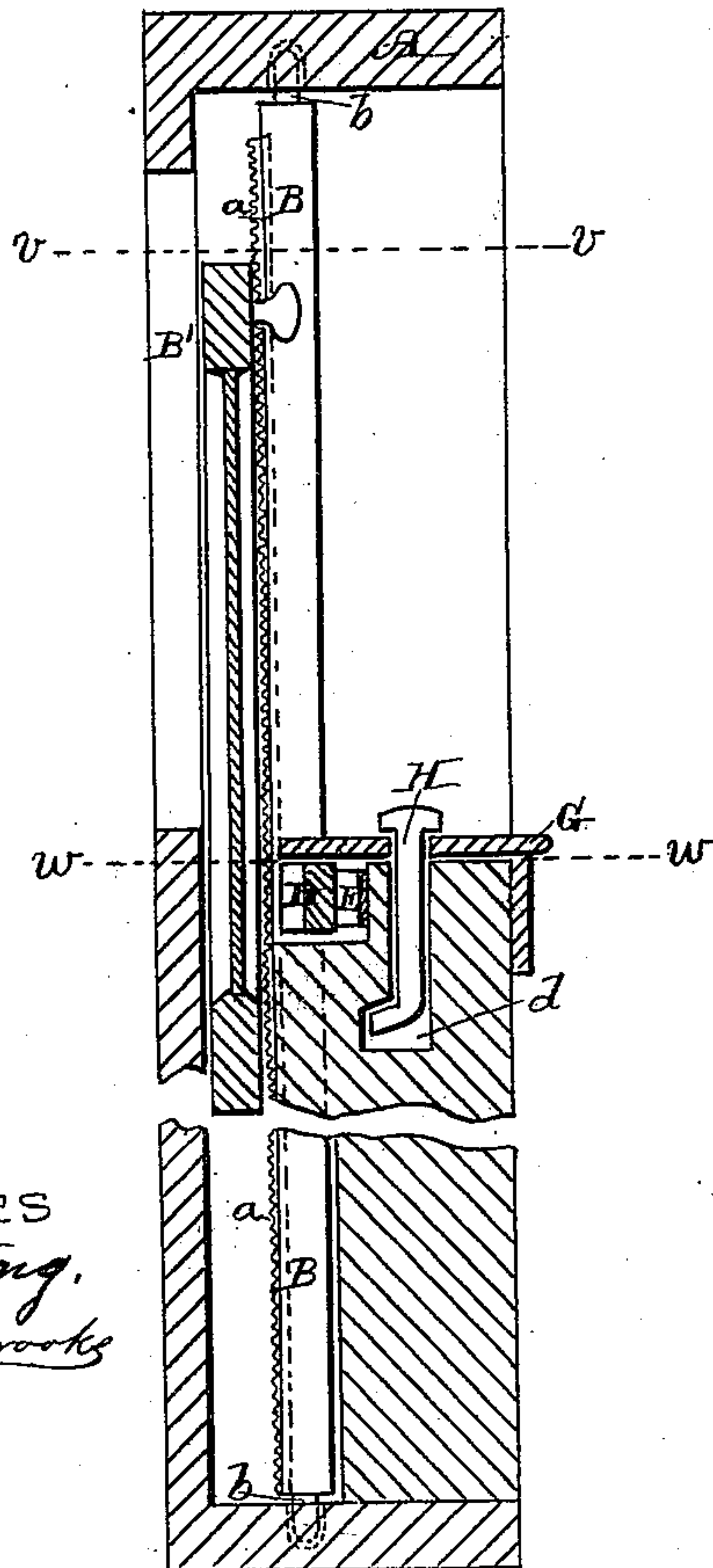
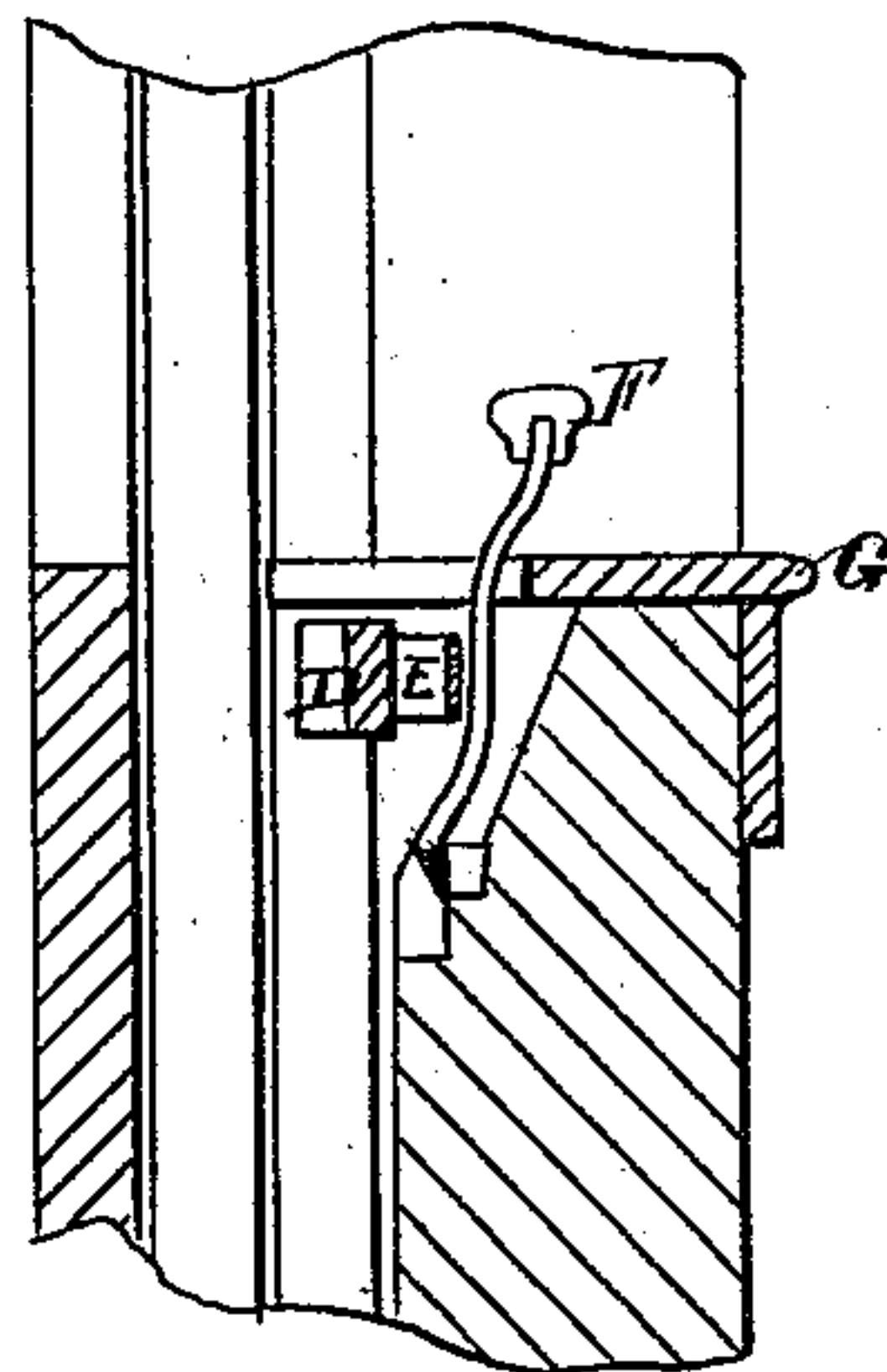


Fig. 4



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UNITED STATES PATENT OFFICE.

NOAH HAYNES, OF SAN JOSÉ, CALIFORNIA.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 229,884, dated July 13, 1880.

Application filed April 5, 1880. (No model.)

To all whom it may concern:

Be it known that I, NOAH HAYNES, of San José, county of Santa Clara, and State of California, have invented an Improvement in Window Sashes and Stops; and I hereby declare the following to be a full, clear, and exact description thereof.

The object of my invention is to provide a means by which the window-sashes of cars, steamers, and houses may be made tight and dust-proof in their frames or stops, while at the same time they may be readily raised and lowered, or held at any point, without liability of jamming.

It consists in providing pivoted stops on the frame inside of the sash, which stops are held in contact with the sash by means of a strong spring, the spring being controlled by a lever or knob.

The sides of the sash and of the stops are provided with corrugated rubber bands, so that by engaging with each other the sash will be held at any desired point.

Whenever the window is to be moved in either direction, by pushing on the lever controlling the spring the pivoted stops are swung back and the pressure on the window-sash relieved so it can be moved. As soon as the lever is released the spring throws the stops firmly against the sash, pushing it tightly against the outer stops, so as to prevent jar and keep out the dust. This action also locks the window so it cannot be opened from the outside.

Figure 1 is a horizontal section through *vv*, Fig. 3. Fig. 2 is a horizontal section through *ww*, Fig. 3. Fig. 3 is a vertical section through *xx*, Fig. 2. Fig. 4 is a vertical section through *yy*, Fig. 2.

Let A represent the frame in which the window and sash are placed, and B B' the stops between which the sash C slides. On the sides of the inside stops, B, are placed vertical corrugated rubber bands *a*, and on the insides of the sash are corresponding pieces of corrugated rubber *a'*, to engage with the corrugations on the stop-band, so as to hold the window at any point, as hereinafter described.

The stops B are pivoted at both ends, as shown at *b*, the pivots being on the edges nearest the frame. Under the cap of the sash-box

are placed two levers, D, the outer ends of which are pivoted or hinged in the inner edges of the inner window-stops, B, or fitted into slits in said stops, as shown. Behind these levers is a spring, E. At their meeting ends is the operating-lever or knob F, by means of which the levers are moved. This lever or knob F projects up through the plate of the sash-box, so as to be moved by any one at the window inside. The window-sash slides loosely between its stops when the stops are moved back by the levers; but when the spring forces the levers forward the stops jam against the sides of the sash and hold it tightly. This forces the sash close against the outside stops, B', so that all cinders, dust, &c., are prevented from entering at the joints.

In car-windows particularly it is necessary to make the sashes fit very tightly in their stops, to prevent the entrance of cinders and dust and to keep them from jarring. The windows are not therefore always easy to move, and changes of temperature affect their action. By having the stops movable the windows can never get jammed, since the stops are thrown back by the lever and side pressure on the window-sash relieved. As the window is raised or lowered to the desired height the knob is released, and the spring actuating the levers throws the stops against the sash, holding it in position.

The edges of the corrugations on the bands *a a'* hold the window so that it will not move. The pressure of the spring on the stops prevents any jarring or noise of the sash, and these stops hold said sash tightly against the outside stops, making a close joint, which will keep out dust and cinders.

The sash-box plate G, which covers and incloses the springs and levers for the window-stops, is slotted for the passage of the knob or plate for moving said levers. It is also provided with side slots, *d d*, through which pass the locking-hooks H. These hooks are provided with square heads, and their lower ends pass down through the plate. A quarter-turn of the heads throws the hooked or turned ends *h* back under the sash-box, so as to secure the plate in position. The heads of these hooks may be countersunk and covered with metal plates, so as to be out of sight.

In case a pane of glass becomes broken, or the sash is injured, it may be readily removed by turning the blocks, raising them out, and sliding out the plate. The levers may then
5 be lifted out of place, the spring removed, and the stops lifted from their pivots or pintles, the sash then being free for removal. In doing this no screws have to be taken out, nor is any of the wood-work liable to injury.

10 These removable stops may be applied to any window.

It is obvious that the levers may be connected in a variety of ways to the stops, and that the lever-actuating knob may be placed
15 in any desired position. The window cannot be raised from the outside, so that the spring, stop, and corrugated band act as a lock to hold the window at any desired point, locking it not only when closed but when at any position.
20 All snaps, locks, or catches are therefore unnecessary.

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

1. In combination with the window-sash C, 25 the pivoted inside stops, B, provided with the levers D, spring E, and knob F, whereby the window is held against the outer stop, B', to prevent the entrance of dust, but may be released to be put in any desired position, substantially as and for the purpose herein set forth. 30

2. In combination with the sash C, provided with the corrugated bands *a*, and the pivoted swinging stops B, having controlling- 35 levers D, the spring E, whereby said sash is automatically locked at any point, and catches may be dispensed with, substantially as herein described.

In witness whereof I have hereunto set my 40 hand.

NOAH HAYNES.

Witnesses:

J. H. OWENS,
ALONZO TYLER.