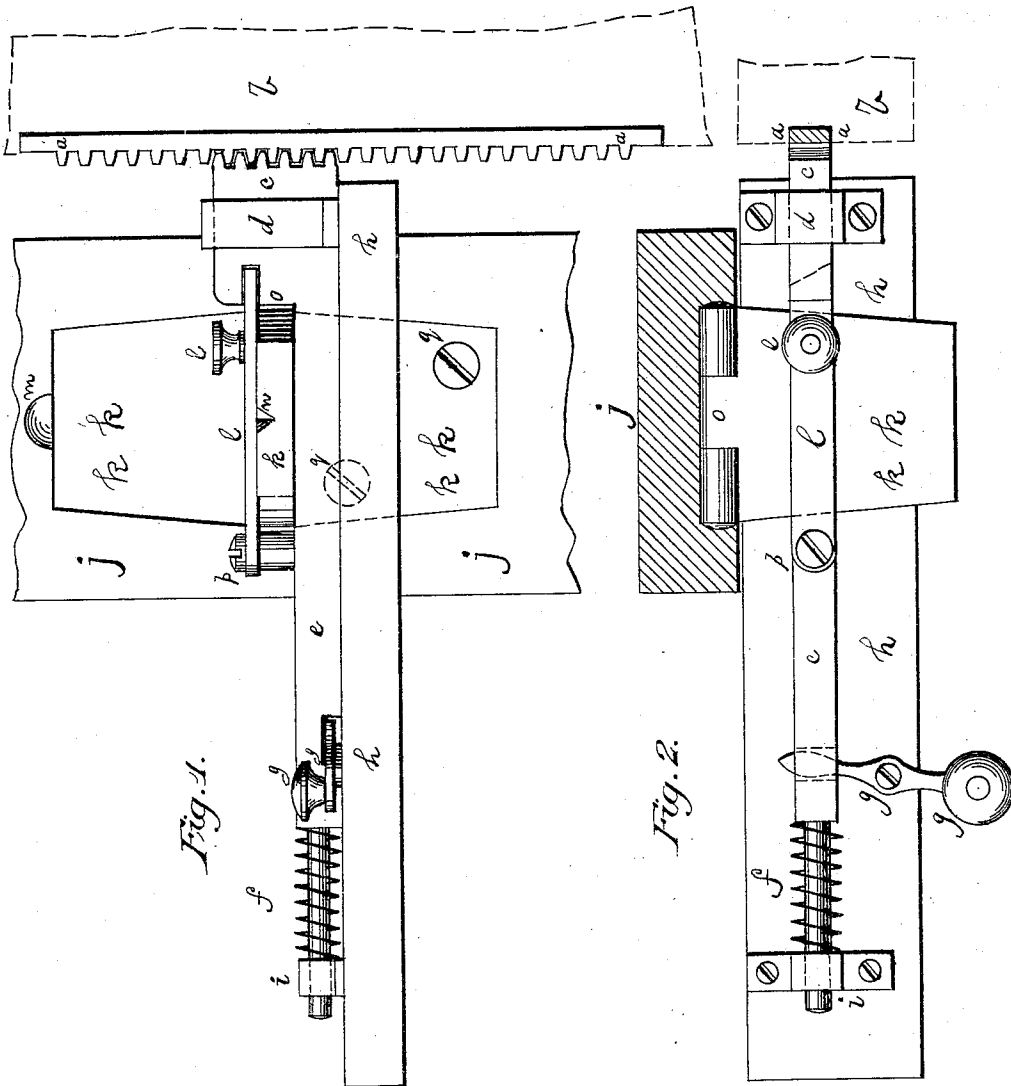


A. N. RANKIN.

Fasteners for the Meeting Rails of Sashes.

No. 153,113.

Patented July 14, 1874.



Witnesses:
J. W. Speaks Jr
J. W. Kinney

Inventor:
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UNITED STATES PATENT OFFICE.

ANDREW N. RANKIN, OF NYACK, NEW YORK.

IMPROVEMENT IN FASTENERS FOR THE MEETING RAILS OF SASHES.

Specification forming part of Letters Patent No. **153,113**, dated July 14, 1874; application filed June 3, 1874.

To all whom it may concern:

Be it known that I, ANDREW N. RANKIN, of the village of Nyack, county of Rockland, in the State of New York, have invented an Improvement in Window-Fasteners, which I call the "Excelsior Window-Fastening."

The object of my invention is to construct a fastening for the sashes of windows, so that they are both thereby securely fastened, either when both sashes are closed, or when one of them is partly open and the other one is closed, or when both sashes are partly open.

The following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said invention, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim and desire to secure by Letters Patent.

The present invention consists in inserting a rack into the frame of a window, to the side of the pulley-cord and out of its way, sunken level with the face of the frame of the window, so as not to interfere with the movement of the lower sash when the same is being hoisted or lowered, the rack being firmly secured, by means of countersunk screws, to the frame of the window. Upon the top of the upper frame of the lower sash is fastened a bolt, with its face ribbed, corresponding to the teeth in the aforesaid rack, and which ribs, interlocking with the teeth of said rack, firmly hold the lower sash in place, the bolt being pressed forward by a spring properly placed for that purpose. In the side or face of the frame of the upper sash there is placed—sunken even with the surface of the sash-frame, so as not to interfere with the movement of either sash when the same is being hoisted or lowered—a plate or plates, a ring or rings, as many as may be needed, hung or joined with its own counterpart by a hinge, one part of said plate or ring to be securely fastened to said upper sash and the other part of said plate or ring to be free to work upon the joint or hinge. When the part of said plate or ring which is free to work upon the joint or hinge is turned at about right angles with the frame of the sash to which it is at-

tached, it enters into a cavity or inclosed space prepared to receive it in the upper face of the bolt, and is covered by a sliding bar, which firmly holds it in place, thus securely fastening the upper sash to the lower sash; and, as aforesaid, the lower sash is firmly held to the rack by the ribbed face of the bolt interlocking with the teeth of the rack, and the rack being securely fastened to the frame of the window, both sashes are immovable to those upon the outside of the building.

Figure 1 is a partial elevation of device. Fig. 2 is horizontal section of device.

In the accompanying plate of drawings, *a a* represent the rack, sunken into the frame of a window. *b* represents the frame of a window. *c* represents the head of the bolt, with its ribbed face. *d* represents the loop which fastens the head end of the bolt to the top of the upper frame of the lower sash. *e* represents the extension of the said bolt along the top of the upper frame of the lower sash. *f* represents the spring, in this exhibit a spiral; but I do not confine myself thereto, but claim the right to use any other suitable device for holding or pressing the bolt forward into the rack. *g g* represent the lever, with its knob for a handle and its screw for a fulcrum, for withdrawing the bolt from the rack, when desiring to raise or lower either sash. *h* represents the top of the upper frame of the lower sash, upon which the bolt is securely fastened by the loop *d*, as aforesaid, at the head end. *i* represents the loop which fastens the other end of the bolt to the top of the upper frame of the lower sash. *j* represents the face of the frame of the upper sash. *k k* represent the hinged plate or ring, to be sunken into the face of the upper sash-frame even therewith. The moving part of said plate or ring, when placed at right angles with the said face of the upper sash-frame, to fasten the upper sash to the lower sash, is placed in the cavity or inclosed space upon the upper surface of the bolt and held there by the aforesaid bar, as is shown by *k* in Fig. 1, and by *k k* in Fig. 2. *l l* represent the bar and its handle, which securely hold in place the plate or ring of the upper sash when the two sashes are being held or fastened together. *m* represents a finger-opening in the face of the frame of the

upper sash. *n* represents a somewhat similar finger-opening in the movable part of the said plate or ring. *o* represents the hinge or joint connecting the two parts of the plate attached to the upper sash. *p* represents the screw, serving the double purpose of fastening and hinge to the bar upon the upper surface of the bolt, for fastening to the bolt the plate or ring of the upper sash. *q q* represent the screws, countersunk, which hold the plate or ring securely to the face of the upper sash-frame.

I claim as my invention—

The combination of the countersunk rack *a*; the bolt *c*, with its face ribbed, fitting into the rack; the spring *f*, holding the bolt securely

to the rack; the lever *g* to free the bolt from the rack when desired; the cavity or inclosed space in the upper surface of bolt to receive the plate or ring from the upper sash; the movable bar *l* to hold the plate or ring to the bolt, and the plate or plates, ring or rings *k*, countersunk, as described, fastened to the face of the upper sash-frame, all arranged, constructed, and operating substantially in the manner described and shown, for the purpose set forth.

ANDREW N. RANKIN.

Witnesses:

J. W. SPEAKES, Jr.,

J. MCKENNEY.