No. 837,875. PATENTED DEC. 4, 1906.

J. B. McKEOWN.

AUTOMATIC WINDOW CONTROLLING ATTACHMENT.

APPLICATION FILED FEB. 14, 1906.

Fig. 1,

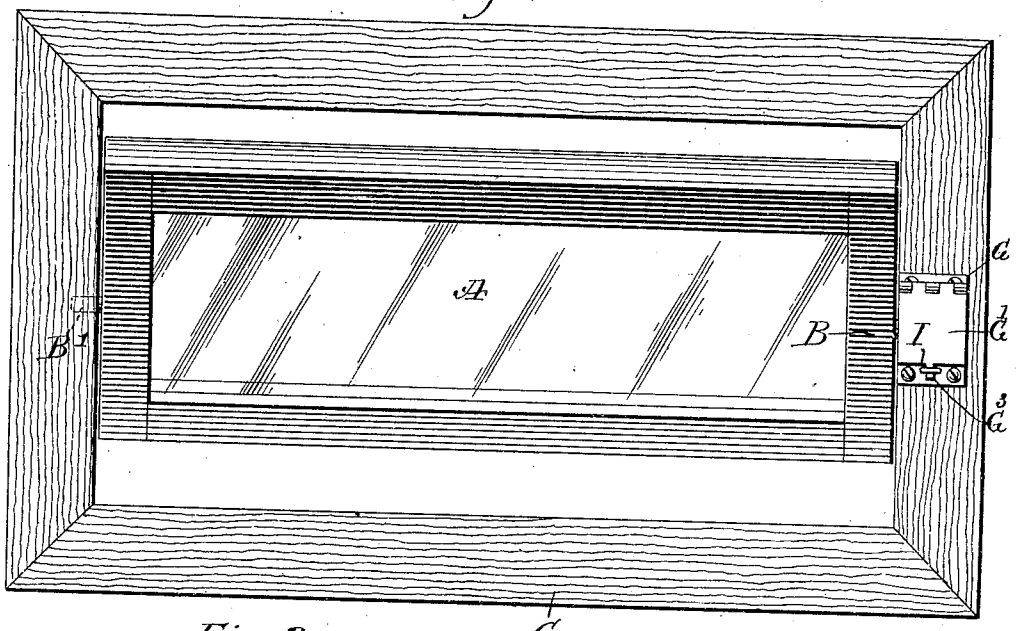


Fig. 2,

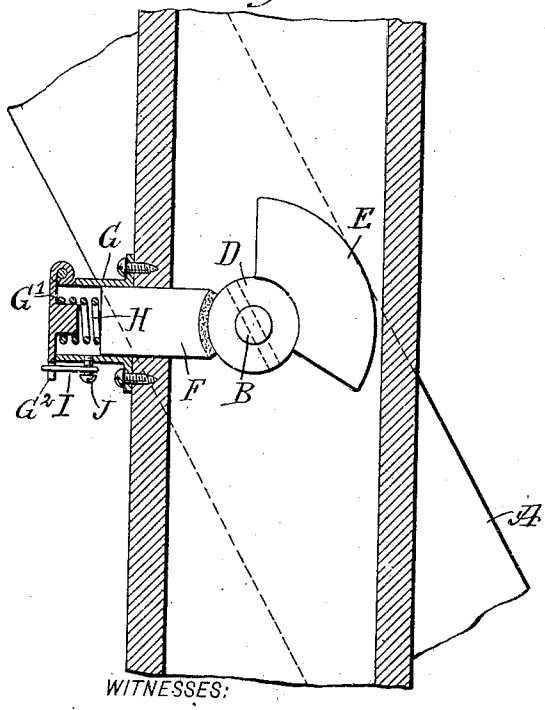


Fig. 3,

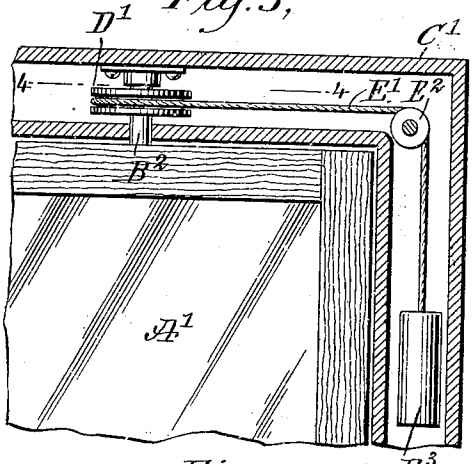


Fig. 4,

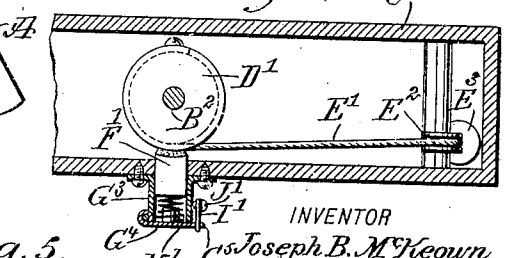
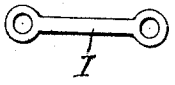


Fig. 5.



WITNESSES:

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AUTOMATIC WINDOW-CONTROLLING ATTACHMENT.

No. 837,875. Specification of Letters Patent. Patented Dec. 4, 1906.

Application filed February 14, 1906. Serial No. 301,005.

To all whom it may concern.

Be it known that I, JOSEPH B. McKEOWN, a citizen of the United States, and a resident of Union Hill, in the county of Hudson and State of New Jersey, have invented a new and Improved Automatic Window-Controlling Attachment, of which the following is a full, clear, and exact description.

The invention relates more particularly to windows in factories, stores, and other buildings; and its object is to provide a new and improved automatic window-controlling attachment arranged to allow moving the window-sash into an open position and holding it therein for ventilating and like purposes and to permit the sash to move into a closed position in case of a fire to shut off the draft, and thus prevent the fire from spreading.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the improvement as applied to a window having its sash mounted to swing on a horizontally-disposed axis. Fig. 2 is a transverse section of the same. Fig. 3 is a sectional front elevation of the improvement applied to a window having a sash mounted to swing on a vertical axis. Fig. 4 is a sectional plan view of the same, and Fig. 5 is an enlarged face view of the fusible link.

The window-sash A (shown in Figs. 1 and 2) has its trunnions B B′ disposed horizontally and journaled in suitable bearings on the sides of the window-frame C. On the trunnion B is formed or secured a friction-wheel D, carrying a weight E, employed for swinging the open sash back into a closed position. The friction-wheel D forms part of a retaining device for allowing the sash to be moved into an open position and holding it therein, and this retaining device is preferably in the form of a brake and is provided with a brake-block F in peripheral engagement at its inner end with the wheel D. The brake-block F is mounted to slide in a casing G, attached to the window-frame C, and the said block is pressed on by the inner end of a spring H, arranged within the casing G and resting with its outer end on the cover G′, hinged on the casing G. The free end of the cover G′ is provided with a pin G^2, engaged by one end of a fusible link I, held at its other end on a pin J, attached to the casing G. The link I is capable of melting or fusing at a low temperature, but normally serves to hold the cover G′ closed against the tension of the spring H, which latter presses the brake-block F inwardly against the brake-wheel D and with sufficient force to normally hold the window-sash A in an open position. Now in case of a fire the link I melts, and in doing so the cover G′ is released, allowing the spring H to open the cover and open out completely, thereby removing its pressure from the brake-block F, and thus releasing the latter. The window-sash is now free to swing into closed position to shut off the draft from the fire, and thus prevent quick spreading of the same.

In the modified form shown in Figs. 3 and 4 the sash A′ is provided with vertically-disposed trunnions B^2, journaled in the top cross-bar and the sill of the window-casing C′, and on the upper trunnion B^2 is secured a wheel D′, forming a pulley, on which winds and unwinds a rope E′, extending over a pulley E^2 and carrying a weight E^3 for moving the sash from an open into a closed position.

The wheel D′ is frictionally engaged at its peripheral face with a brake-block F′, slidable in the casing G^3 and pressed on by a spring H′, resting on the hinged cover G^4, normally locked against the pressure of the spring H′ by the fusible link I′, held on the casing-pin J′ and engaging the pin G^5 on the cover G^3. When the link I′ melts or fuses in case of a fire, then the brake-block F′ is released from the pressure of the spring H′ to allow the weight E^3 to move the window-sash A′ shut. The contacting surfaces of the brake-wheels D and D′ and their brake-blocks F and F′ may be roughened or lined to increase the friction between the said surfaces.

The device shown and described is very simple and durable in construction, is composed of but few parts, and is not liable to get easily out of order.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A controlling attachment for a self-closing window-sash, comprising a brake member attached to the window-sash, a second brake member mounted to slide toward and from the first-mentioned brake member, a spring resting at one end against the slidable

brake member, a hinged device engaging the other end of the spring, and a fusible link for holding the said hinged device against the tension of the spring.

2. A controlling attachment for windows, comprising a brake member attached to the window-sash, a second brake member movable toward and from the first-mentioned brake member, a spring resting at one end against the said second brake member and adapted to press the said member against the first brake member, a hinged device engaging the other end of the spring for holding the same under tension, a fusible locking and releasing means for normally holding the hinged device in engagement with the spring, and means for automatically moving the sash to a closed position, when the said fusible means is melted.

3. The combination with a pivoted window-sash, of a brake member on the pivot of said window-sash, a brake-block normally in engagement with said brake member, a spring pressing the said block, a device mounted to swing and engaging the said spring, a fusible locking and releasing device for holding the said device in engagement with the spring, and a weight for turning the brake member and moving the window-sash, when the brake-block is released from the pressure of the spring.

4. The combination with a pivoted window-sash arranged to swing automatically into a closed position, of a wheel on the pivot of the said window-sash, a block in peripheral engagement with the said wheel, a spring pressing the said block, a casing having a hinged cover which rests on an end of the said spring, and a fusible link for locking the said casing-cover against the tension of the said spring.

5. A controlling attachment for a self-closing window-sash, comprising brake members, of which one is attached to the window-sash, a casing having a hinged cover and in which the other brake member is mounted to slide, a spring in the said casing and resting with one end on the said slidable brake member and with its other end on the said cover, and a fusible link for holding the said cover closed against the tension of the spring.

6. A controlling attachment for a pivoted window-sash comprising a brake member rigidly connected with the pivot of the window-sash, a second brake member comprising a block mounted to slide, a spring for normally holding said block in peripheral engagement with the first-mentioned brake member, a movable device adapted to engage the said spring, fusible means for normally holding the said device against the tension of the spring, and a weight connected with the brake member on the pivot of the window-sash, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH B. McKEOWN.

Witnesses:
THEO. G. HOSTER,
EVERARD B. MARSHALL.