No. 612,037. Patented Oct. 11. 1898.

C. H. HANNUM.

ADJUSTABLE AND NOISELESS WINDOW.

(Application filed Jan. 14, 1898.)

(No Model.)

Fig. 1.

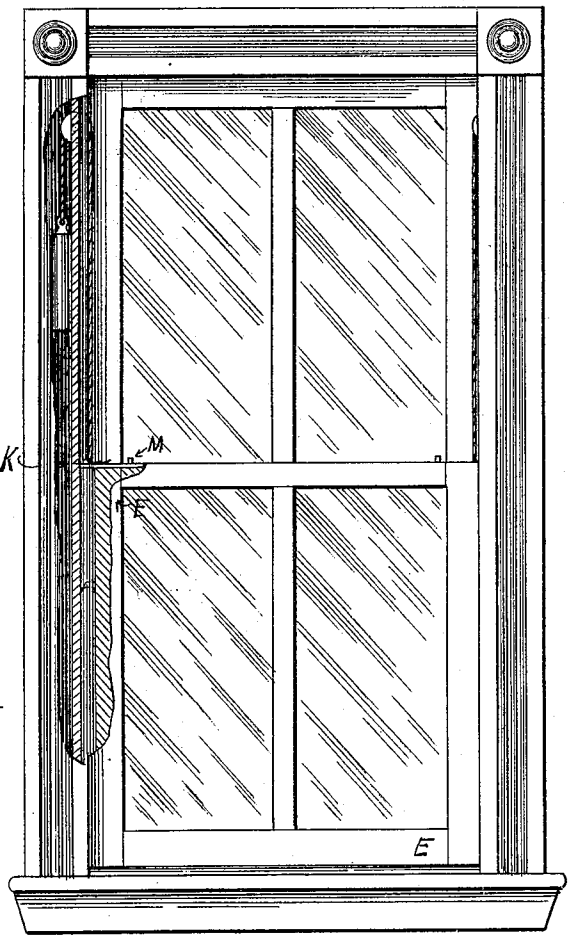


Fig. 4.

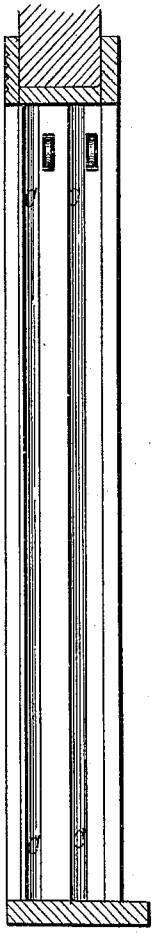


Fig. 6.



Fig. 5.

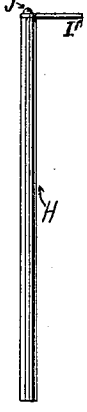


Fig. 3.

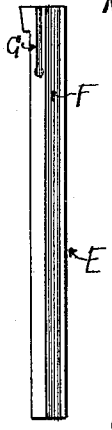
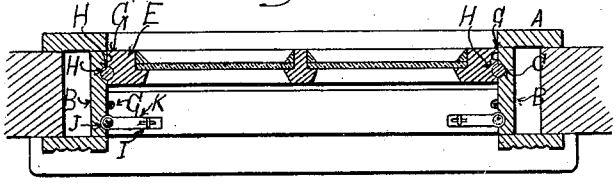


Fig. 2.



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ADJUSTABLE AND NOISELESS WINDOW.

SPECIFICATION forming part of Letters Patent No. 612,037, dated October 11, 1898.

Application filed January 14, 1898. Serial No. 666,620. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. HANNUM, a citizen of the United States, and a resident of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Windows, of which the following is a specification.

My invention relates to means and mechanism employed to operate sash without friction and to quickly and easily remove the sash or sashes from the frame and as easily replace said sash or sashes without the use of parting-strips and beads, such as are used in the ordinary window-frame.

To attain the desired end, my invention consists, essentially, in providing the window-frame at each side of the sash with a half-round groove, also providing each sash with a corresponding groove running the entire length of the pulley-stile. Within the grooves at each side of sash is placed a round rod the length of sash. In front of grooves in sashes is another groove for sash-cords to run in.

My invention also involves certain other novel and useful combinations or arrangements of parts, which will be hereinafter first fully described and then pointed out in the claim.

In the drawings, Figure 1 is a front elevation of a window-frame with a portion broken away, showing the location and arrangement of one of the rods. Fig. 2 is a horizontal cross-sectional view, both sash being drawn to the sill. Fig. 3 is a side view of one of the sash-stiles. Fig. 4 is an interior face view of one of the sides of the frame. Fig. 5 is the round rod which runs the entire length of sash. Fig. 6 is a thin metal plate screwed into the top end of round rod, as shown in Fig. 5.

Like letters of reference, wherever they occur, indicate corresponding parts in all the figures.

A is the casing, made in the usual way.

B are the sides of the frame, each made of a single piece of material, with half-round grooves running its entire length.

E are the sashes, the stiles thereof being grooved the entire length, as at F. There is also another groove at G, which is used for sash-cord, same as may be found in the ordinary sashes.

H is the round rod, which operates in groove C and in corresponding groove in stile of sashes.

I is the plate, secured by a screw to the top of round rod at J.

K shows a slot which is used to operate the plate by the use of the fingers, which is secured to staple driven into meeting-rail at M.

Fig. 1 shows only the arrangement of the rod in the grooves.

Fig. 2 shows both sashes drawn down to the window-sill.

I employ only one rod to each sash-stile, making in all four to a frame, as illustrated in Fig. 2.

When constructed and arranged in accordance with the foregoing description, my device will be found admirably adapted to the use and purposes for which it is intended. The sashes slide easily and noiselessly and will not permit dust or draft to enter and will not rattle while the sashes are in their place by the force of wind. It is also anti-friction and adjustable and may be easily removed from the frame by drawing the round rod from the grooves and releasing the cords.

Having now fully described my invention, what I claim as new and useful therein, and desire to secure by Letters Patent, is—

In combination a window-casing, a frame having grooves therein, rods H fitting in said grooves and in corresponding grooves formed in the sashes and plates I secured to said rods and means for attaching so that they may be readily detached, as and for the purpose set forth.

CHARLES H. HANNUM.

Witnesses:
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ANNA STUHLMANN.