

Patented Aug. 5, 1884.

Fig. 1.

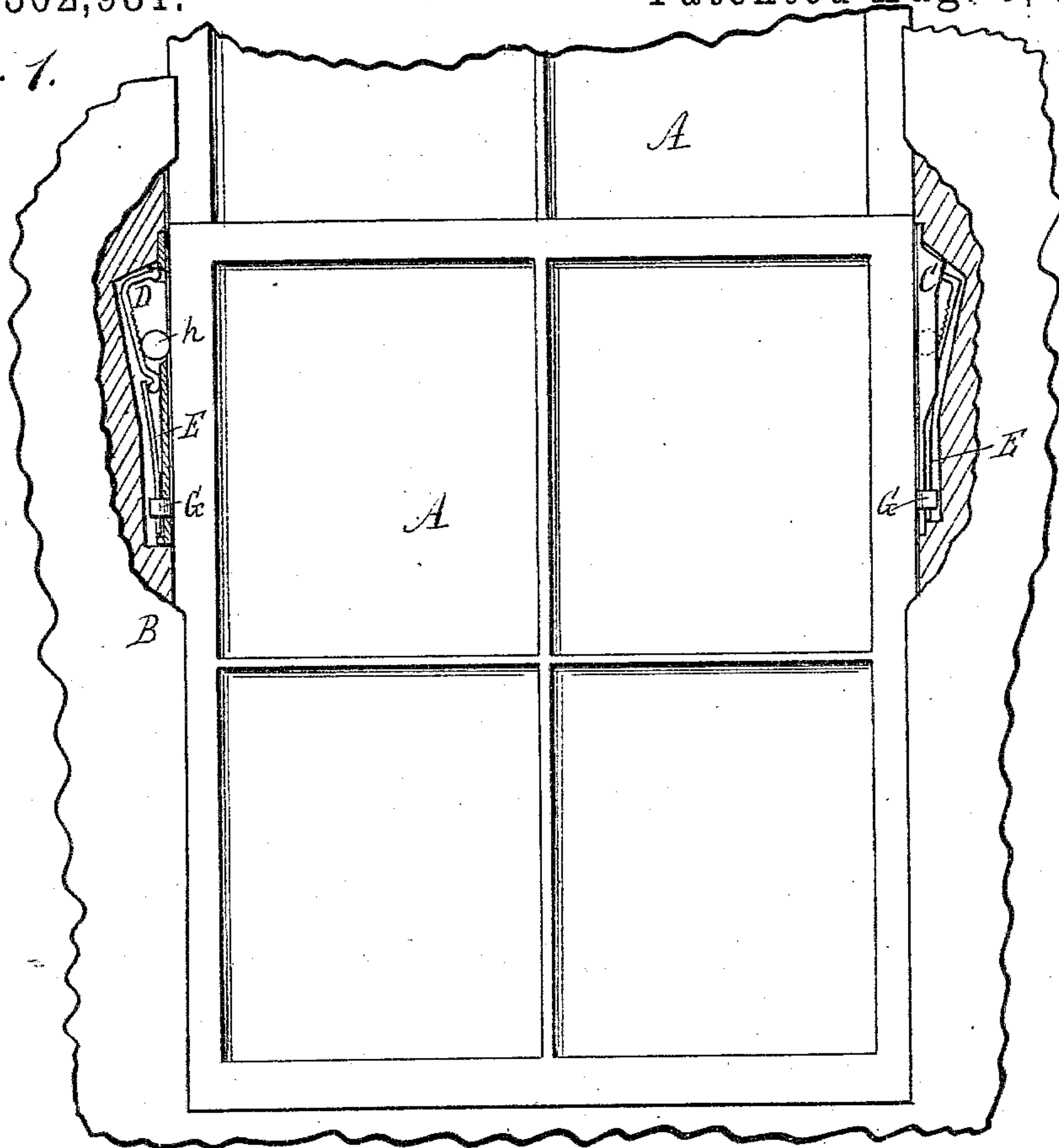


Fig. 2.

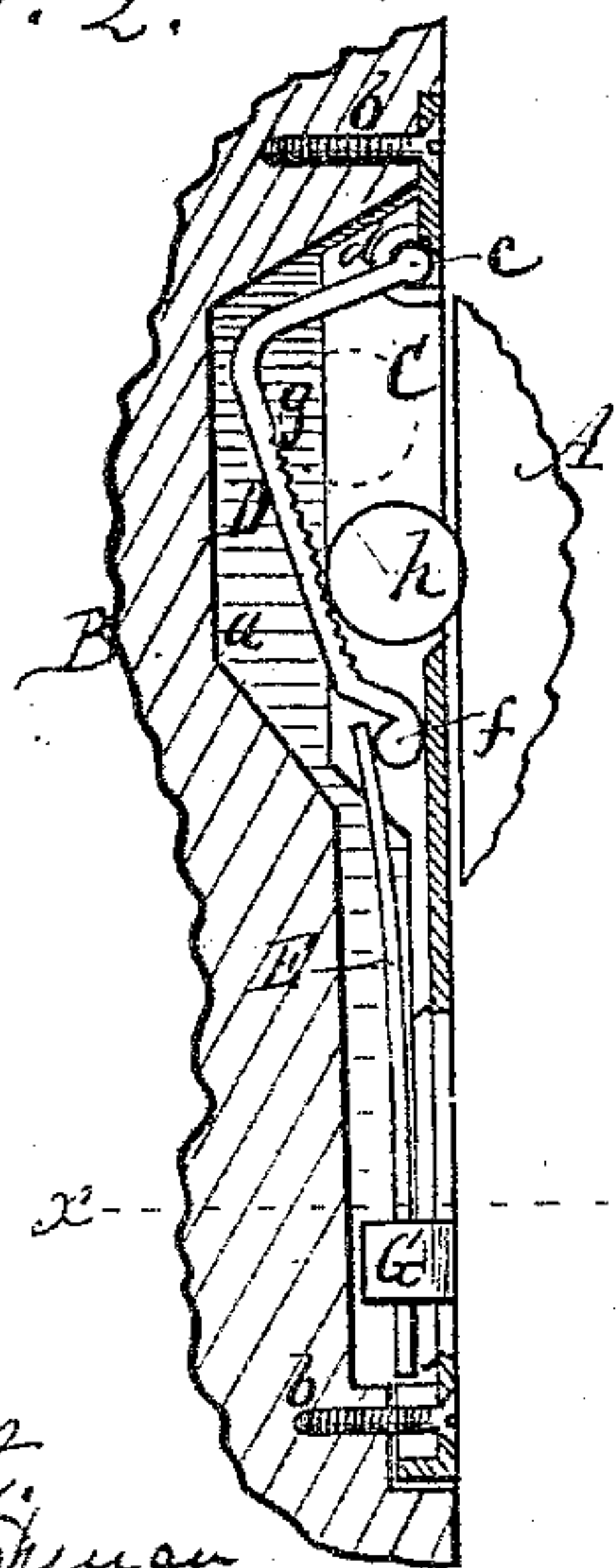


Fig. 3.

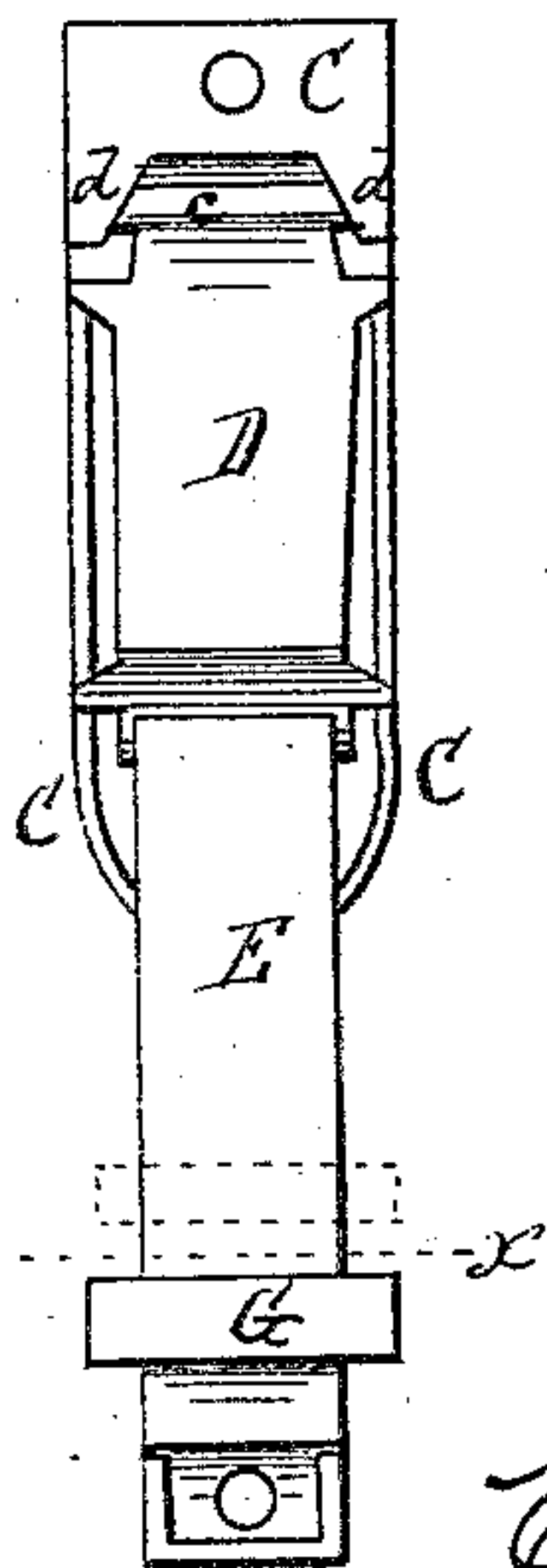
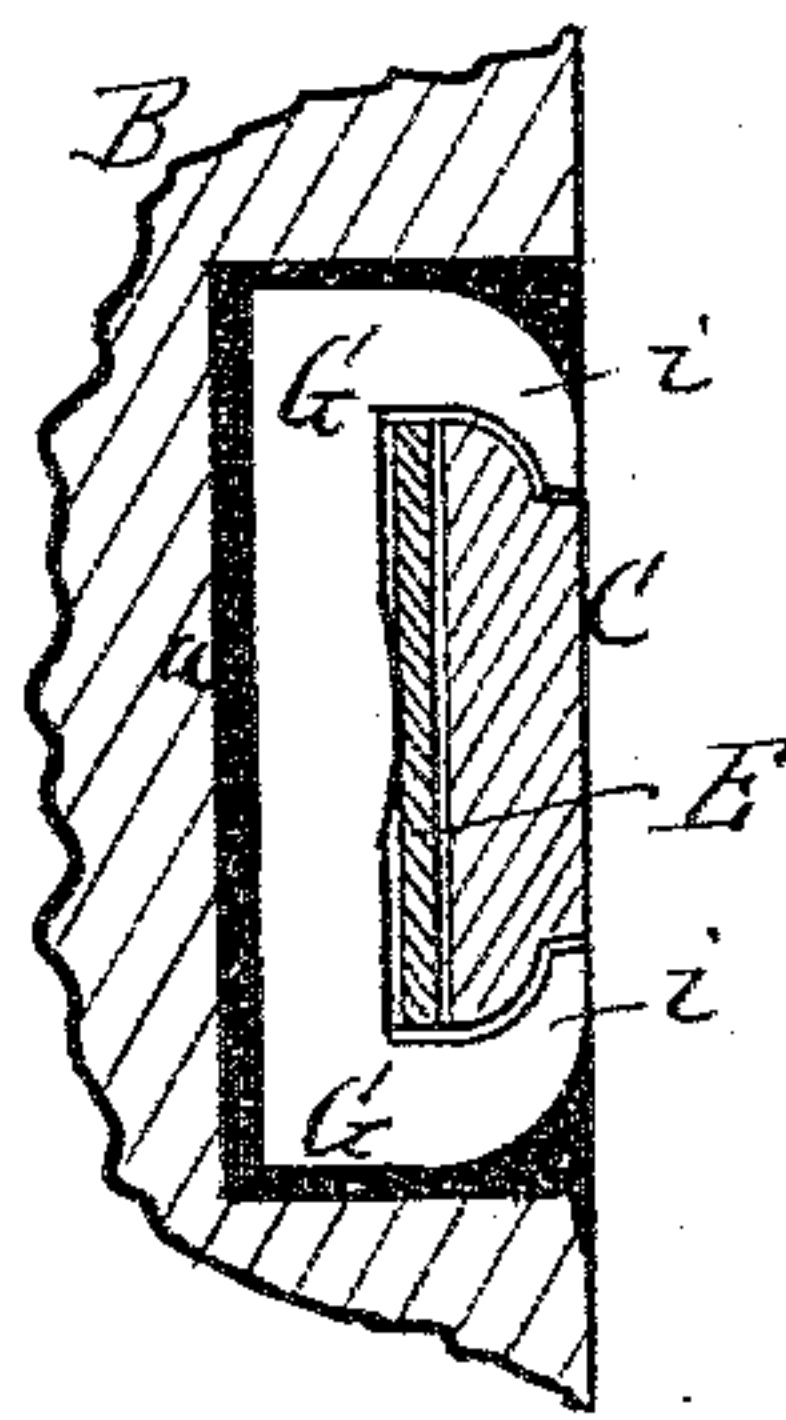


Fig. 4.



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UNITED STATES PATENT OFFICE.

EBER C. BYAM, OF ROCHESTER, NEW YORK, ASSIGNOR OF TWO-THIRDS TO JOHN A. STEWART AND JAMES S. BAKER, BOTH OF SAME PLACE.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 302,981, dated August 5, 1884.

Application filed November 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, EBER C. BYAM, of Rochester, Monroe county, New York, have invented a certain new and useful Improvement in Sash-Balances; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation, partially in section, of a window showing my improvement attached thereto. Fig. 2 is an enlarged sectional view of the fastening device. Fig. 3 is a back elevation of the same. Fig. 4 is a cross-section in line *xx* of Figs. 2 and 3, showing the device on an enlarged scale.

My improvement relates to side attachment for windows, for the purpose of holding the sash at any desired position, and in general character is similar to my patent of April 13, 1880, No. 226,488.

The invention consists in the combination of an inclined socket for holding a roller, a spring bearing on the lower end of the socket, to allow elastic action of the latter, and a clamp operated from the outside and adjustable up and down, to increase or lessen the stiffness of the spring, all as hereinafter described.

In the drawings, A A show the two sashes of a window, and B B the jambs or casing. My improvement is as follows:

C is a cast-iron case set into a mortise, *a*, in the jamb opposite the edge of the sash, and secured fast in place by screws *b b*.

D is a socket-piece or way having a pivot, *e*, at the upper end, which rests in bearings *d d* of the case so as to turn easily, the lower end of the socket-piece having a round or curved knuckle, *f*, which rests against the back of the case. The body *g* of the socket is inclined upward and backward, and in the same rests a wooden or other roller, *h*, which bears against the edge of the sash when at its lower position, but is thrown away from the sash when at the highest position, as indicated by the dotted lines, Fig. 2.

E is a straight, flat steel spring on the back or inner side of the case, its upper end bearing against the knuckle *f* at the bottom of the socket-piece, and its lower end secured by the adjustable clamp.

G is the adjustable clamp, the same consisting of a square half-loop which slips endwise over the bottom of the case and spring, and

has claws *i i*, which embrace the edges of the case, as shown in the cross-section, Fig. 4, which prevents the clamp from coming off, but allows it to be adjusted up and down. The clamp is placed in position on the fixture before the latter is placed in its mortise in the jamb, and when once in place it cannot be removed till the fixture is taken off; but the claws *i i* rest flush in the mortise, and by taking hold of them with the fingers, the clamp can be raised and lowered, while the fixture is in place and without removing it from the jamb.

The great advantage in this invention consists in the combination of the three parts, the pivoted socket-piece or guideway for the roller, the straight spring bearing against the bottom of the same so as to allow the guideway to spring out or in to accommodate the roller, and the clamp sliding on the lower end of the casing embracing the spring and increasing or lessening its power accordingly as it is moved up or down. A peculiar advantage results from the form of the clamp, which brings it to the outside of the jamb, flush with the surface, whereby, while it allows free movement of the sash up and down, yet it can be seized by the fingers and adjusted higher or lower without removing the fixture from its fastening. In my former patent referred to the adjustment of the spring could not be made, except by removing the fixture from the jamb. These fixtures are used on both sides of the sash, and may be used on both the lower and the upper sashes, or either, as may be desired.

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

In a sash-balance, the combination, with the main case, of the socket-piece or guideway pivoted at its top but free at its bottom, the straight spring bearing against the bottom of the socket, a clamp sliding over the lower end of the case and embracing the spring, whereby the stiffness of the latter may be increased or diminished, and a roller resting on the inclined body of the socket-piece, as shown and described, and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

EBER C. BYAM.

Witnesses:

JOHN A. STEWART,
R. F. OSGOOD.