(Model.)

A. AYERS.

SASH HOLDER.

No. 246,704. Patented Sept. 6, 1881.

Fig. 1

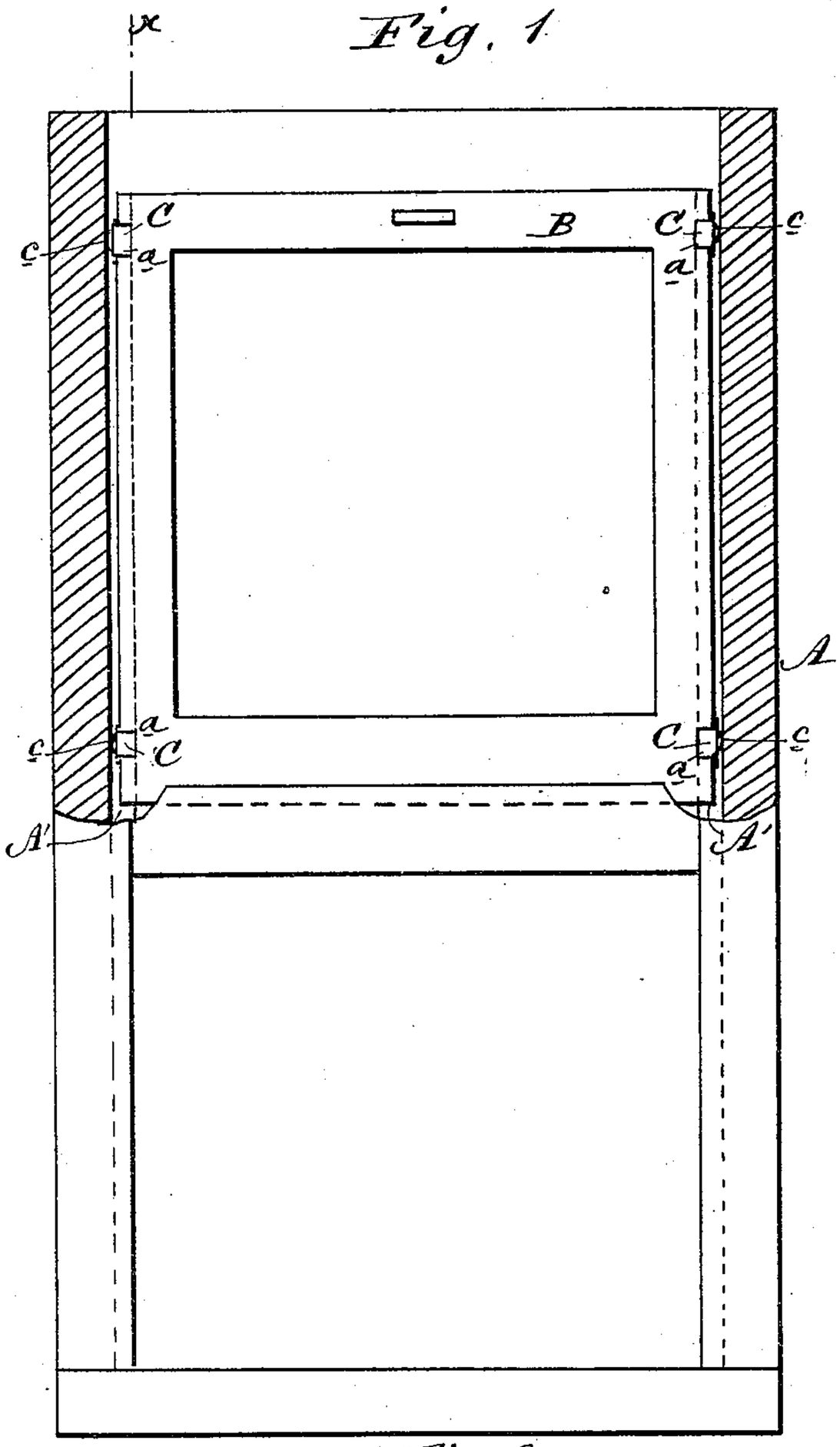


Fig. 2

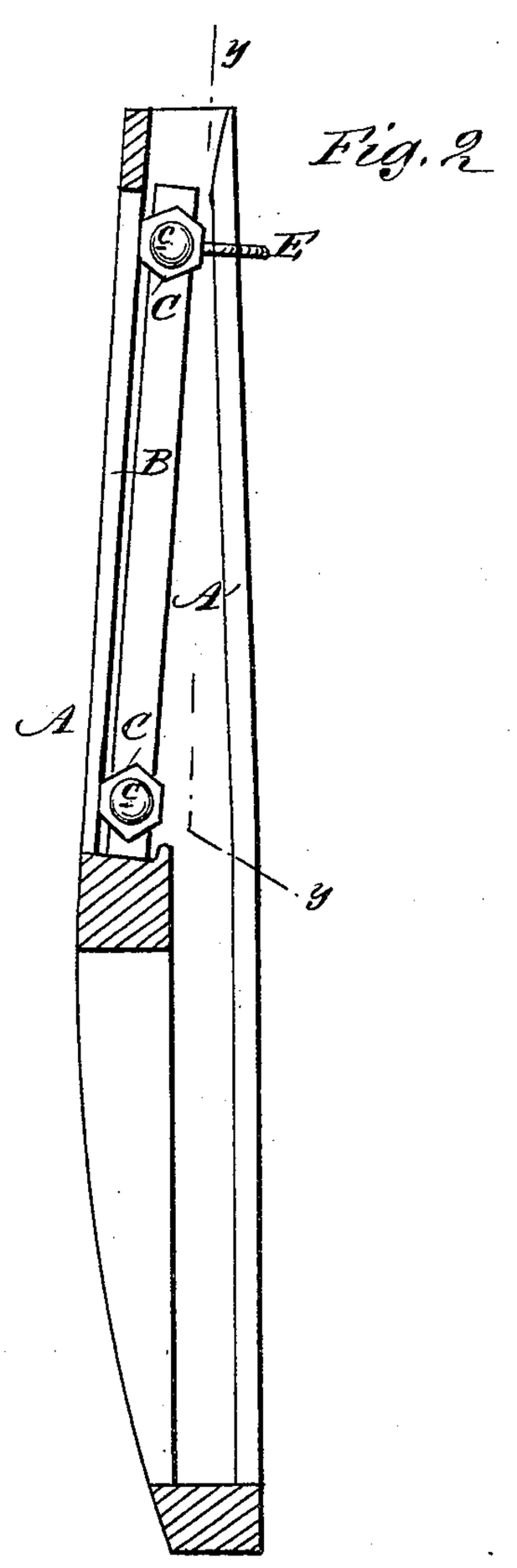


Fig. 3

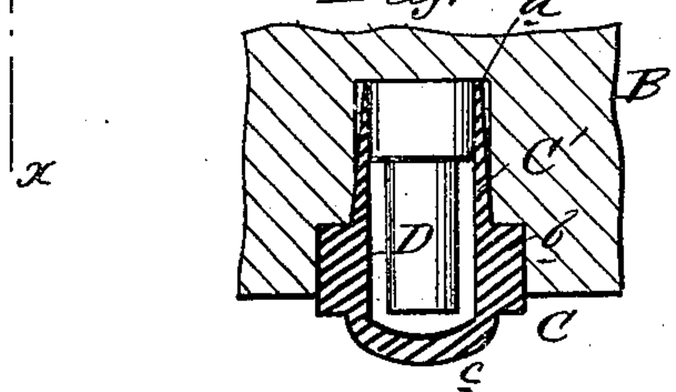


Fig. 5

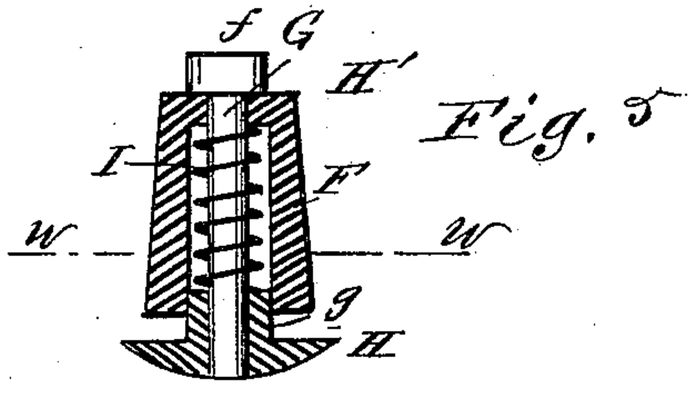


Fig. 4

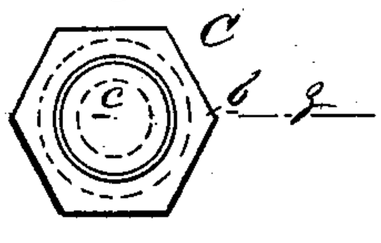
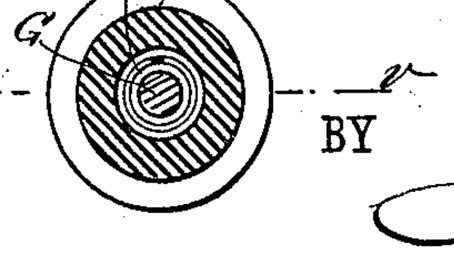


Fig. 6



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ALBERT AYERS, OF RAHWAY, NEW JERSEY, ASSIGNOR TO HIMSELF AND JOHN L. FREEMAN, OF SAME PLACE.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 246,704, dated September 6, 1881.

Application filed July 8, 1881. (Model.)

To all whom it may concern:

Be it known that I, ALBERT AYERS, of Rahway, in the county of Union and State of New Jersey, have invented an Improved Window-Stop, of which the following is a specification.

This invention relates to that class of devices which are designed to hold window-sashes at any desired elevation, and to prevent their rattling, and is especially designed for car and carriage windows.

The invention consists of a rubber tube closed at one end, provided with a head having a polygonal face or edge and a projecting central boss, and containing a loosely-fitting rigid pin, which tube and pin constitute the stop, several of which are designed to be set in suitable sockets in the edges of the sash, so that opposite faces will bear against the sides of the sash-grooves in the window-frame and the bosses against the bottoms of the grooves.

Figure 1 is a partly-sectional front elevation of a carriage-window sash on line *y y*, Fig. 2, showing my improved device attached. Fig. 2 is a sectional side elevation of the same on line *x x*, Fig. 1. Fig. 3 is an enlarged sectional elevation of a stop in position on line *z z*, Fig. 4. Fig. 4 is a plan of a stop. Fig. 5 is a sectional elevation of a modification of the stop on line *v v*, Fig. 6. Fig. 6 is a cross-section of the modified stop on line *w w*, Fig. 5.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a window-frame provided with sash-grooves A′, and B represents a sash provided with sockets *a* for holding the stops C. A stop, C, consists of a rubber tube, C′, closed at one end, having an annular polygonal-faced head, *b*, and a central projecting hemispherical boss, *c*. Said stop C is set in a socket, *a*, in the sash. The boss *c* and the outer portion of the head *b* are designed to project from the window-sash, as shown in the drawings, so that opposite faces of the head *b* (which head *b* is wider than the edge of the sash B) shall extend beyond the faces of the side rails of sash B, as shown in Fig. 2. By said head *b* bearing against one or the other or both of the sides of the grooves A′ in the window-frame as said sash B is moved up or down, rattling is prevented, and at the same time the bosses *c*, always bearing against the bottoms of the opposite grooves A′, hold said sash B in any desired position. The rigid pin D, which is a part of the stop C, is inserted through the open end of the tube C′ and reaches to the top of the annular portion of the head *b*. Said pin D is enlarged at its lower end where the tube C′ fits tightly about it, and is reduced for the remainder of its length, as shown in Fig. 3, so that the said tube C′ may be longitudinally compressed and retain enough elasticity to accommodate itself to the width of the window-frame A, and at the same time sufficient rigidity to hold the sash B in position, the said pin D being long enough to prevent the boss *c* from being pressed inward beyond the face of the window-sash.

E represents a thumb-piece on the sash B, by which the latter may be moved up and down.

In Figs. 5 and 6 is shown a modification, H′, of the stop, in which F represents a tube fully open at one end and partially closed at the opposite end. Up through this tube F, from the smaller to the larger end thereof, is passed a pin, G, the lower end of which is enlarged, as shown at *f*, to prevent its further entrance into the tube F, while on the opposite end of said pin G, which projects through the tube F, is fixed a circular convex button, H, of rubber, whose shank *g* is free to move up and down within a limited range in the said tube F. About the pin G is a spiral spring, I, one end of which bears against the button H, while the other end bears against the inside of the bottom of the tube F. This modified stop, when used, is designed to be set within a deeper and shouldered socket in the window-sash B, so that the pin G may be free to move in and out; and the button H is designed to bear against the sides and faces of the grooves A′. These rubber stops C H′ hold a sash firmly and do not rub the paint or varnish from the window-frame, and the parts of them in contact with the window-frame, being made of vulcanized

rubber or rubber compounded with soapstone or other suitable substance, are very durable and move without sticking.

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

In a window-stop, the rubber tube C′, having an annular polygonal head, *b*, and projecting central boss, *c*, and the pin D, substantially as herein shown and described, whereby the stop is made to bear on the sides and faces of the window-frame grooves, as set forth.

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Witnesses:
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