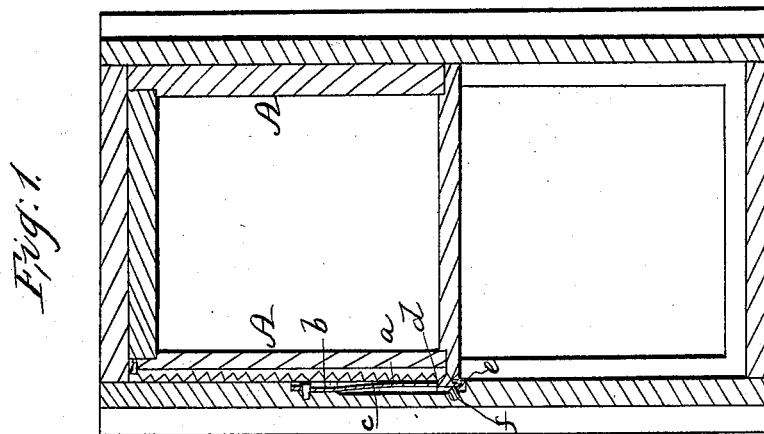
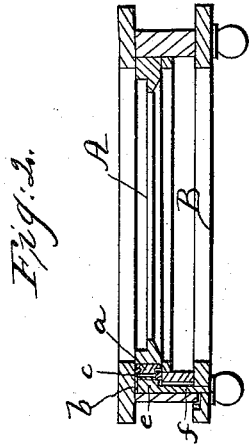


B. Bray,
Sash Fastener.
N^o 54,286. Patented May 1, 1866.



Witnesses:

Wm. P. Halsey
Samuel W. Piper

Inventor:

Benjamin Bray,
by his attorney
R. V. Hoady

UNITED STATES PATENT OFFICE.

BENJAMIN BRAY, OF METHUEN, MASSACHUSETTS.

IMPROVEMENT IN SASH-FASTENERS.

Specification forming part of Letters Patent No. 54,286, dated May 1, 1866.

To all whom it may concern:

Be it known that I, BENJAMIN BRAY, of Methuen, of the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Windows; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a vertical section, and Fig. 2 a transverse and horizontal section, of a window frame and sash as provided with my invention.

The purpose of the said invention is not only to dispense with the usual cords and balancing-weights and pulleys of a sash, but to enable such sash to be raised and maintained at any desirable altitude within the window-frame, as well as to be fastened either when closed or when raised or lowered to any position within the frame. My invention is applicable to either sash of the two contained in the frame.

In carrying out the said invention I fix to or into the vertical edge of the sash A or B a toothed rack, *a*, each tooth of which is made triangular in transverse section. I also affix to the contiguous side of the window-frame and in a recess, *b*, formed therein a spring, *c*, provided at its free extremity with a triangular tooth, *d*, to enter the space between any two next adjacent teeth of the rack, the spring at or near its other end being fastened to the window-frame. In rear of the spring there is a projection, *e*, from a short shaft, *f*, which is

arranged in the window-frame and provided with a knob, the same being not only so that when the shaft is turned so as to bring the projection in contact with the spring the latter will be prevented by such projection from being forced back so as to liberate its tooth *d* from the rack, but so that when the shaft is revolved so as to carry the projection sufficiently away from the spring the latter may be free to be forced back so as to liberate the tooth *d* from the rack. The spring should be stiff enough to prevent the weight of the sash from throwing the tooth out of the rack. Thus it will be seen that by the action of the spring and its tooth with the rack the sash will be retained at any altitude within the window-frame in which it may be; also, that in the application of force to the sash for the purpose of either raising or depressing it the triangular tooth of the rack and spring will cause the tooth of the spring to be thrown out of the rack, so as to liberate the sash and allow it to move in the frame.

I claim—

The combination of the triangular-toothed rack, the triangular-toothed spring-catch, and the locking device of the said catch, constructed, arranged, and applied to a window sash and frame substantially in the manner and for the purpose as hereinbefore specified.

BENJ. BRAY.

Witnesses:

R. H. EDDY,
F. P. HALE, Jr.