

E. H. Wheeler,

Sash Holder.

No. 109362.

Patented Nov. 15, 1870.

Fig. 1

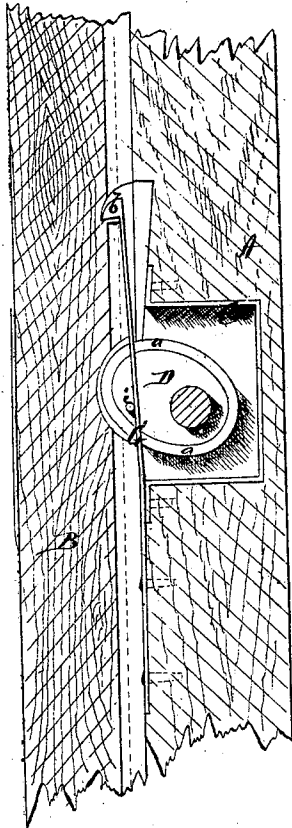
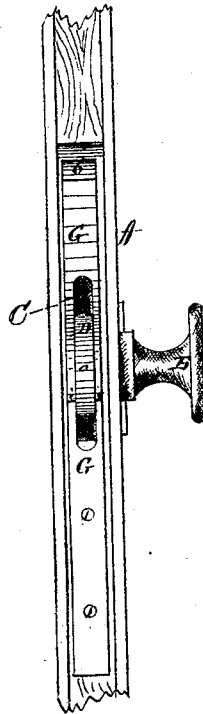


Fig. 2



Witnesses:

Ed. Leventy
A. H. Mason

Inventor

Edmund H. Wheeler
per Alexander Mason
Atty

United States Patent Office.

EDMUND H. WHEELER, OF SCRANTON, PENNSYLVANIA.

Letters Patent No. 109,362, dated November 15, 1870; antedated November 5, 1870.

IMPROVEMENT IN SASH-HOLDERS.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, EDMUND H. WHEELER, of Scranton, in the county of Luzerne and in the State of Pennsylvania, have invented certain new and useful Improvements in Sash-Stop and Lock; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "sash-stop and lock," composed of an eccentric covered with gum, rubber, or leather, being pressed toward the sash by a spring on the top end of which is a hook, which answers as a fastener to hold the sash down when closed.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section, and Figure 2, an inside view of my stop and lock.

A represents a portion of a window-frame, and B, a portion of the window-sash.

In the inner edge of the frame A is a recess, into which is inserted a metallic box, C, and in this box is placed a solid eccentric, D.

The shaft upon which this eccentric is placed passes through on the inner side of the frame A, and is at its end provided with a button, E, by means of which the eccentric is turned.

The outer circumference of the eccentric D is surrounded by a band, *a*, of gum, rubber, or leather.

To the edge of the frame A is secured a spring, G, at one end, the other end of the spring being provided with a hook, *b*, as shown in fig. 1.

The spring G is also slotted, so that the eccentric D may project through the same.

Through the projecting end of the eccentric D is passed a pin, *i*, on the outer side of said spring, and against which the spring bears to force the eccentric outward.

The edge of the sash B is grooved its entire height, and at a suitable point in said groove is a recess for the hook *b* of the spring G to enter into when the sash is closed to lock the same.

At a suitable point in said groove is also an indentation for the outer end of the eccentric to enter into, so as to allow the hook *b* to enter the recess formed for it.

The two great advantages of my sash-stop and lock are simplicity and durability.

Simplicity, from the fact that it has but two direct parts to accomplish two direct objects, namely, as a stop to hold the sash at any point firmly, and yet with such an elasticity as not to render the hold

harsh, (in which case a continual wearing of both stop and sash must occur.)

It has but one spring, which forces both stop and lock to work.

This spring is not of the spiral form, but is made of either spring-steel or brass, and not one-twentieth part of the capacity of the spring is required in order to force both stop and lock to do their respective work, and make both sure.

The principle of the stop is of eccentric form, closing up all the open space between the sash and post or frame in the form of a wedge, or as a key-stone closes an arch.

The elastic substance which covers the stop will not admit of a gripping hold, as heretofore referred to.

The lock is simple, from the fact that it is connected firmly at the top of the spring in the form of a hook, and so arranged that, when the sash is raised, it leaves the sash entirely, leaving no chance for wear of the sash from the hook, and on leaving its position as a lock, the spring assumes its duty to keep the stop against the sash, so as to make it sure of working.

In point of durability, the stop is made solid, of cast-brass or iron, oblong or egg-shape.

The pressure or strain being no more than the weight of the sash, but little strength is required, when it has strength enough to support fifty times the weight of an ordinary sash without overtasking it.

The lock and spring combined are durable, from the fact that the full capacity of the spring is not required, and when once locked the strain, when attempting to force the sash up, comes on the screws or where it is fastened to the post or frame, and on the hook, but so close to the spring that the strain is so divided as to make the principle the same as trying to force the spring in two in the center.

This stop and lock are particularly adapted for railroad cars, but can also be used on windows in houses, &c., and can readily be changed to suit both an upper and lower sash.

Having thus fully described my invention,

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

The combination of the solid eccentric D provided with elastic band *a*, and pin *i* with the slotted spring G provided with hook *b*, constructed and arranged to operate substantially in the manner and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 7th day of April, 1870.

EDMUND H. WHEELER.

Witnesses:

C. W. HARTLEY,
A. B. STEVENS.