

AUGUST FREUTAL.

Improvement in Spring Locks for Ventilating Sashes.

No. 118,921.

Patented Sep. 12, 1871.

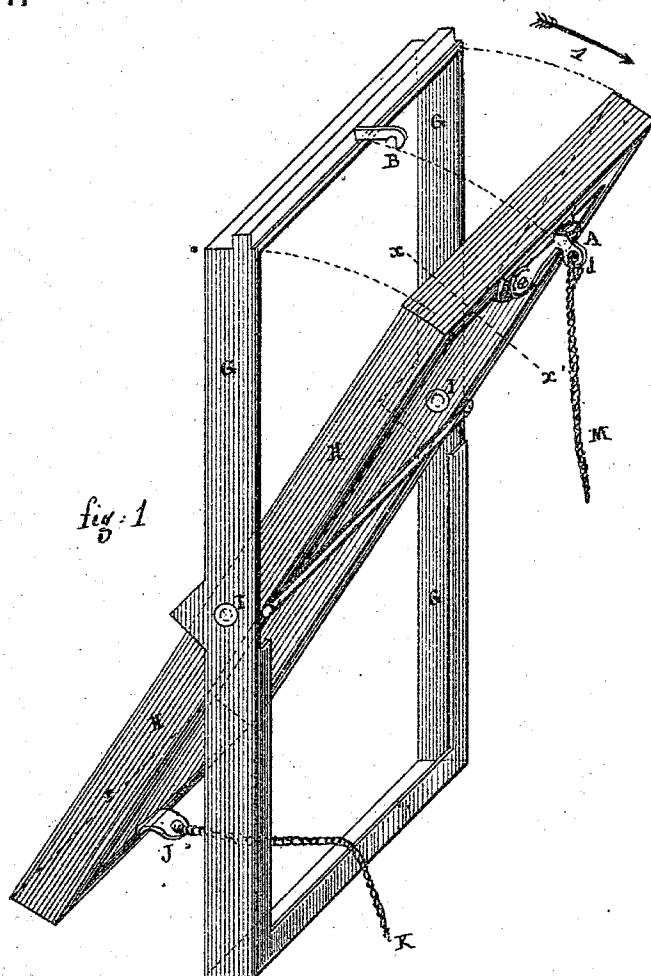


fig. 1

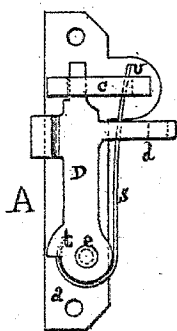


fig. 2

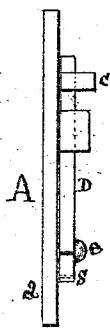


fig. 3

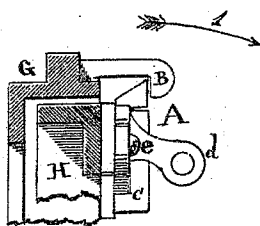


fig. 4

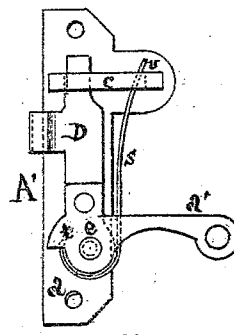


fig. 5

Witnesses.

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AUGUST FREUTAL, OF NEW YORK, N. Y.

IMPROVEMENT IN SPRING-LOCKS FOR VENTILATING-SASHES.

Specification forming part of Letters Patent No. 118,921, dated September 12, 1871.

To all whom it may concern:

Be it known that I, AUGUST FREUTAL, of the city of New York, in the county and State of New York, have invented certain Improvements in Church-Ventilators, of which the following is a specification.

This invention relates to that class of ventilators or windows used in churches, halls, theaters, &c., which are generally swung so as to pivot on horizontal axes, and which, being out of reach, are open and shut by the aid of cords; and the invention consists in the combination, with such swinging ventilators, of a certain spring-latch or catch, which retains firmly the said ventilator in a closed position, whereby the danger of storms disturbing the ventilator is entirely overcome.

Figure 1 represents a perspective view of a church-ventilator mounted in its frame and having my improved fastener attached. Fig. 2 is a front view of my improved latch for ventilators. Fig. 3 is a top view of the same. Fig. 4 is a side view also of the same, with part of the ventilator and frame seen in sectional elevation through the line *x x'* of Fig. 1; and Fig. 5 is a modification of my improved latch to be used on ventilators opening vertically.

G is a ventilator stationary frame, which may be of any ordinary construction and suitable to receive the swinging-sash. H is the ventilator-sash, made in any ordinary or improved manner, and in this case pivoted, at I I, to the frame G, so as to be nearly on a balance. J is an eye, fastened to the lower part of the sash H, and to which is attached a cord, K, used for closing the ventilator. A is my improved spring-latch or lock, which is worked with the cord M, and, being fastened to the top part of the ventilator-sash H, will hold the same closed when required, or serve as a plain hook for opening said ventilator when the cord M is pulled downward. The lock A is made as follows: *a* is a frame or plate, provided with suitable holes to fasten said plate to the sash H. *c* is a staple or bridge, which is riveted or otherwise fastened to the plate *a* in such a manner as to guide the end of the latch D and the end of the spring *s*. D is a latch, having the proper shape, with a suitable nose, to match, correspond, and engage the stationary hook B of the stationary frame G, and which is pivoted loose, at *e*, upon the plate *a*, so as to operate freely in the staple or bridge *c*, and

substantially as represented in my drawing in Figs. 1, 2, 3, and 4. The latch D has a tail, *d*, whereto the rope M is fastened, so that a strain put upon the said cord M from below will disengage the nose of the latch D from the hook B, allowing the sash H to be pulled by said rope M in the direction of the arrow 1 and open the ventilator. S is a flat spring, fastened, at *t*, to the latch D, and which, being coiled around said latch and engaged in the staple C at U, will always keep the latch up or against the hook B. When my improved lock is to be used upon a ventilator swung windowwise or vertically, then I construct it as represented in Fig. 5 by A', dispensing with the tail *d* to the latch D, but, instead, having the right-angled tail-lever *a'* for attaching the cord M, all other arrangements of the parts of the lock being substantially the same as already described for the lock A.

In church-ventilators of the kind we are now considering, and which are put up in the ordinary way, two cords are simply fastened, one to the top, one to the bottom of the pivoted sash, and, by pulling the one or the other of these cords, by fastening one or both to a nail, cleat, or bracket, the sash is made to pivot or swing open or shut, and there are no means provided for keeping the sash closed other than suitable arrangements for fastening the hanging end of the cord, which is fastened to the lower part of the ventilator; but as there is always more or less stretch in a long cord the consequence is that the ventilators are never perfectly closed, and that, besides the annoyance of having the sashes jarring against their frames in case of storms or wind, it very often happens that the rain, snow, dust, or wind find their way into the church through the quivering ventilators.

With my improved ventilator-lock a single pull upon the cord K will swing the ventilator closed, and the lock A, engaging the hook B, will retain the said ventilator perfectly closed, and any strain put upon the cord M will at once open the ventilator, so that it can be managed perfectly from below and yet be as effectually closed or locked as if it was an ordinary window at hand's reach.

This improvement is so well understood by those interested that I have now a great demand for my latch, and no complete church-window is now made without being provided with my improvement.

Having described fully my improvement, what

I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. The ventilator-sash H, provided with the lock A, in combination with the frame G and hook B, so as to operate substantially in the manner and for the purpose set forth.

2. The lock A, composed of the plate *a*, bridge *c*, latch D, and spring S, constructed and arranged substantially as shown and set forth.

3. The lock A', constructed as shown and set forth, when used for holding closed a ventilator-window out of hand's reach, as herein specified.

AUGUST FREUTAL. [L. s.]

Witnesses:

MAX. CLAVER,

H. GENGEMBRE HUBERT.