

J. J. Crooke,
Sash Fastener.

N^o 14,600.

Patented Apr. 8, 1856.

Fig 3.

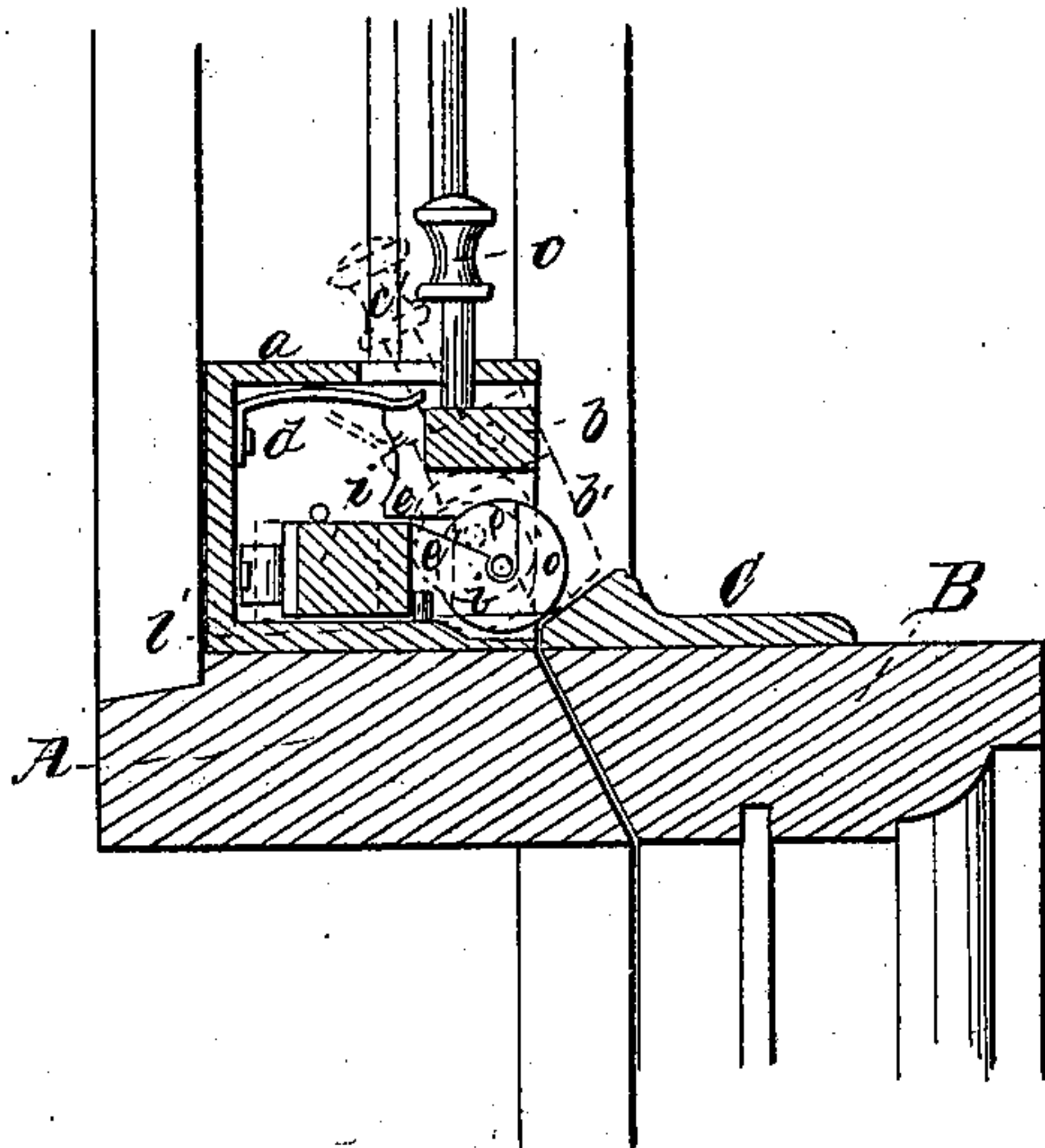


Fig 2.

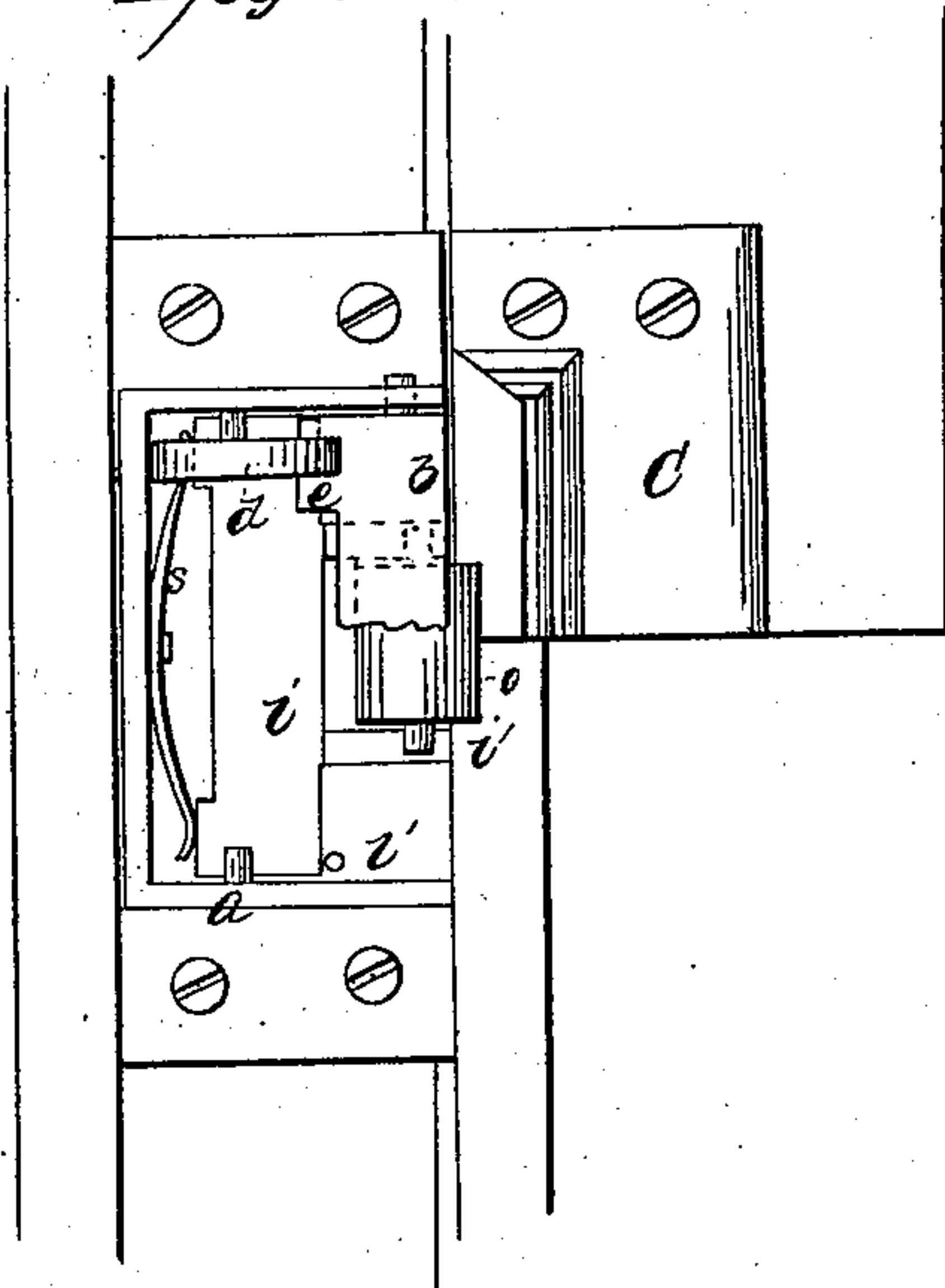
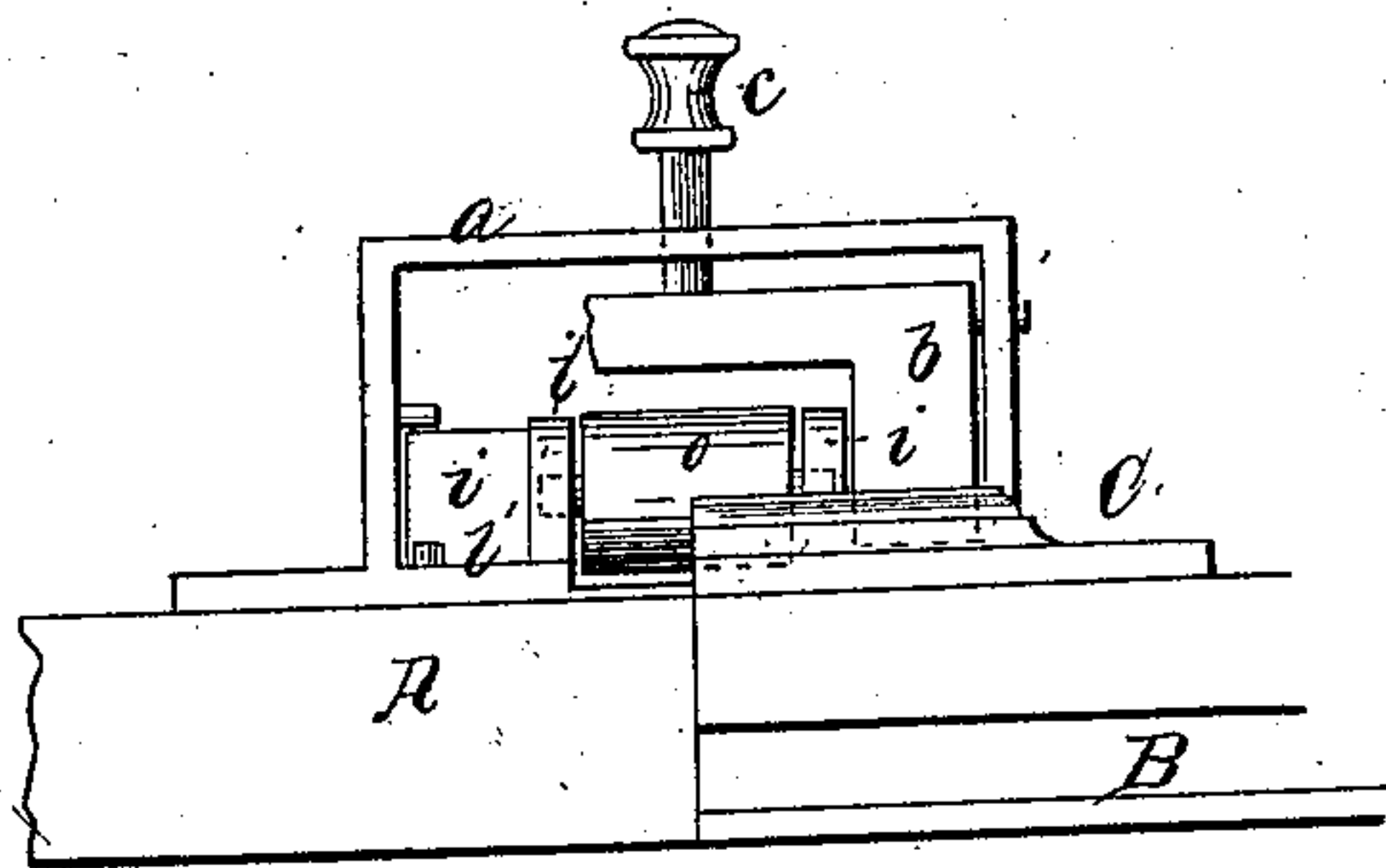


Fig 1.



UNITED STATES PATENT OFFICE.

JOHN J. CROOKE, OF NEW YORK, N. Y.

SASH-FASTENER.

Specification of Letters Patent No. 14,600, dated April 8, 1856.

To all whom it may concern:

Be it known that I, JOHN J. CROOKE, of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Sash-Fasteners; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being made to the annexed drawing, making a part of this specification, in which the figures are fully described herein, and similar letters indicate similar parts throughout.

My invention is for certain improvements in self operating sash fasteners. In all the old forms of these fasteners which effect the self locking of the window by a latch or spring catch arrangement the opening of the window is necessarily performed at some inconvenience inasmuch as both the hands of the operator are required for the purpose, that is to say, one hand must hold the spring catch back while the sash is being raised with the other. In the case of a heavy sash or those not well counterbalanced or which may stick from swelling, freezing, or other cause, the inability to employ the force of both hands at once to raise the window becomes peculiarly an objection, and not infrequently two persons are required to accomplish it. My improvement obviates all these objections while it forms at the same time a self operating fastener of especial strength, security and durability.

The fastener consists of a metal box (*a*) having one side open, which side when the article is screwed on the upper half of the sash faces inward, as in Figure I which exhibits a front view. In this front opening is a bolt (*b*) with two arms, of which only one is represented in Fig. I, the other being shown as broken off for the sake of rendering the figure clearer. This bolt does not slide but is hinged or pivoted at its top to the ends of the box as shown. On the top of the cross piece of said bolt is a knob (*c*) which projects above the box, so that by vibrating this knob the lower ends of the bolt will project beyond the line of the box (*a*) or be brought back parallel with its open edge. When the bolt is projected as shown in the duplicate line (*b'*) Fig. III it is in the position by which the opposite or lower sash is fastened down as clearly seen in said figure, and the throwing of the bolt outward by a spring constitutes itself fastening quality,

but this of itself would be no better than the old kinds of spring latches.

The improved part consists in a method of locking back the bolt when the window is to be raised, and effecting the unlocking thereof by the shutting of the window operating through the intervention of the same mechanism. At (*d*) Figs. II and III are the springs which throw out the legs of the bolt. These it will be seen press upon the top part and back of the pivot on which the bolt hangs, and which here is made to project, and as shown at (*e*) in the side view Fig. III. The object of this projection is to effect the catching back of the bolt upon the disengaging piece when the window is to be raised. This piece is constructed as follows: It consists of a bar (*i*) lying across the box, back of the bolt. Two arms project forward from the middle part and pass between the legs of the bolt as shown at (*i'*). The top edges of these arms are beveled sloping downward toward the front, as shown in the side view Fig. III and terminating near the end in a half round cavity, which forms the bearings for the axis of a roller, represented in the several figures at (*o*). The bar (*i*) is capable of sliding back and forth but is always kept pressing toward the front or open side by a spring (*l*) at its back, the stop (*l'*) limiting the extent of its forward motion.

The operation will be as follows: In Fig. III the two parts of the sash A and B are in connection as when the window is closed, and the lines (*b'*) represent the bolt (*b*) when locked, the ends abutting upon the metal guard plate C. Take hold of the knob (*c'*) and pull it toward you into the position (*c*). The bolt will then stand vertically and clear of the sash head B, and to keep it in this position it will be seen that the heel of the projection (*e'*) in the duplicate figure has been brought to (*e*) where it will be resting upon the top of the bar (*i*). The bar (*i*) will have been pushed back by (*e*) in the act of turning the bolt, so that the moment the projection gets above the top it springs forward and under thereby forming a catch to hold it in place. The window can now be raised, but in doing so the roller (*o*) will interfere and this must be got out of the way. As the plate C strikes this roller as in Fig. III it will be lifted out of its bearings and will then retreat backward, the axis

sliding up the inclined planes of the arms
(*i*) as shown at (*o'*). The moment that the
sash rail gets past, the roller slides back
again to its former position; therefore in
5 shutting the window the plate C must strike
the roller, and as the blow is downward it
cannot get out of the way as in the former
manner, therefore it is pushed back and thus
drives the cross bar (*i*) against its spring
10 (*l*) which operation it will be seen relieves
the projection (*e*) and the bolt springing
out locks down the window. Thus it will
be seen that the object of the retreat of the
roller up its inclined plane in raising the
15 window is to prevent it disengaging the
bolt, whereby both hands may if necessary
be used for the raising, at the same time that
the window is always sure to be secured
by the act of shutting down as described.

As a substitute for the roller the arm (*i'*) 20
(or a tongue might be used) which could
rise out of the way by a hinge, and the
top being beveled would be driven back on
the return of the sash, but this would have
to project so far as to insure meeting the rail 25
of loose as well as closely fitting windows,
and the motion would be so great as to
render this an inferior substitute for the
roller described.

What I claim is—

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Combining with the bolt of a self-acting
window latch an engaging and disengaging
catch constructed and operated substantially
as described herein.

JOHN J. CROOKE.

Witnesses:

S. M. MAYNARD,
THOMAS DUCY.