

H. J. DAVISON.

WINDOW.

APPLICATION FILED MAR. 19, 1909.

937,580.

Patented Oct. 19, 1909.

3 SHEETS—SHEET 1.

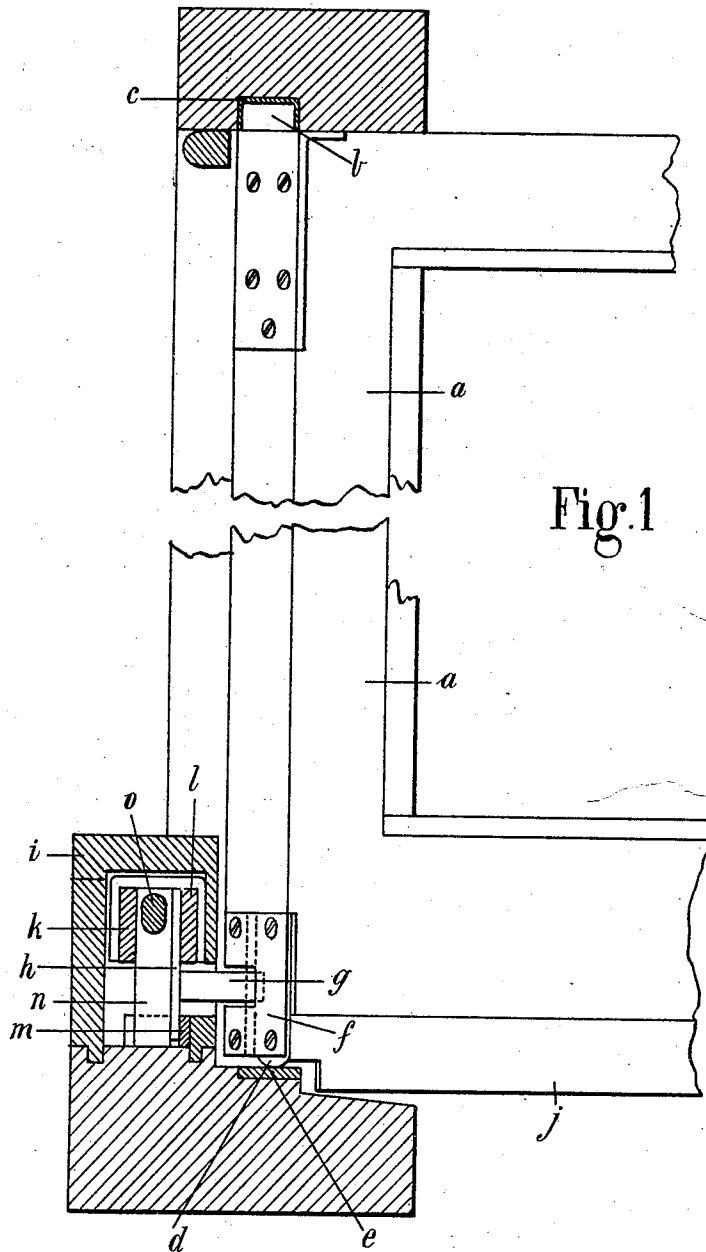


Fig. 1

Witnesses

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Albert Popkins

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per Stewart Mason

Attorneys

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3 SHEETS—SHEET 2.

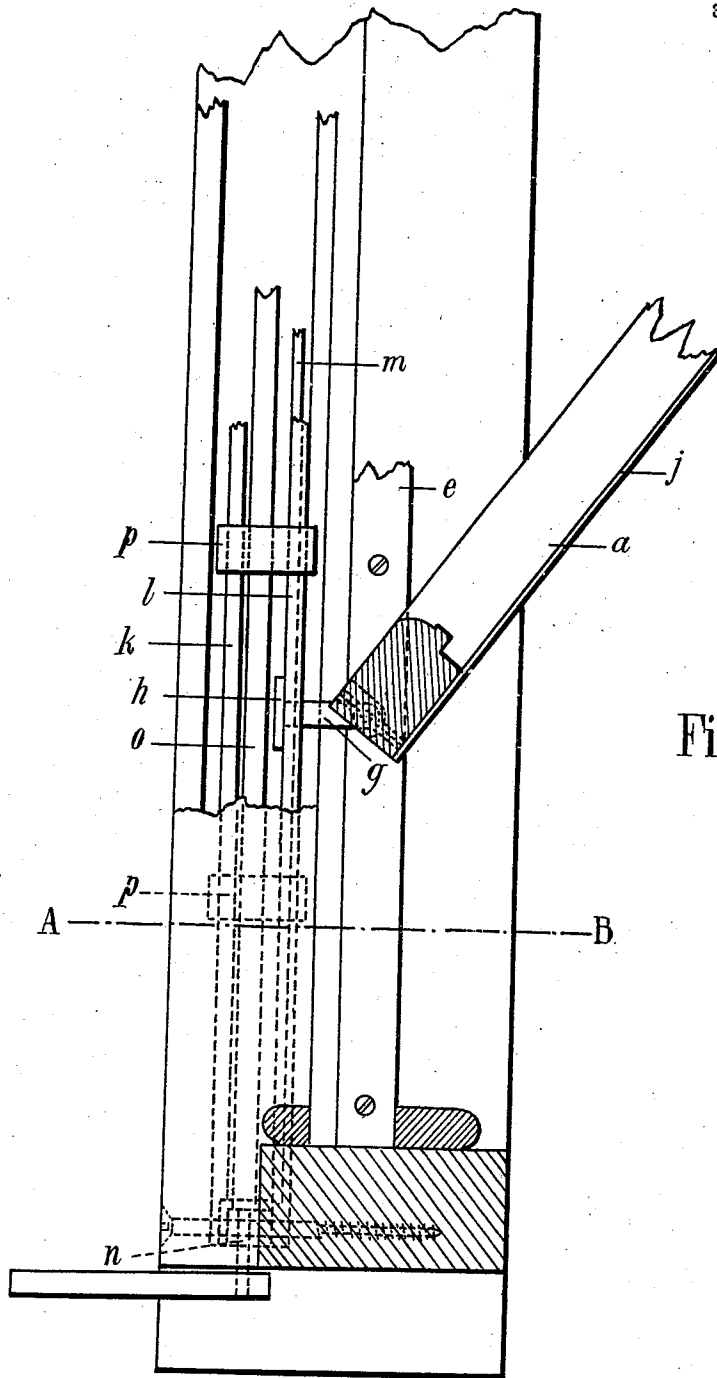


Fig. 2

Witnesses

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3 SHEETS—SHEET 3.

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Fig. 3

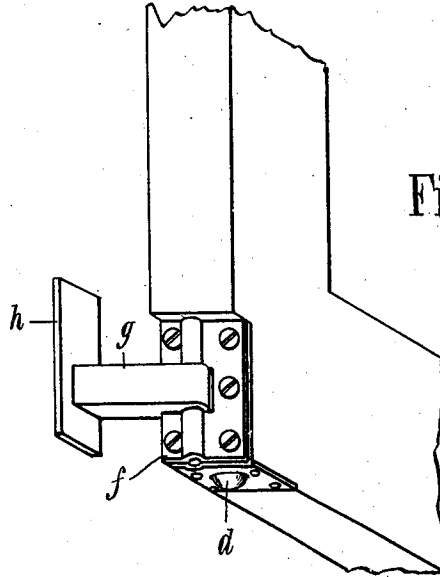


Fig. 4

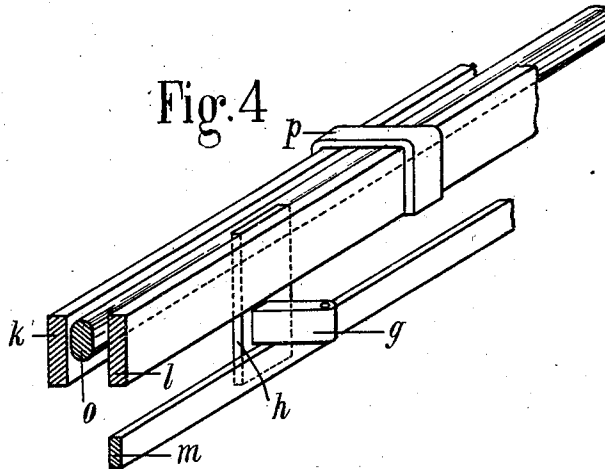
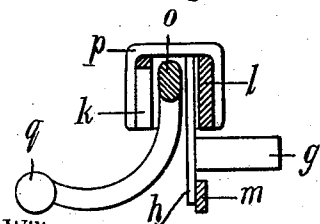
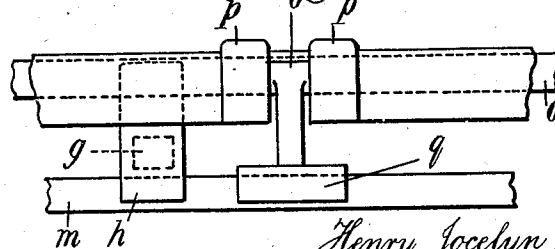


Fig. 6



Witnesses,
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Fig. 5



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UNITED STATES PATENT OFFICE.

HENRY JOCELYN DAVISON, OF MOORFIELD, ENGLAND.

WINDOW.

937,580.

Specification of Letters Patent. Patented Oct. 19, 1909.

Application filed March 19, 1909. Serial No. 484,465.

To all whom it may concern:

Be it known that I, HENRY JOCELYN DAVISON, post-captain, R. N., a subject of the King of Great Britain, residing at Moorfield, Bexhill-on-the-Sea, in the county of Sussex, England, have invented new and useful Improvements in and Relating to Windows, of which the following is a specification.

This invention relates to windows of the known type in which two sashes are hinged together and mounted in a single frame, the hinge line being either vertical or horizontal, and the ends of the sashes opposite to the hinge line being arranged to slide in the frame during the opening or adjusting of the window, so that the two sashes fold together outward and the central hinge line is only within the frame when the window is closed.

It is the object of this invention to provide such windows with improved locking means for holding the sashes in any required position.

The invention is illustrated in the accompanying drawings in which—

Figure 1 shows an elevation, partly in section on the line A—B of Fig. 2, and partly broken away, of one sash and the locking device in connection therewith. Fig. 2 shows a plan view, in section, of part of the frame and one sash, Figs. 3 and 4 are detail views of parts of the device shown in Figs. 1 and 2, Figs. 5 and 6 are detail views showing a modified form of this device.

In the construction shown in Figs. 1 to 4, the window is of the type in which the sashes slide horizontally; each sash *a* has a sliding block *b* of suitable form, with or without anti-friction devices such as rollers, pivotally attached at its upper sliding corner, and adapted to work in a channel piece *c* extending along the top member of the frame. At the bottom sliding corner of the sash is a suitable anti-friction support such as a large ball and socket bearing *d*, which works on a metallic bottom plate *e* in the frame. Attached to the end of the sash close to this support is a plate *f* formed as a hinge for the bar *g* which carries the head plate or block *h*. At the inner side of the frame at the bottom thereof is a box or casing *i* extending the full length of the window and carrying two bars *k* and *l* and a subsidiary bar *m* all suitably attached to two end pieces or supports *n*. These supports also have a bar *o* of oval or elliptical section revolvably

mounted in them, said bar being extended beyond the support at one end and provided with a suitable handle (not shown) for turning it. The two bars *k* and *l* are held against separation at intervals in their length by clasps or shoes *p* which engage over both bars as shown. These clasps may be flexible enough to allow the bars to spring apart somewhat, but they must resist such separation with considerable force.

With this device it will be seen that when the bar *o* is in the position shown in the drawings, it leaves the head piece *h* of each sash attachment free to move longitudinally along the frame so that the sashes can be adjusted to any desired position. When the bar *o* is turned through a quarter revolution its wider parts will press on the one hand against the head pieces *h*, and on the other hand against the back bar *k*. The back bar *o* thus locks the head pieces firmly against the front bar *l* and prevents the sashes from moving until the handle is turned again to return the bar to the position shown. The bar *m* serves as a guide for the lower parts of the head pieces *h* and prevents said head pieces from tilting outward. In long windows also it is preferable to arrange the handle which turns the bar *o* at or near the center of the bar to avoid undue twisting of the latter in use. This modification is illustrated in Figs. 5 and 6 wherein the handle *q* is fixed upon or formed integral with the bar, and extends inwardly through a slot in the box *i*. The bar *k* is then in two parts with a clasp *p* at each side of the point of separation; it will thus be seen that no obstruction is offered to the movement of the head pieces *h* past the central line of the window, while adequate locking can be effected in all positions.

What I claim is:—

1. In a window the combination of two sashes and means hinging them together, a window frame with guiding grooves at the top and bottom thereof, sliding pieces pivotally attached to the sashes near their free ends and working in one of the grooves, a bar of cam section extending across the window frame and rotatable on its axis, a back bar adjacent to said bar of cam section, and so arranged that rotation of the bar of cam section presses said sliding pieces into locking engagement with the frame.

2. In a window the combination of two sashes and means hinging them together, a

window frame with a groove at one end
thereof, sliding pieces pivotally attached to
the sashes near their free ends and working
in the groove, a bar of cam section extending
5 across the window frame at the other end
and rotatable on its axis, bars arranged on
either side of said cam section bar, clamps
resiliently resisting separation of said bars,
other sliding pieces pivotally attached to
10 the sashes near their free ends and working
in the groove between said cam section bar

and one of the bars beside it, so that rotation
of the cam section bar presses said sliding
pieces into locking engagement with the
bar beside them. 15

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

HENRY JOCELYN DAVISON.

Witnesses:

LEONARD EDMUND HAYES,
H. D. JAMESON.