

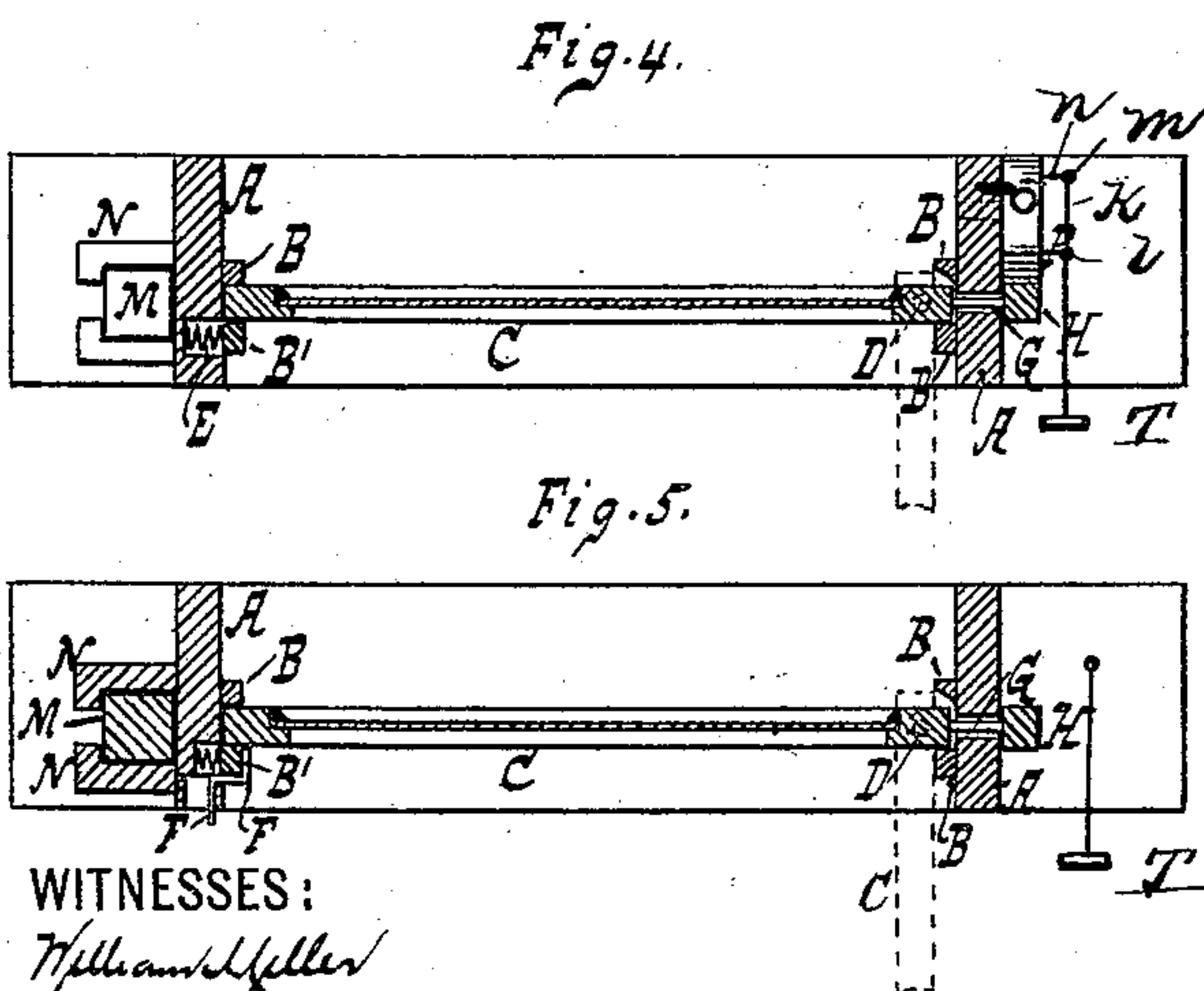
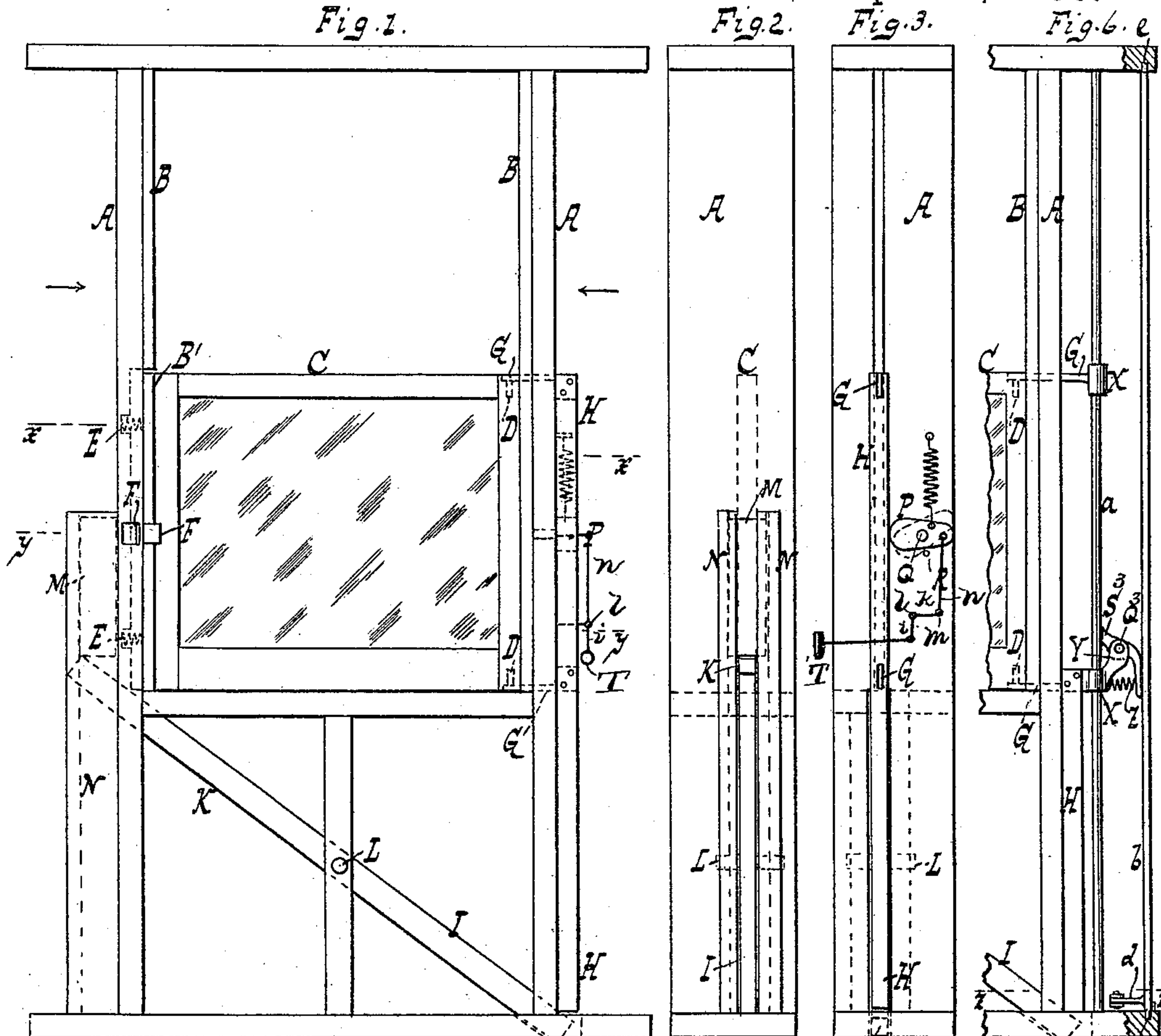
(No Model.)

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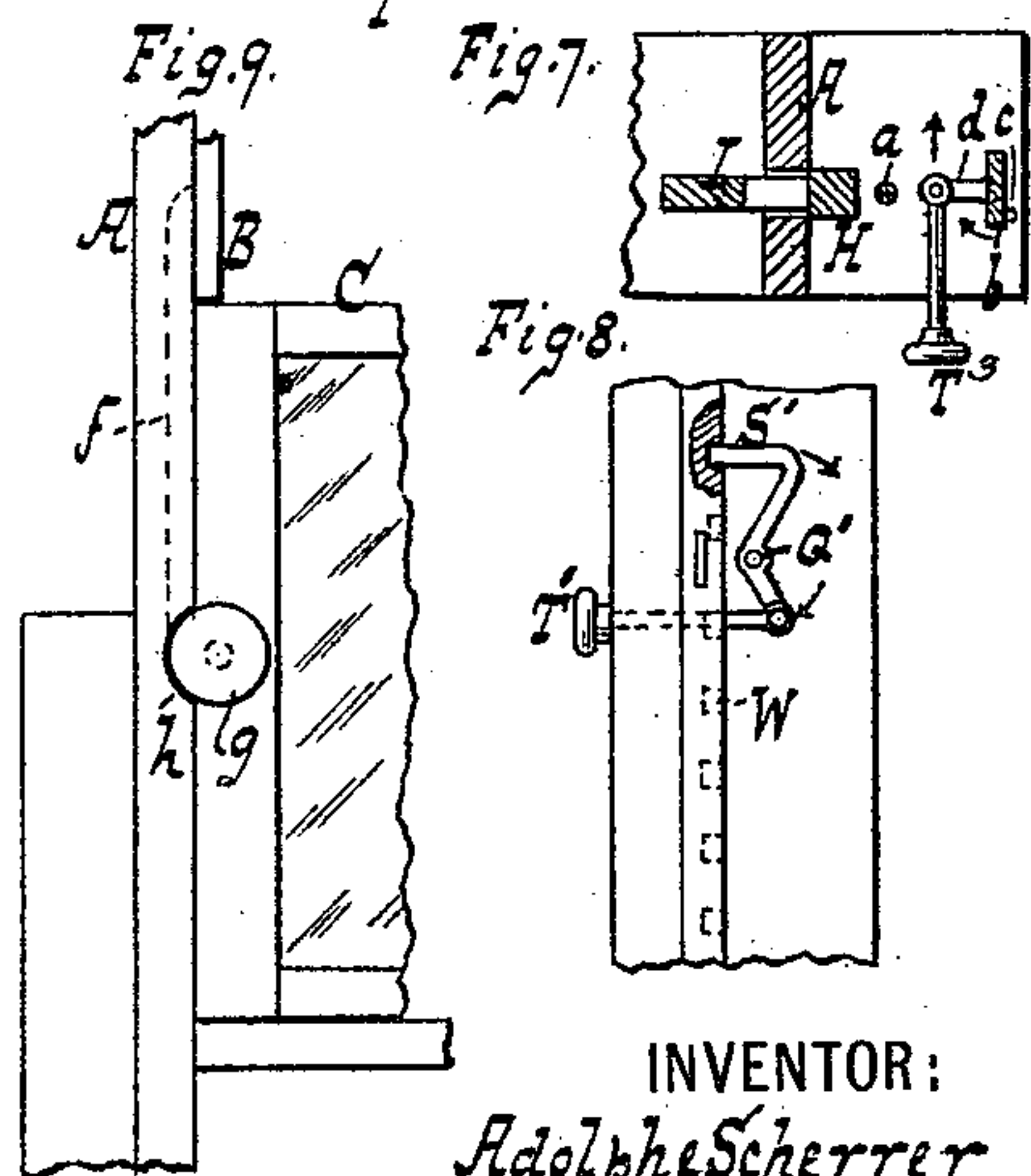
A. SCHERRER.
WINDOW.

No. 538,216.

Patented Apr. 23, 1895.



WITNESSES:
William Miller
Chas. E. Pönnigen.



INVENTOR:
Adolphe Scherrer
BY
Haupt & Haupt
ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

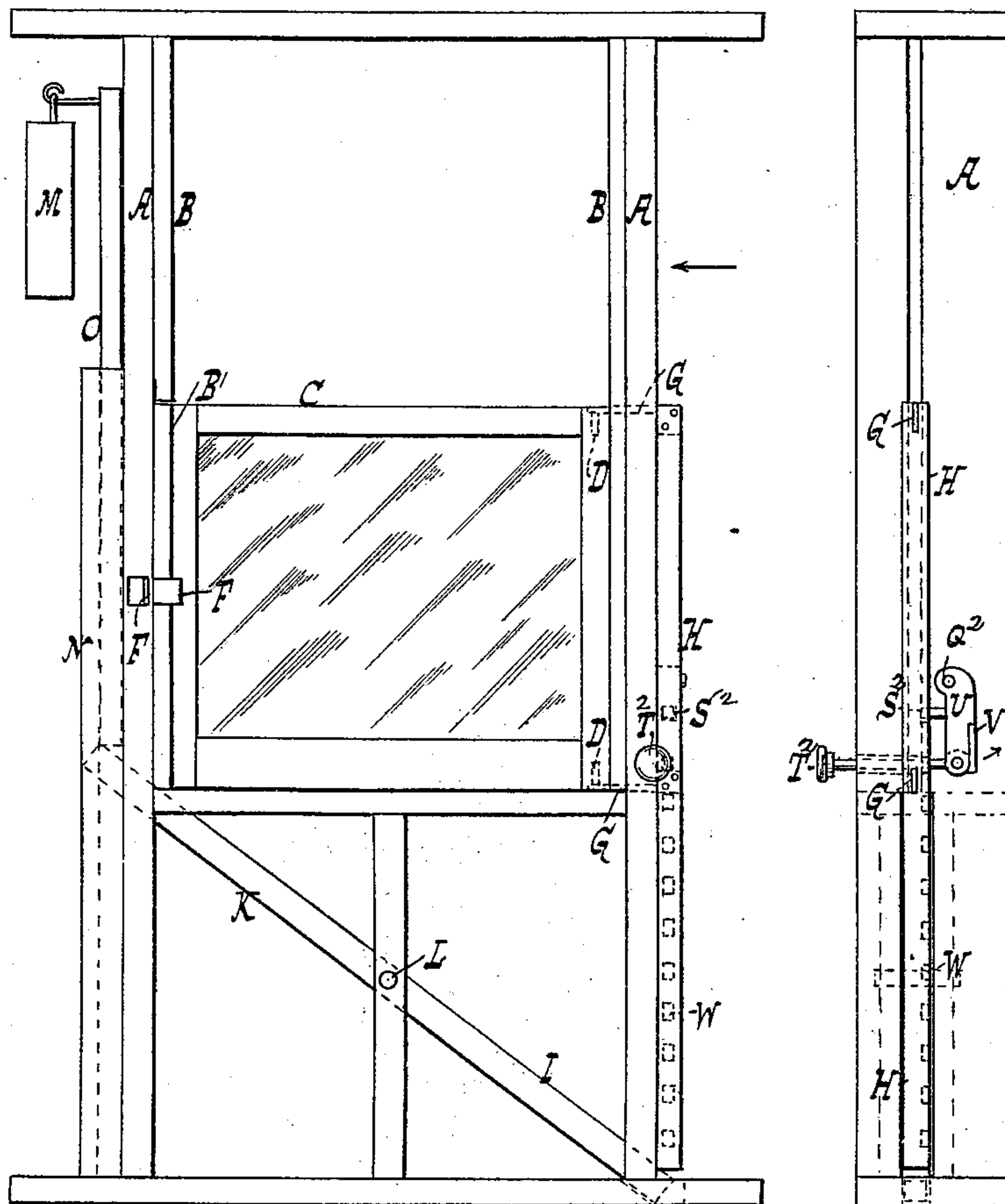
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Fig. 10.

Fig. 11



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UNITED STATES PATENT OFFICE.

ADOLPHE SCHERRER, OF NEW YORK, N. Y.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 538,216, dated April 23, 1895.

Application filed May 24, 1894. Serial No. 512,333. (No model.)

To all whom it may concern:

Be it known that I, ADOLPHE SCHERRER, a citizen of Alsace, Germany, residing at New York, in the county and State of New York, have invented new and useful Improvements in Windows, of which the following is a specification.

The object of this invention is to provide means by which a window sash can be readily or easily actuated and also locked as required and the invention resides in the novel features of construction set forth in the following specification and claims and illustrated in the annexed drawings in which—

Figure 1 is a face elevation of the window. Fig. 2 is an edge view at one side of Fig. 1. Fig. 3 is an edge view at another side of Fig. 1. Fig. 4 is a section along $x x$ Fig. 1. Fig. 5 is a section along $y y$ Fig. 1. Fig. 6 is a face elevation of a modification. Fig. 7 is a section along $z z$ Fig. 6. Fig. 8 is a detail view of a lock or detent. Fig. 9 is a face view of a part of a window frame and sash illustrating one method of detachably holding the sash in its frame. Fig. 10 is a face view of another modification. Fig. 11 is an edge-view of Fig. 10.

The frame A has the guide rails B for the travel of sash C. A part B' of one guide rail is made movable so that when withdrawn the sash C when at said movable part B' can be swung inward on the joint or pivots D as seen in dotted lines in Figs. 4 and 5 so as to have the outer face of the pane readily accessible for cleaning. The rail part B' is held to its engaging position by springs E and can be withdrawn by a handle or tongue F connected to rail part B' and made to extend within reach through a suitable slot or opening in frame A.

The pivots or hinges D carrying the sash C are supported or carried by arms G which arms are connected to a bar H resting on an arm I of lever I K fulcrumed at L. The weight M acting on lever arm K tends to raise arm I with the vertically movable bar H so as to carry the latter up and raise the sash. This weight M running or traveling in guides N can be either connected to or made to act directly on lever arm K as seen in Fig. 1 or a slide or arm O (Fig. 10) running in said guides N

can be made to engage lever arm K and the weight M can be connected to slide or arm O. In either case the effect is to raise the sash or to hold it elevated.

By having the lever I K housed below the sash behind the wainscot said lever will be concealed from view, while the removal of the wainscot or panels will give ready access to the lever. In Figs. 1 and 10 the lever is shown uncovered or exposed.

As the tendency of weight M is to normally hold the sash up or to raise the sash, a lock or detent must be applied if the sash is to be held lowered. A detent or lug P (Fig. 3) swinging on pivot or fulcrum Q can be turned to jam or clamp against the sash or the bar H for locking the sash against the action of weight M. The releasing position of detent or cam P is shown by broken lines (Fig. 3) the detent in releasing position resting against stop or stud R. The detent P can be actuated by a button or handle T extending within reach of the operator and jointed to arm i of bell crank lever i, k , fulcrumed at l and jointed at m to link n connecting with the detent P. A spring suitably applied aids in moving the detent to releasing position and in holding said detent in such releasing position.

Instead of the detent shown in Fig. 3 a detent or tooth S is shown in Fig. 8 mounted on the pivot Q' which tooth is weighted to drop into engagement with one or another of the teeth or recesses W on bar H so as to lock the latter with the sash against motion. A button T' extending within reach is used to release tooth S'; or as seen in Fig. 11 the tooth S² is made to extend from an arm U pivoted at Q² and having a weight V tending to swing tooth S² to the locking position. The button T' which in Fig. 8 is pulled to release tooth S is in Fig. 11 replaced by push button T² to effect said release.

In Figs. 6 and 7 the bar H is connected to but one of the arms G, and said arms have eyes X sliding on a fixed rod or guide a in the window frame. To one of the arms G is secured an extension Y carrying the pivot Q³ while in Figs. 3, 8 and 11 the pivots Q, Q' or Q² are respectively fixed to the window frame. The tooth S³ on pivot Q³ in Fig. 6 is pressed into locking or clamping position against bar

5 *a* by a spring *Z*. The button *T*³ in Figs 6 and 7 when pushed in rotates a plate or flat bar *b* so that said plate presses or swings the tooth *S*³ to its releasing position against the pressure of spring *Z* acting on the tail of tooth *S*³ so that the tooth no longer presses against rod *a* and the window is free to be moved. When the button *T*³ is released the spring *Z* moves the tooth *S*³ to its engaging position and moves the rotary plate *b* into contact with stop *c*, (Fig. 7.) The button is connected to the rotary plate *b* by an arm *d* and said plate has its bearings or pivots *e* in the upper and lower part of frame *A*.

15 In Fig. 9 the movable rail part *B'* is omitted and the frame *A* has a groove *f* in which travels a finger button or rotary disk *g* on the sash. As long as the button or roller is in the groove *f* the sash is held in the window frame but when the button rests at the cut out portion *h* said button can pass out of the groove thus allowing the sash to be swung on hinges *D* out of the frame to the position shown by broken lines in Fig. 4.

25 When constructed in the manner last described the springs and movable rail are entirely dispensed with, rendering the action of the parts more reliable and certain and avoiding all liability of any of the parts becoming deranged or inoperative.

30 What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a vertically movable

bar, a sash connected to and made to rise and fall with the bar, a pivoted lever at one end engaging said bar, and a weight acting on the other end of said lever to depress the same for actuating the latter to raise the sash, substantially as described.

2. The combination of a vertically movable bar, a sash connected to and made to rise and fall with the bar, a lever pivoted intermediate its ends and at one end engaging said bar, and a weight acting on the other end of said lever to depress the same, said lever being housed below the sash, substantially as described.

3. A vertically movable bar and a sash connected to and made to rise and fall with the bar, and a lever made to engage the bar, and a weighted slide made to engage said lever for actuating the latter to raise the sash substantially as described.

4. A window sash combined with an actuating bar, a pivoted detent normally resting out of engagement with said bar, and means for pressing said detent against a side of the bar to hold the sash against motion by the actuating bar, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ADOLPHE SCHERRER.

Witnesses:

WM. C. HAUFF,

E. F. KASTENHUBER.