

(No Model.)

R. D. CURTISS.
SASH FASTENER.

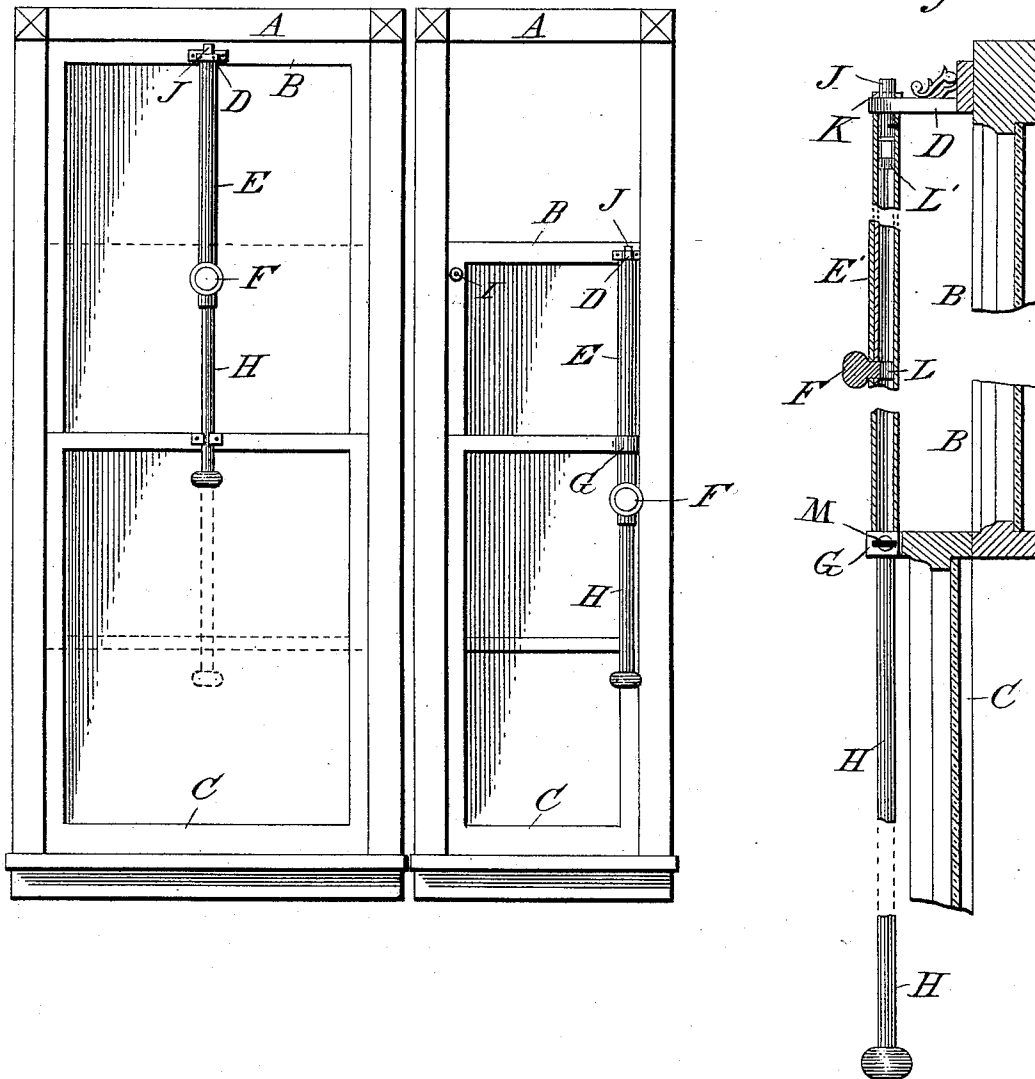
No. 429,167.

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Fig.3.

Fig.1.

Fig.2.



Witnesses:
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UNITED STATES PATENT OFFICE.

ROSMAN D. CURTISS, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
JOHN C. CROW, OF SAME PLACE.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 429,167, dated June 3, 1890.

Application filed November 30, 1889. Serial No. 332,170. (No model.)

To all whom it may concern:

Be it known that I, ROSMAN D. CURTISS, a citizen of the United States, and a resident of Chicago, county of Cook, and State of Illinois, have invented new and useful Improvements in Devices for Opening and Closing Window-Sashes, of which the following is a specification, reference being had to the accompanying drawings, illustrating the invention, in which—

Figure 1 is an elevation of a window frame and sashes with my devices for operating the sashes in position, as when the top sash is lowered. Fig. 2 is an enlarged vertical transverse section of a portion of two window-sashes with a broken elevation of my device attached thereto. Fig. 3 is a face view of a window-frame, the sash therein, and my device attached.

This invention relates to devices for opening and closing window-sashes; and it consists, in brief, in a suitable pipe attached to the upper sash and a rod telescoped into it and provided with an annular groove near its upper end, whereby a spring-catch on the lower portion of the pipe engages the rod, so that when it is pulled down the upper sash will be brought down with it. After the sash has been lowered the spring-catch is released, so that the rod may be pushed into the pipe and not be in the way of the glass in the lower sash. A guide is secured to the meeting-rail of the lower sash, and it is of suitable size for the pipe to slide in, and serves also as a support for the sliding rod, and a set-screw is tapped into the guide to bear on the pipe or rod, and thus hold the sash in any desired position, as hereinafter fully specified and shown.

A represents the inside of a window-frame, and B C are the sashes therein.

E represents a pipe of suitable length and strength, whose upper end is plugged with a pin J, which passes through a bracket D, secured to the upper portion of the upper sash, a pin K holding the pin J in place. A spring E' is attached to the pipe E, and on its free end is a stop F, which projects through one side of the pipe and into an annular groove

L in the rod H, and when the rod is drawn farther out of the pipe E it may project into an annular groove L', so as not to be wholly withdrawn. A knob is affixed to the lower end of the rod H for the convenience of operating it.

At Fig. 3 the device is attached to the middle portion of the sash. At Fig. 1 it is attached to the side of the sash. Fig. 2 is also represented as the device attached to the middle portion of the upper sash.

It will be understood that the lengths of the rod and pipe will be governed by the distance which the sash is to move, and that the guide G should be formed to allow the pipe to slide therein. A thumb-screw M, Fig. 2, is tapped into the guide G to support the sash in any desired position.

The device in practice serves well the purpose without liability of breakage, as is the case when the ordinary pole is employed. Another advantage is, the device is always in place and not liable to get out of order, and at the same time it is comparatively inexpensive. I is an anti-friction wheel on the sash.

It has been the custom to attach a single rod to the top portion of the top sash, extend it down past the meeting-rails and lock it to such rails to hold the sash in the various positions required; but this rod at all times when the upper sash is lowered projects down over the glass of the sash below, and by reason thereof is objectionable, especially when the lower sash contains but one light of glass, as is the custom to make them. A rod provided with notches or teeth has also been attached to the top sash and arranged to be locked to the meeting-rails of the sash. There is the same objection to this rod as to the one mentioned—that is, it cannot be employed on two-light windows unless it projects over the lower glass when the upper sash is lowered. In contradistinction my device is two-part, and the upper sash can be lowered a distance equal to the space between the meeting-rails and the lower end of the pipe E without any portion except the knob on rod H projecting below the meeting-rails, and such a distance is at all times sufficient for ventilation.

It is proper to state that a sash is operated much more easily when the device is attached to the middle portion of the top rail.

I claim and desire to secure by Letters Patent of the United States—

An improvement in devices for raising and lowering window-sash, consisting of the short pipe E, attached to the top rail of the upper sash and provided with a spring-catch F E',

in combination with a rod H, provided with 10 annular grooves on its periphery and operating in the short pipe, and a guide on the meeting-rail of the lower sash, substantially as and for the purpose specified.

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Witnesses:

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