

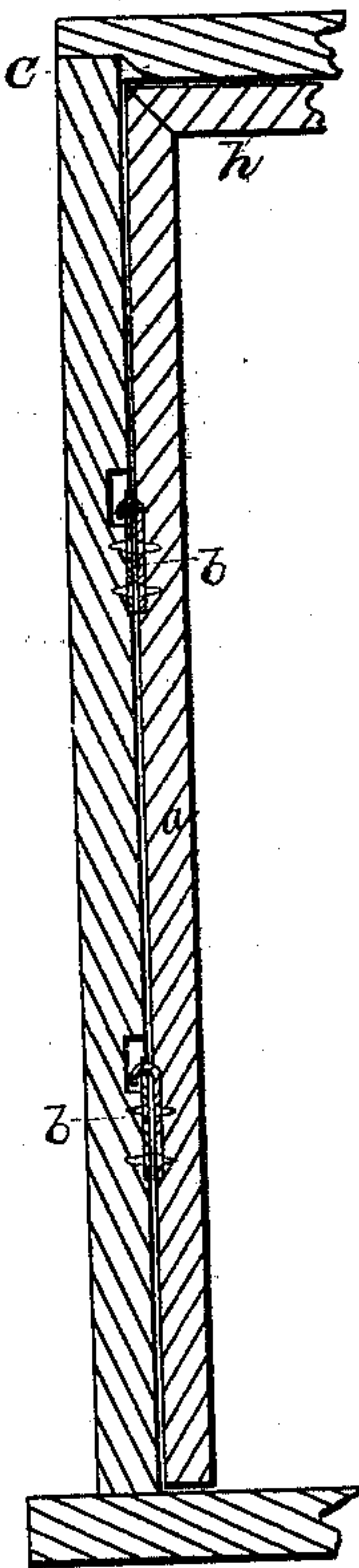
*A. J. Cleveland.*

*Window Frame.*

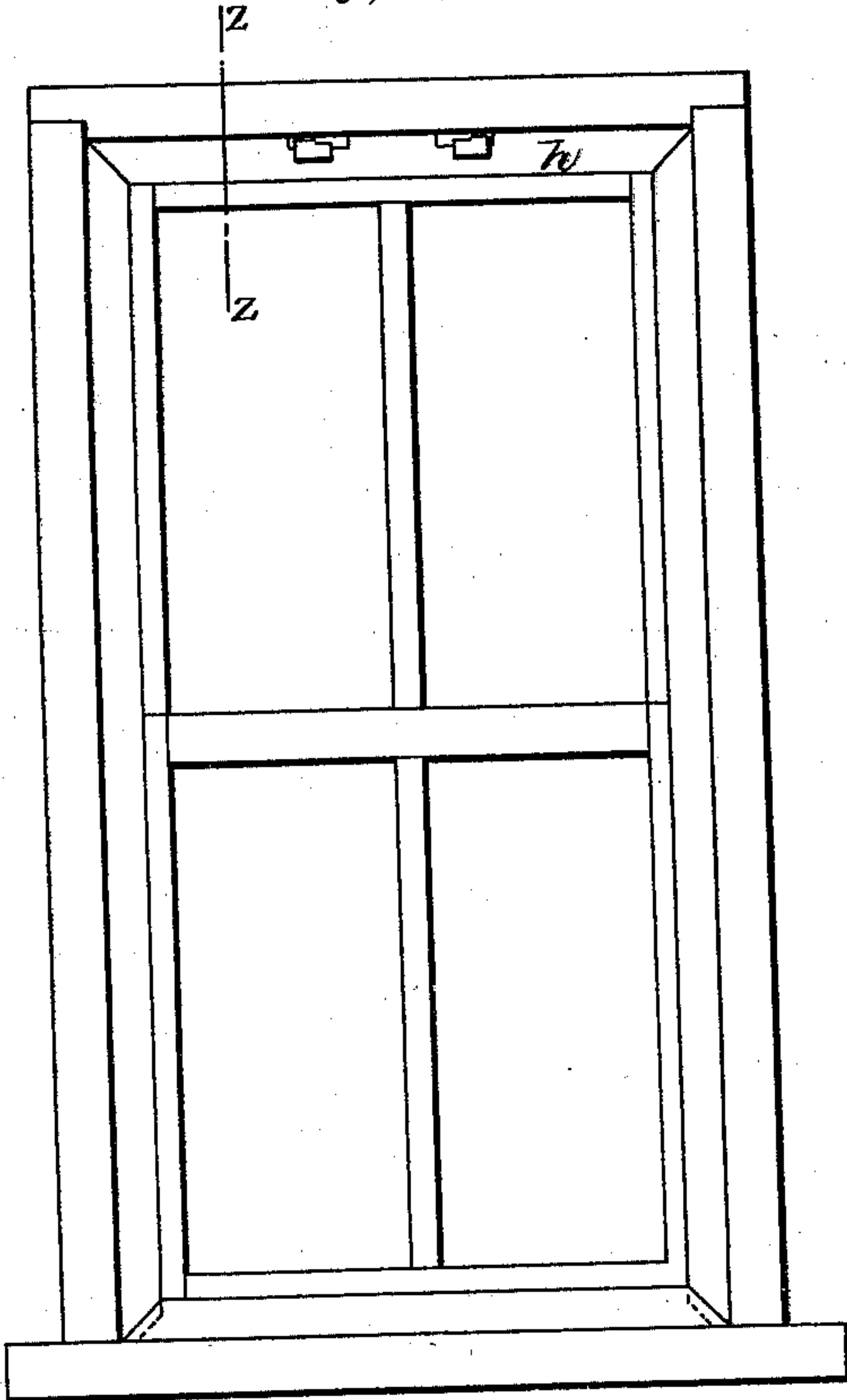
*N<sup>o</sup> 99,760.*

*Patented Feb. 15, 1870.*

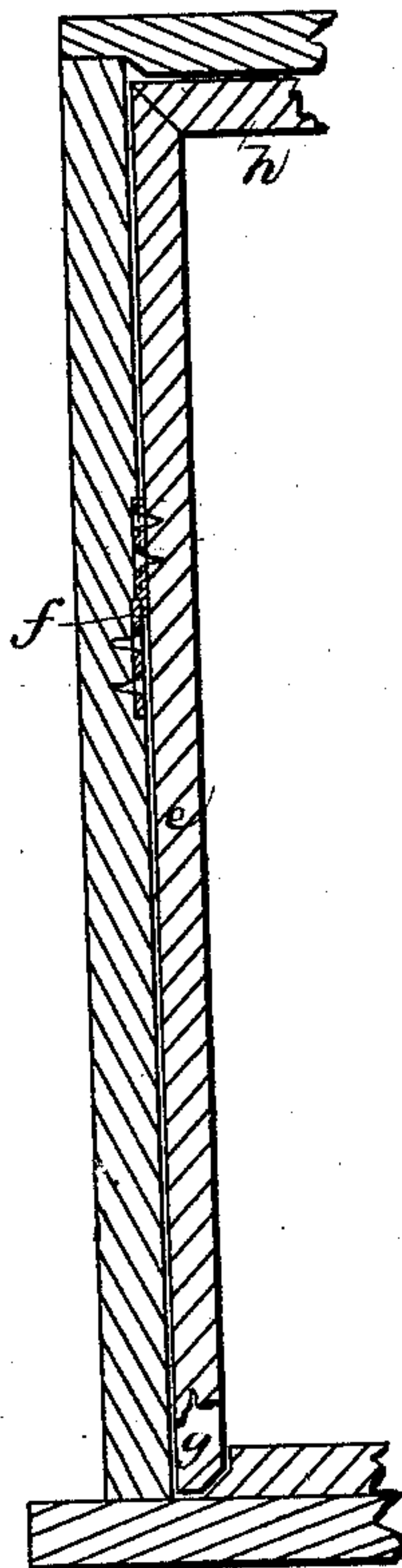
*Fig; 2.*



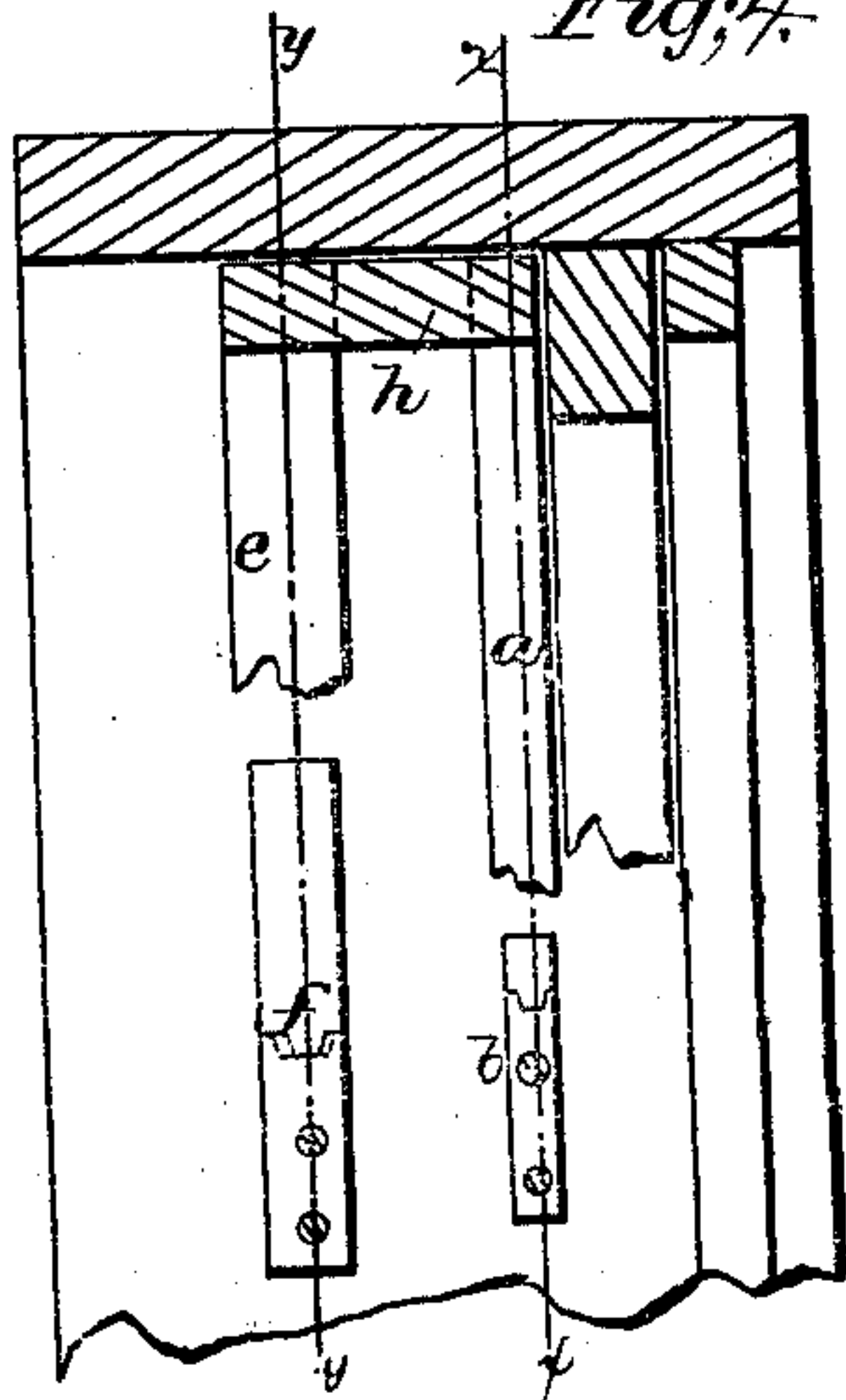
*Fig; 1.*



*Fig; 3.*



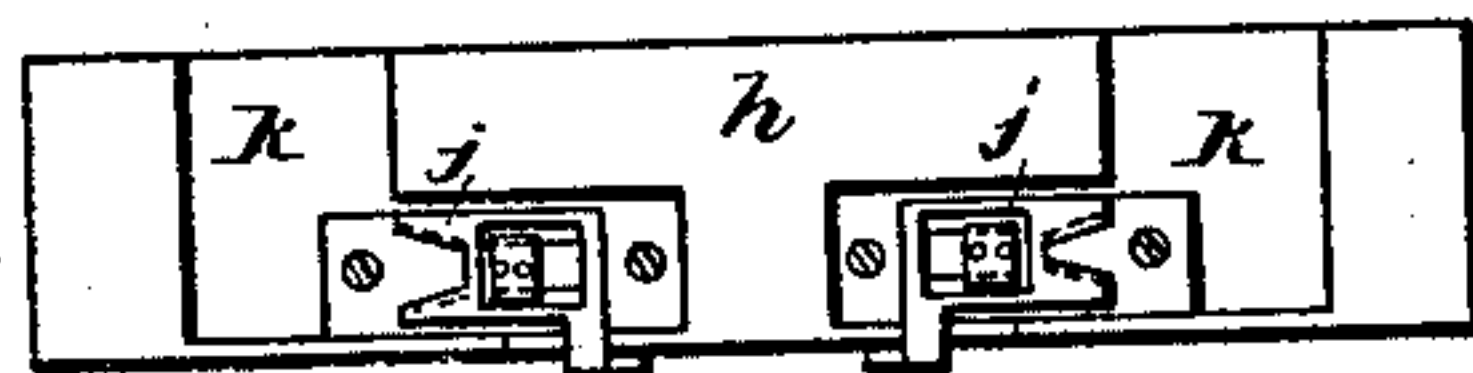
*Fig; 4.*



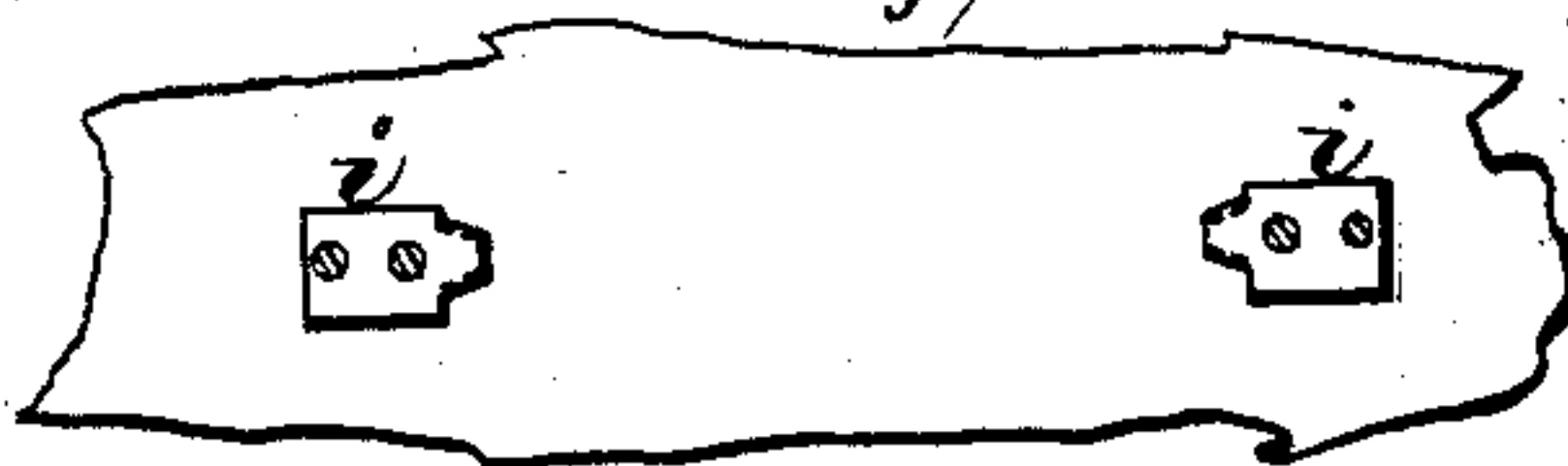
*Fig; 7.*



*Fig; 5.*



*Fig; 6.*



*Witnesses;*  
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*John H. Brooks*

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# United States Patent Office.

A. J. CLEVELAND, OF BALTIMORE, MARYLAND.

Letters Patent No. 99,760, dated February 15, 1870; antedated January 31, 1870.

## IMPROVED WINDOW-FRAME.

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, A. J. CLEVELAND, of Baltimore, Baltimore county, Maryland, have invented a new and useful Improvement in Window-Frames; 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.

My invention relates to securing window-sashes in their frames by means of beads, which are adapted to be easily adjusted and securely held in place, or readily removed, by means of a construction and arrangement of parts hereinafter described.

Figure 1 represents a side elevation of a window-frame having my improvements attached.

Figures 2 and 3 represent vertical sections of the same taken on the lines *x x*, *y y*, respectively, of fig. 4.

Figure 4 represents a section on the line *z z* of fig. 1.

Figures 5, 6, and 7, represent detail views showing my improvement.

Similar letters of reference indicate corresponding parts.

Instead of providing the grooves in the sides of the window-frame for the insertion of the center bead *a*, as heretofore, I propose to provide catches *b b* on the face of the frame, and corresponding hooks on the face of the beads, and hook them therein, as represented in fig. 2; and in order to be able to raise the beads high enough to pass the hook behind the catches, I provide notches *c* in the top of the frame, and the beads are prevented from rising after being hooked to their places by the top bead *h*.

I propose also to secure the inner beads *e* by one set

of hooks, *f*, in a similar manner, and by a tenon on the bottom taking in a dovetail groove in the beveled ends of the bottom inner bead, as represented at *g*, the said bottom bead being nailed down.

And I propose to form the top, center, and inner beads of one piece, as represented at *h*, with beveled ends, so that it may slide into place after the center and inner vertical beads are put in place, which are also beveled at their upper ends; and, in order to secure the said top bead *h*, I provide catches *i* in the top of the window-frame, and slides *j* in the upper face of the bead *h*, to catch behind them after the said bead has been shoved into place; and in order to admit the said bead to slide past the catches *i*, I provide recesses *k* in the upper face of the bead.

By this arrangement it will be readily seen that the upper bead, the inner and central beads may be readily put in and taken out, and that when put in, and the bead *h* fastened by the slides and catches, the whole are secured, and the great annoyance and damage attending the taking out of the windows, as at present constructed, are avoided.

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

In combination with the window-frame A, provided with the catches *b b* and *i i*, and the notch *c*, the beads *e* and *h*, the former having the hooks *f f* and tenons *g*, the latter the slides *j* and recess *k*, all constructed and arranged as herein shown and described, for the purpose specified.

A. J. CLEVELAND.

Witnesses:

JAS. H. BOND,  
O. J. SMITH.