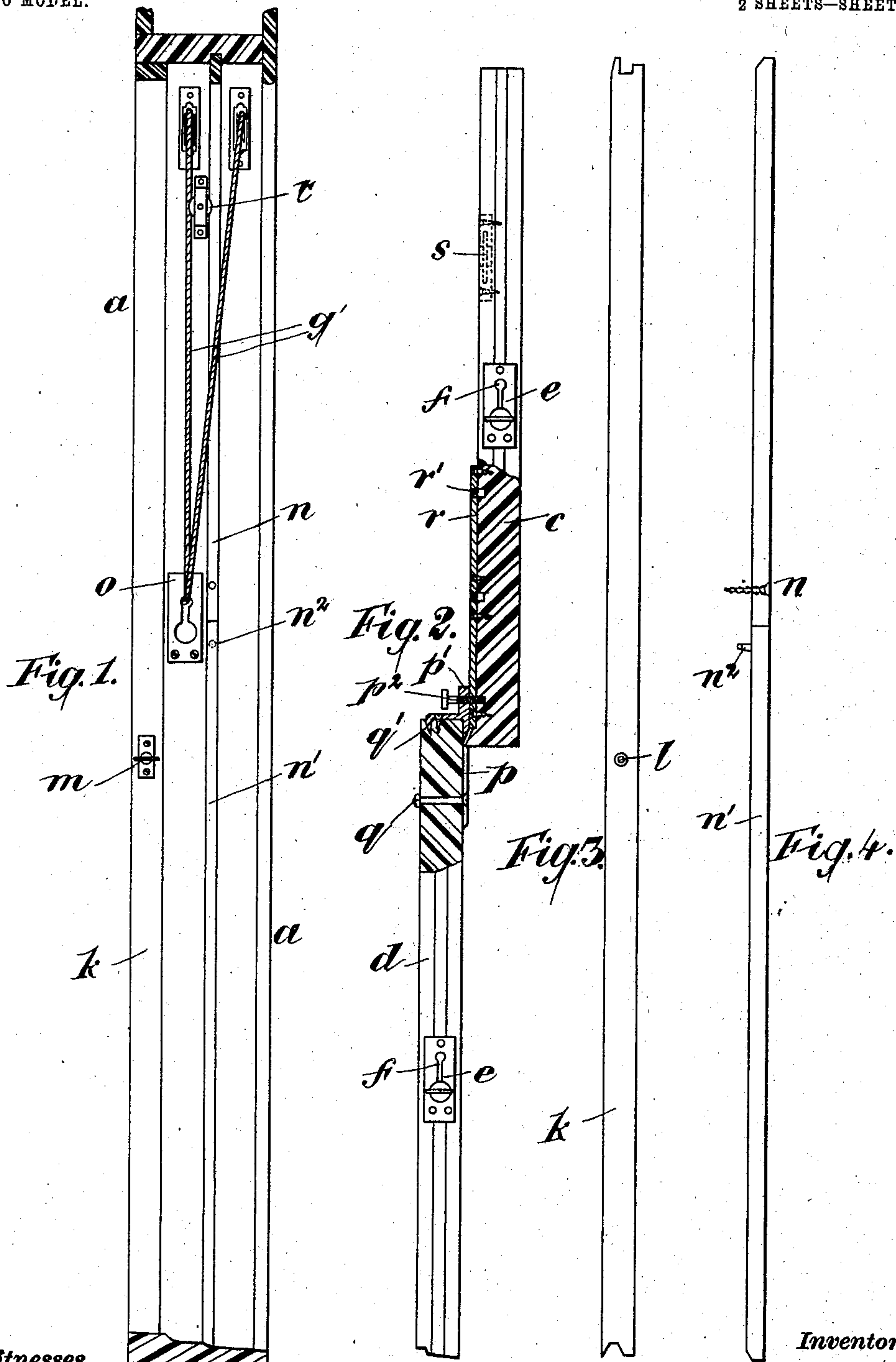


D. G. EDNIE.
WINDOW.

APPLICATION FILED FEB. 16, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses.

H. Mori.
L. Goldman

Inventor.

David Galloway Ednie
by D. Singer

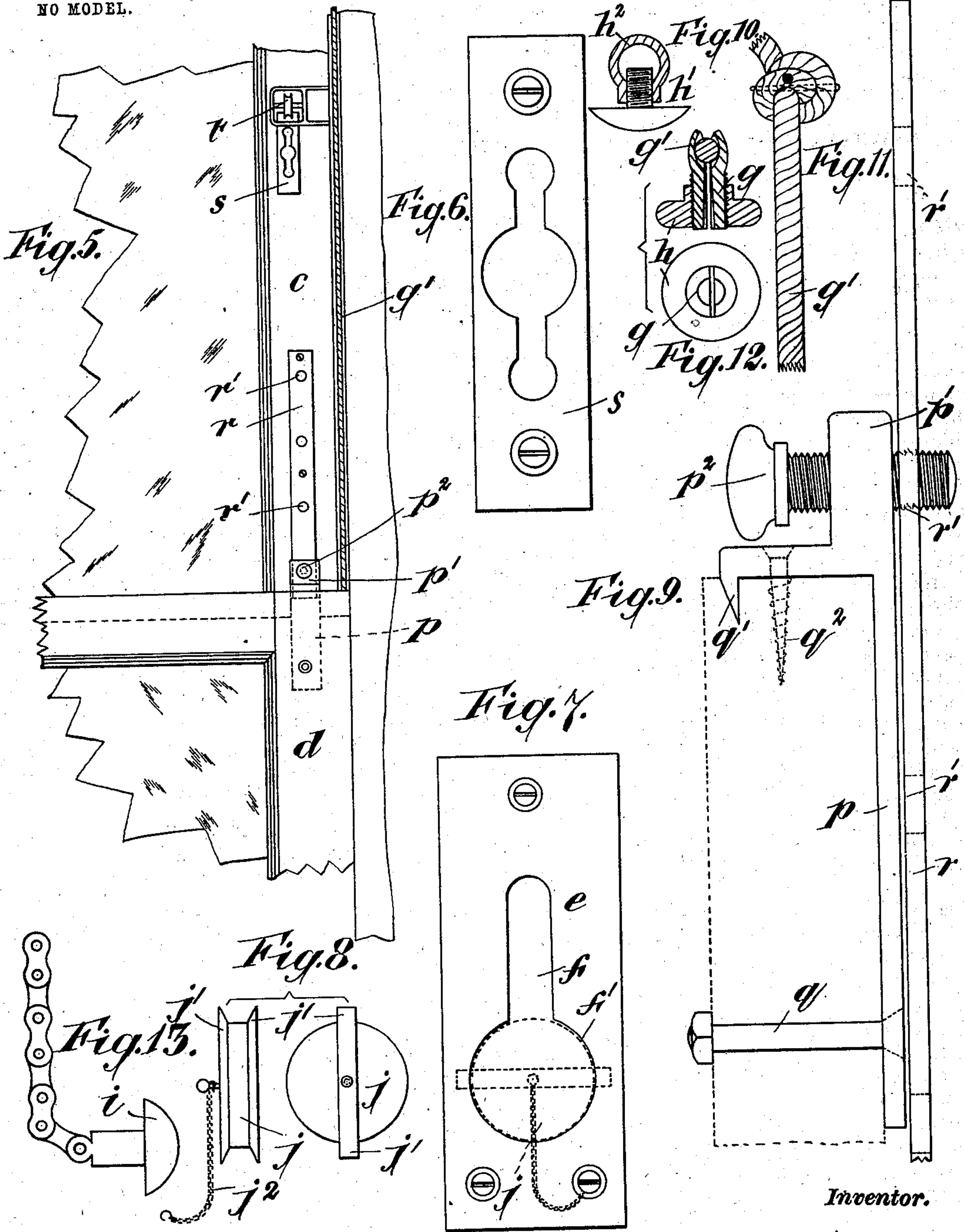
Att'y.

D. G. EDNIE.
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APPLICATION FILED FEB. 16, 1903.

2 SHEETS—SHEET 2.

NO MODEL.



Witnesses.

H. Mon.
L. Baldwin

David Galloway Ednie
by P. Singer

Att'y.

UNITED STATES PATENT OFFICE.

DAVID GALLOWAY EDNIE, OF EDINBURGH, SCOTLAND.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 730,243, dated June 9, 1903.

Application filed February 16, 1903. Serial No. 143,669. (No model.)

To all whom it may concern:

Be it known that I, DAVID GALLOWAY EDNIE, glazier, a subject of the King of Great Britain, residing at 4 Cobden Terrace, Edinburgh, in the county of Mid-Lothian, Scotland, have invented certain new and useful Improvements in Windows, of which the following is a specification.

This invention relates to improvements in double-hung sash and cased windows.

The object of the invention is to so construct such windows that they can be readily opened inwardly for cleaning or other purposes or be entirely removed for painting, repairs, or the like. The arrangement is also such that the sashes can be held partially open for the purpose of ventilation or otherwise.

In order that my said invention may be properly understood, I have hereunto appended two sheets of drawings, whereon—

Figure 1 is a vertical section of the window, showing the pulley stiles and fittings. Fig. 2 is a side view of the upper and lower sashes, part being in section. Fig. 3 is a view of a batten-rod. Fig. 4 shows a method of constructing the parting-beads. Fig. 5 is a front view of part of the upper and lower sashes. Fig. 6 is a view of a pivot-plate. Fig. 7 is a view of another pivot-plate with locking-button shown in dotted lines. Fig. 8 shows a locking-button in front and side view. Fig. 9 is an enlarged side view of the sash-fastening and ventilating arrangement. Fig. 10 is a view of a device for holding the sash-cord. Fig. 11 is a view of a cord knotted at the end. Fig. 12 shows in section and plan another device for holding the sash-cord. Fig. 13 shows a chain with stud at the end.

Referring to the drawings, whereon the same reference-letters wherever repeated indicate the same parts, the sash-frame *a* is of the ordinary construction, with the usual sliding sashes *c d*. Each sash is provided at each side with a pivot-plate *e*, to which the weight or sash cords are removably fastened. As will be seen at Figs. 2 and 7, each pivot-plate is made with a keyhole-slot *f*, into which the end of the weight-cord is removably fastened in any suitable manner, such as by means of a screwed clip *g*, Fig. 12, which grips the cord *g'* and which is screwed into a disk *h*, which latter is of such a size that it can be

inserted into the circular hole *f'* of the slot *f* of the pivot-plate *e*. Of course when the cord works up the narrow part of the slot the disk *h* prevents the cord disengaging itself, or instead of this arrangement the cord may be simply knotted, as shown at Fig. 11, and passed into the slot *f*, or when the sash is hung by chains a stud *i*, Fig. 13, may be fitted on the end of each chain, and this stud can be engaged with the keyhole-slot. In some cases a screw-clip such as shown at *h'*, Fig. 10, may be used. This consists of a stud which is screwed into an eyepiece *h²*, through which the cord is passed. To prevent the cord disengaging itself from the plate *e*, the circular part of the slot may be closed by a button or disk *j*, which is made as shown at Fig. 8, and is simply inserted in place with the bars *j'* vertical and then turned around so that the bars will engage with the plate and lock the button in place, as shown in dotted lines at Fig. 7. The button may be attached to the plate by means of a wire or cord or chain *j²*. The batten-rods *k*, Figs. 1 and 3, may have checked ends, as shown, to fit into corresponding checks in the cross-stiles of the sash-frame, and can further be secured by means of a screw *l* at the center or by a thumb-screw and plate, as at *m*.

The parting-beads *n* are each cut at about three inches above the top of the lower sash. They are miter-jointed at top and bottom and the central part *n'* is removable and is held flush in the pulley-stile with the top part by means of a pin at *n²*.

When the batten-rods and the parts *n'* of the parting-beads are removed or taken out of the way, either sash can be turned or swung around for cleaning or such like purpose on the cords *g'*, which are held securely in the pivot-plates *e*. The studs *i* or disks *h* act as pivots. The knotted-cord arrangement, Fig. 11, is only suitable for windows of light weight. The knot is secured by a pin or pins passed through it.

To bring the sashes right into the room for repairs or such like, the left batten-rod is removed and then the lower sash is pulled in and the buttons *j* are removed from the pivot-plates *e* and the cords also detached. Thereafter the cords are fixed into retaining-plates *o*, (made similar to the plates *e*,) fixed flush in

the pulley-stiles. (See Fig. 1.) When this has been done, the sash can be set aside and repaired. The top sash is likewise manipulated by pulling it down, removing parting-beads, removing the cords, and then fixing them in the plates *o*, (see Fig. 1,) whereupon the sash can be laid aside. The sashes when removed can of course be taken to any suitable place for repair. When the sashes are being fitted in place again, the cords are disengaged from the plates *o* and fitted into the pivot-plates *e* of the sashes. I also provide the window with a sash-fastening and ventilating arrangement, as shown at Figs. 2, 5, and 9. This arrangement consists of a plate *p*, fixed to the bottom sash by means of a bolt *q*, tang *q'*, and screw-nail *q''*. This plate has a lug *p'* with tapped hole in it through which a locking-screw *p''* is passed. This screw can be made to enter, as desired, any one of a series of tapped holes *r'* made in the plate *r*, which is fastened to the face of the upper sash. The plates *p r* may be fixed at only one side of the window, as shown, or on both sides. As the sashes are moved relatively with one another the screw *p''* can be made to engage with one or other of the holes *r'*, and thereby hold the window partially open or not, as desired.

A cord (or cords) may be fixed to the upper sash for pulling it up or down by means of keyhole-slotted plates *s*, one at each side

of the sash, to which knotted ends of the cord (or cords) are engaged in the same manner as with the pivot-plates *e*. The cord (or cords) is passed over pulleys *t*, fastened at the upper part of the pulley-stiles. The knotted ends of the cord (or cords) can be easily disengaged from the plates *s* when desired.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination, a window-frame, a sliding sash fitted in the frame, weight-cords for the sash, keyhole-slotted plates *e* fitted to the sides of the sash, means on the ends of the weight-cords for pivotally securing said cords to the plates and buttons *j* for locking the ends of the cords in the plates substantially as described.

2. In combination, a window-frame, a sliding sash fitted in the frame, weight-cords for the sash, keyhole-slotted plates *e* fitted to the sides of the sash, screw-clamps *h' h''* on the ends of the cords for pivotally securing said cords to the plates and buttons for locking the ends of the cords in the plates, substantially as described.

Signed at Glasgow, Scotland, this 30th day of December, 1902.

DAVID GALLOWAY EDNIE.

Witnesses:

WILLIAM GALL,
H. D. FITZPATRICK.