G. C. Hinman,

Sash Holder.

No. 10,598. Patented Mar. 7, 1854.

Fig. 1.

Fig. 2.

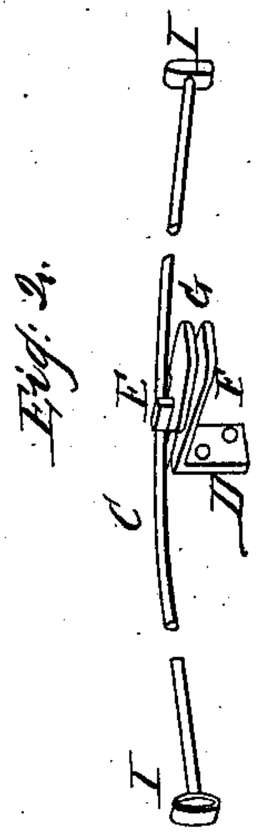

Fig. 3.

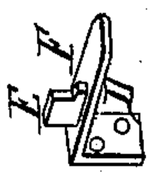

Fig. 4.

UNITED STATES PATENT OFFICE.

GEORGE C. HINMAN, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN SASH-SUSTAINERS.

Specification forming part of Letters Patent No. **10,598**, dated March 7, 1854.

To all whom it may concern:

Be it known that I, GEORGE C. HINMAN, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Window-Fastenings; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part thereof, in which—

Figure 1 is a front view of the window-frame and sash with my improved fastening attached; Fig. 2, a view of the fastening detached, and Figs. 3 and 4 sections of the fastening.

Similar letters in the several figures represent the same parts.

The nature of my invention consists in having a metallic rod secured to the window-sash in such a manner as to form an arch, which by its constant tendency to straighten shall press its extremities against the sides of the window-frame, and thus hold the sash in place at whatever height it is raised, the raising being easily accomplished by the action of a lever which raises the rod at its center, thus increasing the arch or curve and diminishing the pressure of its extremities upon the sides of the window-frame.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A A A, Fig. 1, represent the window-frame; B B, the sash; C, the metallic rod; D, a bracket or stud; E, a vertical projection of the bracket; F, a horizontal projection of the bracket; G, a metallic plate or thumb-piece; I I, metallic plates attached to the extremities of the rod C.

H H, Fig. 1, are staples or loops which serve to keep the rod in place.

Fig. 3 represents the bracket and Fig. 4 the thumb-piece.

The rod C is attached to the horizontal part of the sash by the staples H H, which are driven into the sash at the distance of about one-fourth the width of the sash from its sides.

The bracket D is screwed to the sash equidistant from its sides and a little above the staples, and the rod C rests upon its horizontal projection F and behind its vertical projection E. The rod C, when thus secured, forms an arch or curve and its extremities extend to the sides of the window-frame. The two metallic plates or clogs attached to the ends of the rod C are for the purpose of causing the rod to slide easier upon the window-frame. Their sliding surfaces are also a little rounded for that purpose.

The thumb-piece G, which may be shaped like the thumb-piece of an ordinary door-latch, is placed upon the vertical projection E of the bracket. The horizontal projection of the bracket is shaped similarly to the thumb-piece, and both are so shaped and situated as to be conveniently grasped by the thumb and finger. The thumb-piece G acts as a lever in raising the rod, and has for its fulcrum a shoulder on the vertical projection E, which may be of any form suitable for the thumb-piece.

When it is desirable to raise or lower the sash, the thumb is placed upon the thumb-piece G so as to press the front end down upon the horizontal projection F. This elevates the back end, which raises the rod G, thereby increasing its arch or curve and diminishing the pressure of the sliding pieces upon its extremities upon the sides of the window-frame; and the finger being placed under the projection F the sash may easily be raised or lowered while the thumb-piece G is held down. When the sash has reached the desired height and the thumb is removed, the rod regains its proper curve and holds the sash firmly in place by the pressure upon the sides of the window-frame of the clogs or sliding pieces I I upon the extremities of the rod, caused by the tendency of the arched rod to straighten.

To raise or lower window-sashes held by ordinary fastenings both hands are required, one to operate the fastening and the other to move the sash which is often attended with much inconvenience, especially in railroad-cars, but to raise or lower sashes held by my improved fastening only one hand is required.

Should my improved fastening be broken or otherwise rendered useless, it can easily be removed and a new one substituted without injury to the sash and without the labor and expense attendant upon the removing and replacing of ordinary window-fastenings.

What I claim as my invention, and desire to secure by Letters Patent, is—

The above-described sash-sustainer, consisting of an arched rod attached to the horizontal part of the window in such a manner that the weight of the sash shall cause the clogged ends of the rod to bear equally on both sides, and the above-described lever thumb-piece for increasing the arch of the rod and relieving the pressure so as to allow the window to be lowered, the whole being arranged and operated substantially as above described.

GEO. C. HINMAN.

Witnesses:
ERASTUS SMITH,
W. K. SIMMOND.