

No. 60,633.

PATENTED DEC. 18, 1866.

B. S. HYERS.  
SASH FASTENER.

Fig. 4.

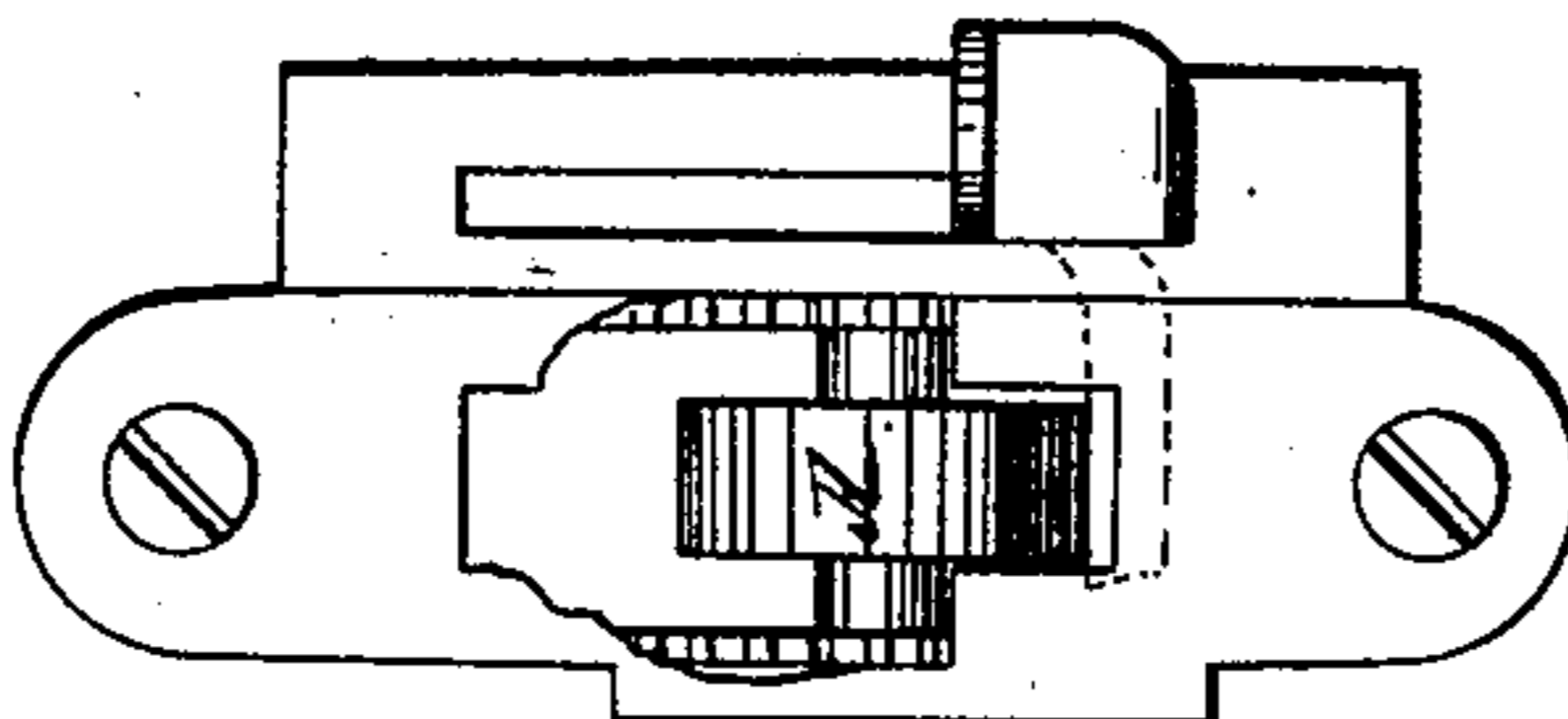


Fig. 3.

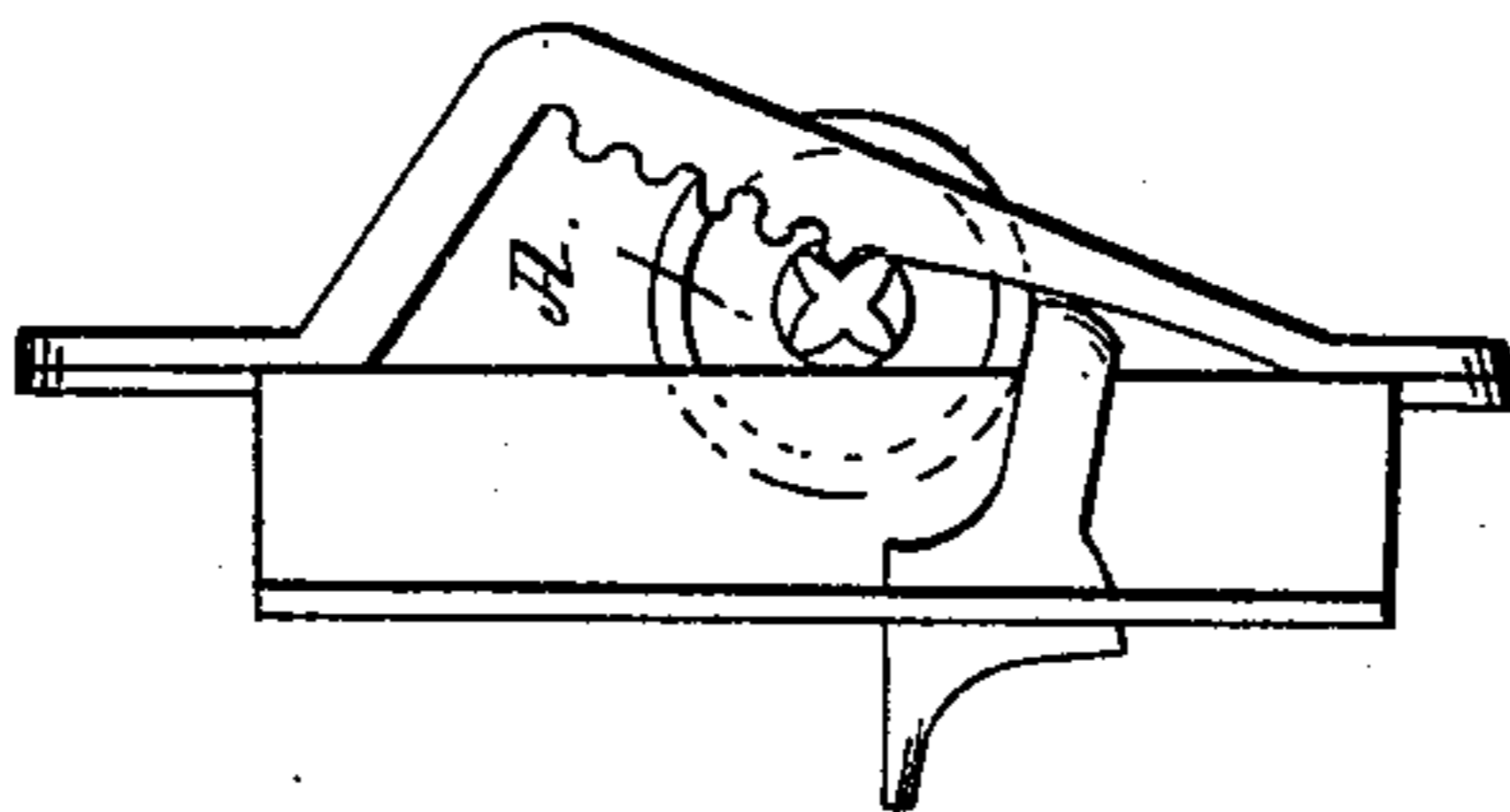


Fig. 2.

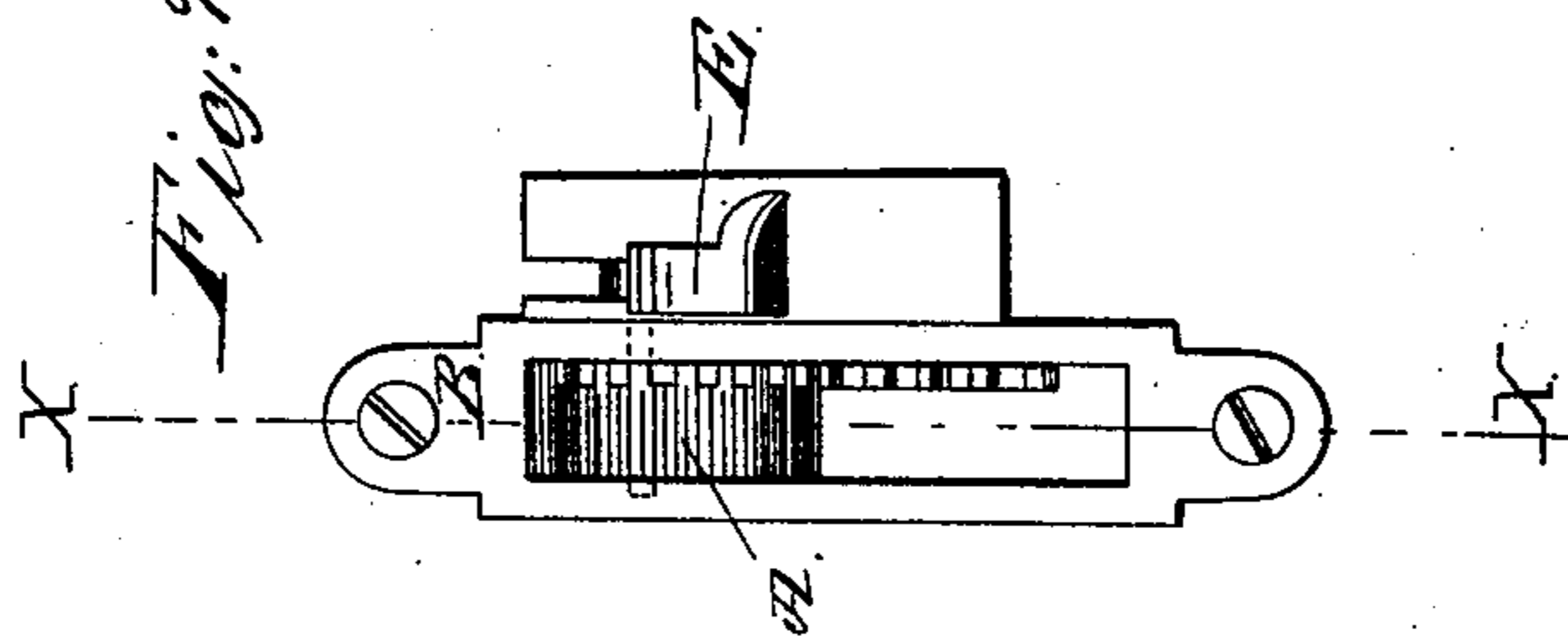
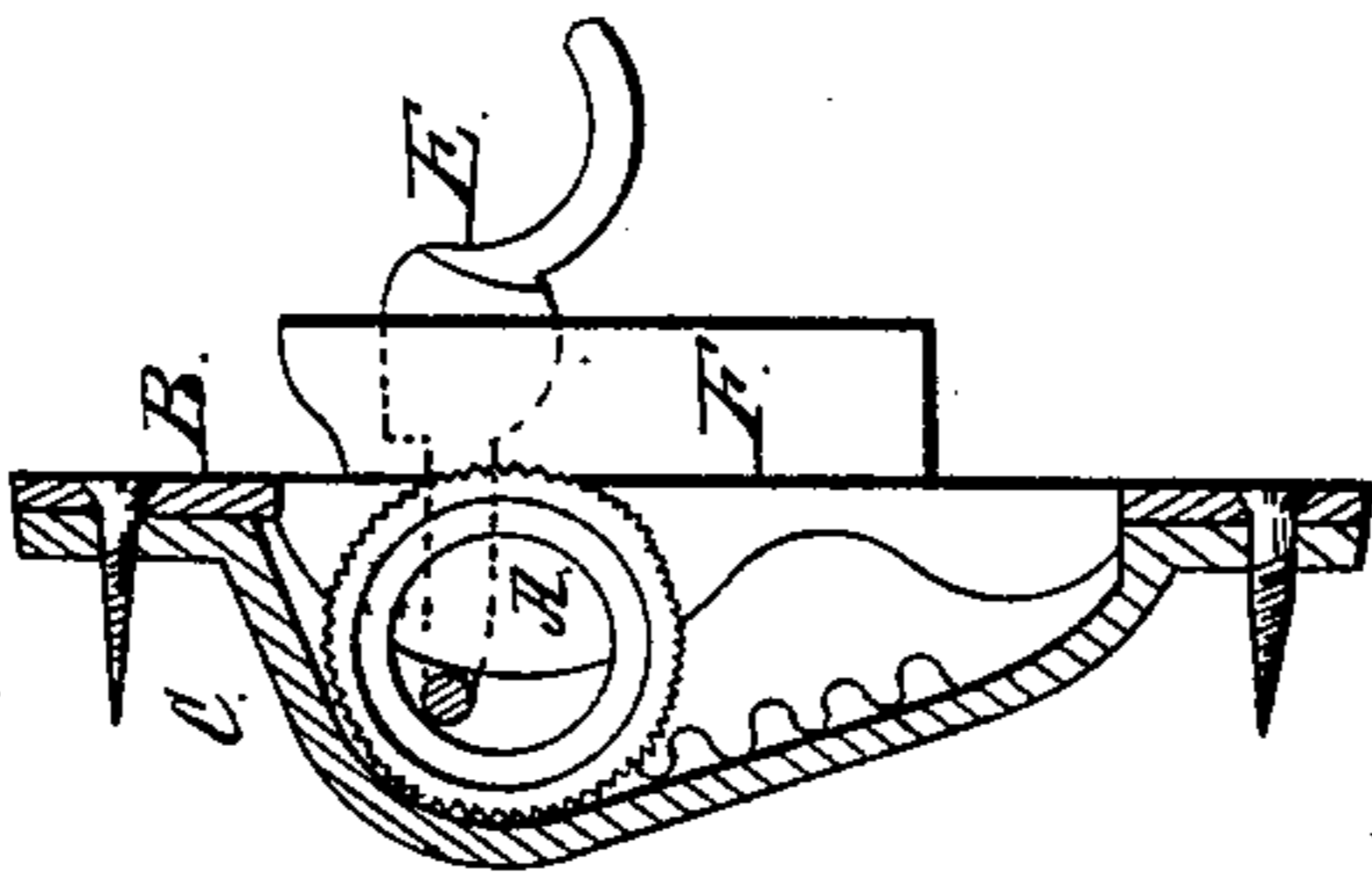


Fig. 1.



Witnesses:

J. W. B. Carrington  
Wm. Freese

Inventor:

B. S. Hyers  
Per Munnell  
Attorney

# United States Patent Office.

## IMPROVED SASH-FASTENER.

BENJAMIN S. HYERS, OF PEKIN, ILLINOIS.

*Letters Patent No. 60,633, dated December 18, 1866.*

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

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, BENJAMIN S. HYERS, of Pekin, in the county of Tazewell, and State of Illinois, have invented a new and improved Sash-Fastener; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The nature of my invention consists in the peculiar construction of a friction-wheel, which is made to bear upon the sides of a sash so as to hold it in any desired position; it is also provided with a small pinion, which meshes into and works in an inclined corresponding rack, which is made fast to the window-frame.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 is a longitudinal sectional elevation from the line  $x x$ .

Figure 2 is a front elevation of the same.

Figure 3 is also a longitudinal sectional elevation of another device, merely shown to anticipate figs. 1 and 2.

Figure 4 is also a front elevation of fig. 3, and for the same purpose.

Letters of like name and kind refer to like parts in each of the figures.

A represents a small wheel made of metal and provided with teeth upon the end at the periphery. The body of the wheel is cored out so that it is but little more than a rim. It is fitted into a slotted plate, B, which is fastened to the window-frame. Upon the inside of this plate, B, is secured another plate, C, in which is a rack which corresponds with the pinion A. This plate and rack C is inclined up from the plate B. E is a trigger that passes through and has a bearing in the plate F. The trigger, E, is provided with a dog that works within the wheel A. The periphery of this wheel, A, is corrugated so that it will engage the edge of the sash more firmly. The wheel in figs. 3 and 4 is provided with a small pinion upon the shaft with teeth, instead of being at the end at the periphery.

The operation consists in simply raising the sash, which rolls the wheel A up the incline and lets the sash move up without any friction or resistance to the sash; but when the force that is applied to raise the sash is withdrawn, the weight of the sash draws the wheel down the incline by the friction of the corrugations upon the periphery of the wheel against the edge of the sash holds it up and at any point desired. When it is desired to lower the sash, by bearing down on the trigger throws the wheel up the incline into a wider space and disengages the sash so that it can be let down at will. Various means have been devised and applied to sashes for the purpose of holding them in a certain position, but thus far have not been reliable, and either cumbersome or frail, therefore of but little utility. But by my invention I am able to obviate and overcome all the difficulties and objections urged against the more common means that have been introduced, and to a certain extent employed, for the purpose of holding window-sash in a certain position, by substituting a neat and comely device which is durable and not likely to wear and get out of order, thereby rendering it of great use and utility.

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

The catch E, operating within the toothed roller A, in combination with the plate F, inclined toothed back C, and toothed roller A, substantially as herein shown and described, and for the purpose specified.

The above specification of my invention signed by me this 20th day of June, 1866.

BENJAMIN S. HYERS.

Witnesses:

WM. F. McNAMARA,  
ALEX. F. ROBERTS.