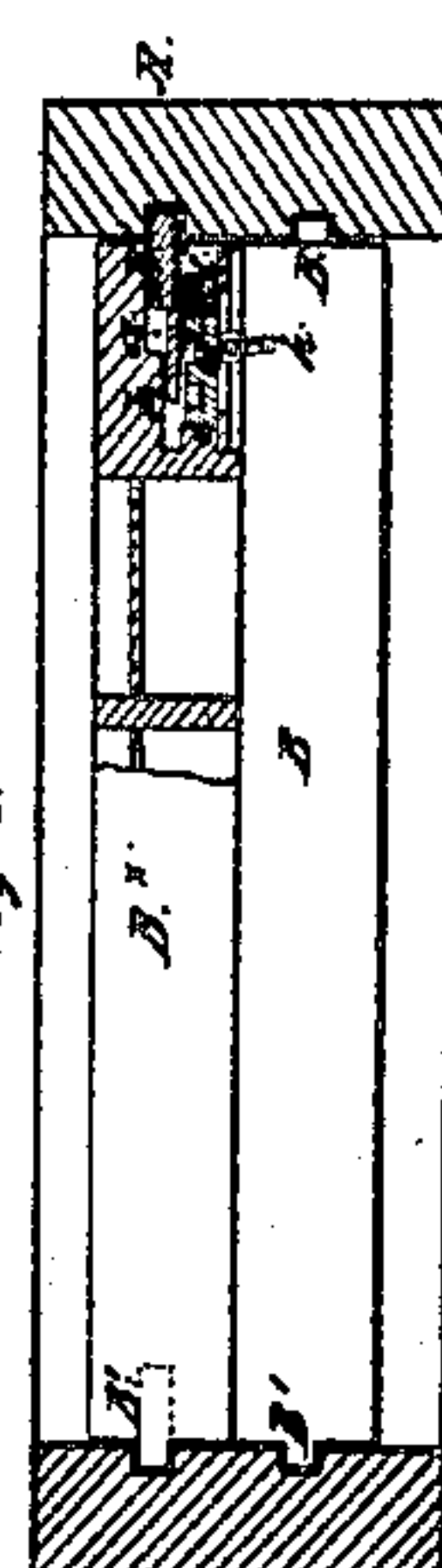
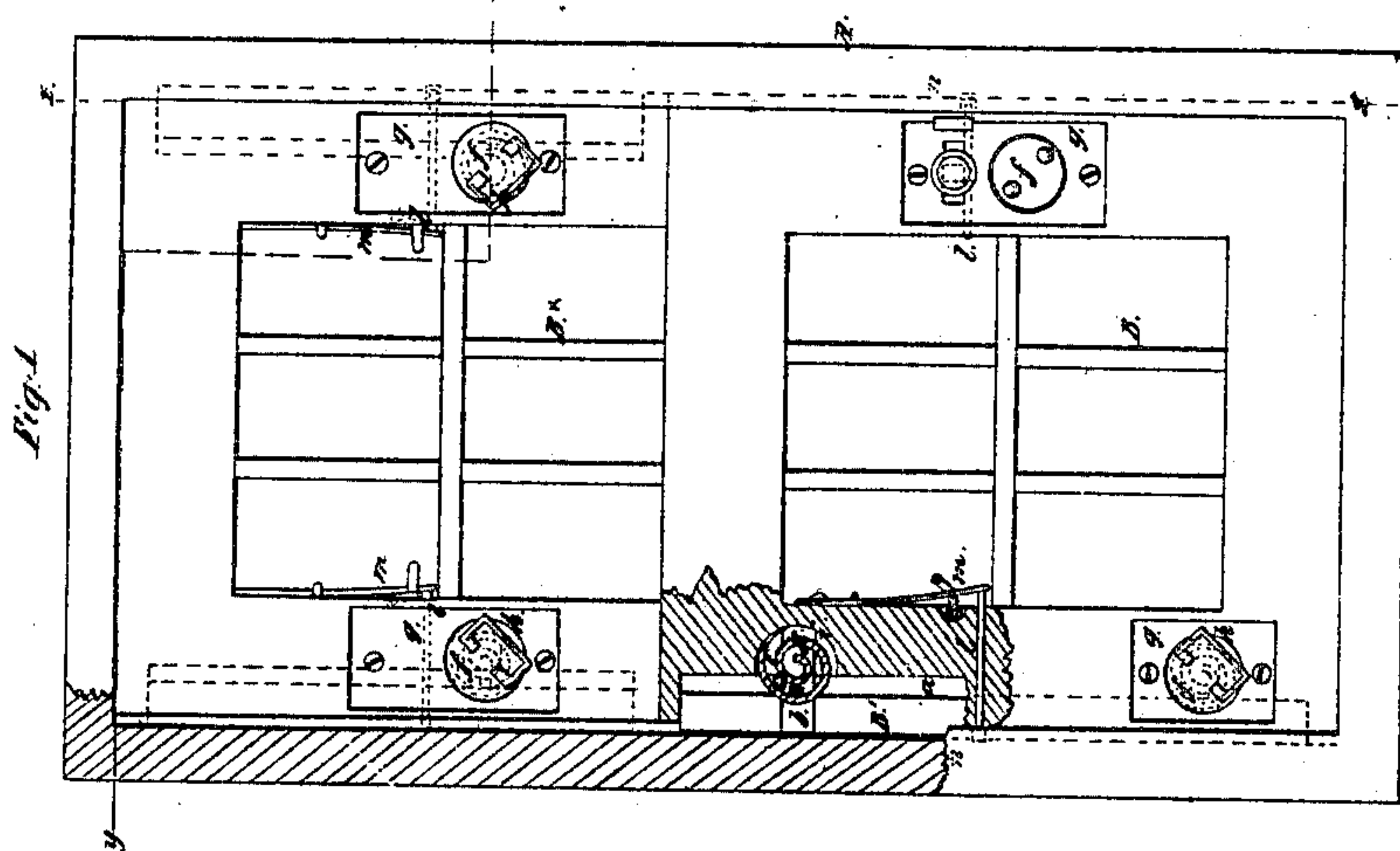
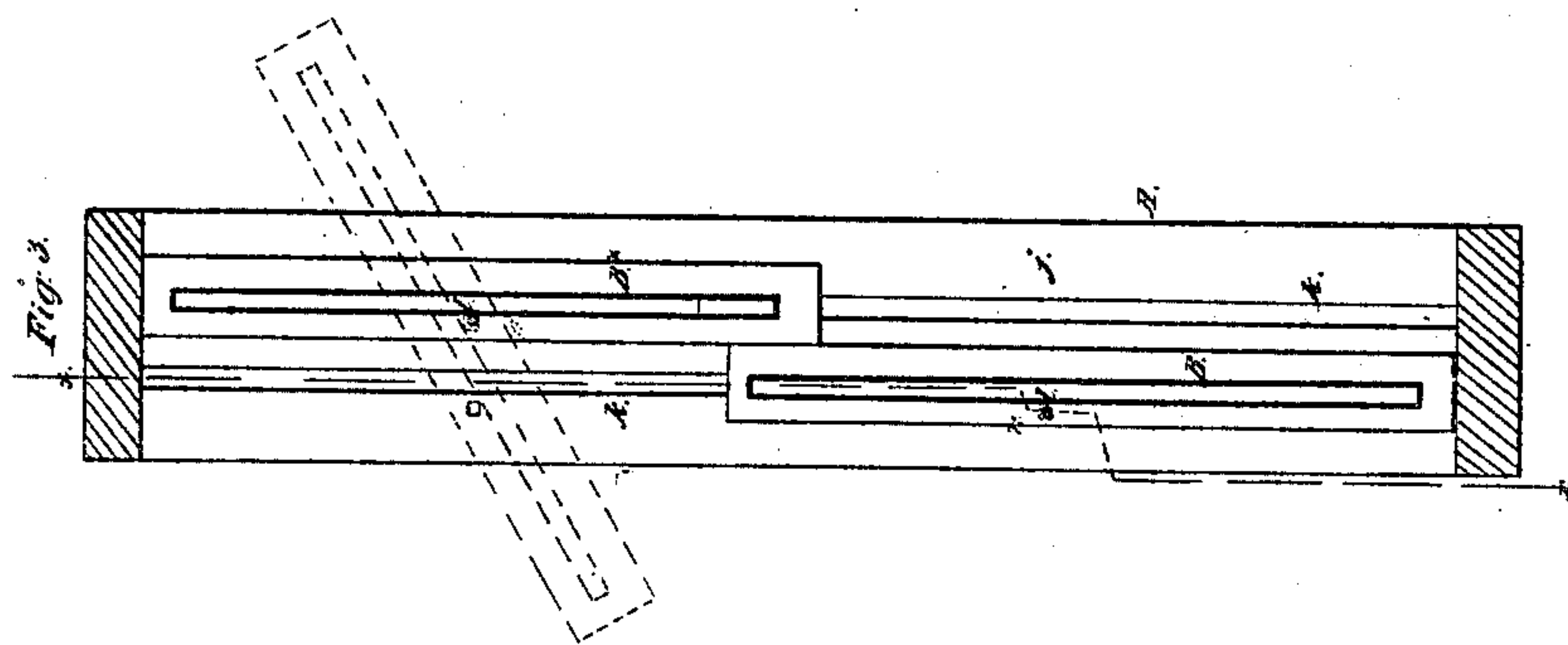
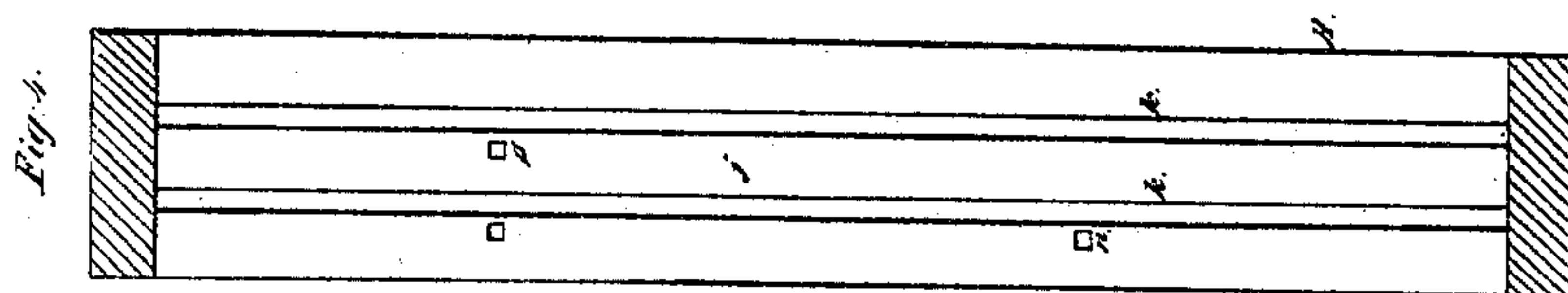


L. W. THICKSTUN.  
WINDOW SASH.

No. 30,095.

Patented Sept. 18, 1860.



Witnesses:  
J. W. Loomis  
R. S. House

Inventor:  
L. W. Thickstun  
per [Signature]  
Attorney

# UNITED STATES PATENT OFFICE.

L. W. THICKSTUN, OF CHATFIELD, MINNESOTA.

## HANGING WINDOW-SASHES.

Specification of Letters Patent No. 30,095, dated September 18, 1860.

*To all whom it may concern:*

Be it known that I, L. W. THICKSTUN, of Chatfield, in the county of Fillmore and State of Minnesota, have invented a new and useful Improvement in Window-Sashes; 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, making part of this specification, in which—

Figure 1, is a sectional elevation of a window having my invention applied to it  $\alpha$ ,  $\alpha$ , Fig. 2, indicates the plane of section. Fig. 2, a horizontal section of the same, taken in the line  $y$ ,  $y$ , Fig. 1. Fig. 3, a vertical section of the same, taken in the line  $z$ ,  $z$ , Fig. 1. Fig. 4, an inner side view of one of the stiles of the window frame.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to combine a sash stop and weather strip in such a way that the device will operate perfectly in either capacity and also to use with the sash and weather strip spring bolts, so arranged as to serve as pivots and admit of the sashes being turned in the frame horizontally for the purpose of washing, ventilation, etc., etc., the stops and weather strips securing the sashes at any point either in the vertical or swinging movement.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a window frame and B, B<sup>x</sup> sashes fitted therein. The sashes may be constructed in the usual way and in each side of them there is made a longitudinal recess or groove  $a$ . Said recesses or grooves extending nearly the whole length of the sashes as shown clearly in Fig. 3.

In each groove  $a$  there is fitted a strip B'. These strips are equal in length to the grooves and the former are allowed to slide freely in and out of the latter. To each strip B there is attached a plate  $b$ , at right angles, each plate having a spur or projection  $c$ , on it. These spurs or projections  $c$ , are each fitted in a spiral recess  $d$  formed by a scroll  $e$ . These scrolls are each attached to a circular disk  $f$ , which disks are secured in plates  $g$ , secured to the stiles of the sashes. The disks  $f$  are allowed to turn freely in the plates  $g$ , each disk being provided with a suitable handle  $h$ , by which it

may be turned. The turning of the disks  $f$ , cause the strips B' to be moved within or out from the sashes the scrolls  $e$  producing the movement as will be readily understood by referring to Figs. 1 and 2. The disks  $f$  are fitted in suitable holes or mortises  $i$  made in the stiles of sashes, as shown clearly in Fig. 2.

In the inner sides of the stiles  $j$  of the window frame there are made vertical grooves  $k$ ,  $k$ , to receive the strips B'. These grooves are shown clearly in Fig. 4 and it will be seen that they extend the whole height of the stile  $j$ , so that the lower sash may be raised the whole height of the frame A and the upper sash lowered to the bottom of said frame. The strips B', it will be seen are guides to the sashes, no "stops" or "parting beads" being required, and it will also be seen that either sash may be secured or retained at any point of its movement by forcing the strips B' out against the inner surface of the grooves  $k$ , the scrolls  $e$ , retaining the strips at any desired point.

There may be two scrolls  $e$ , applied to each strip B' but one probably would be sufficient.

In each side of each sash there is placed a horizontal bolt  $l$ . These bolts are connected at their inner ends to springs  $m$  which have a tendency to keep the bolts forced outward against the inner sides of the stiles  $j$  of the window frame as will be fully understood by referring to Fig. 1.

In the inner sides of the stiles  $j$  and at points a trifle above the bolts  $l$  of the lower sash B there are small holes  $n$ , which when said sash B is raised a trifle receives the bolts  $l$  of said sash, and by turning the disks  $f$ , so as to draw the strips B', within the latter may be turned on its bolts  $l$ , and the sash cleaned at both sides. The upper sash B<sup>x</sup> may be turned in a similar way its bolts  $l$ , by slightly lowering the sash the bolts fitting in holes  $o$  in the stiles  $j$ , see Fig. 3. The upper sash is represented partially turned, in red. The sashes when turned may be secured in any position within the range of their movement by actuating the scrolls  $e$ , and forcing out the strips B' against the inner sides of the stiles  $j$  of the window frame A.

The ordinary sash weight may be applied to the sashes by having grooves made in the inner sides of the stiles to receive the cords



and having the latter connected to the bolts *l*.

From the above description it will be seen that the strips *B'* serve as stops to retain the sashes at any desired height and they also serve as weather strips as they form a close joint between the sides of the sashes and the stiles. The bolts *l*, also serve as a very convenient means for turning the sashes for the purpose of cleaning the same, ventilation, etc.

Having thus described my invention, what

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

The bolts *l*, fitted in the sashes *B*, *B'* in connection with the strips *B'* in the sashes and the holes *u* in the stiles *l*, of the frame *A* all being arranged for joint operation as and for the purpose specified.

L. W. THICKSTUN.

Witnesses:

GEORGE M. GORE,

C. R. SLOCUM.