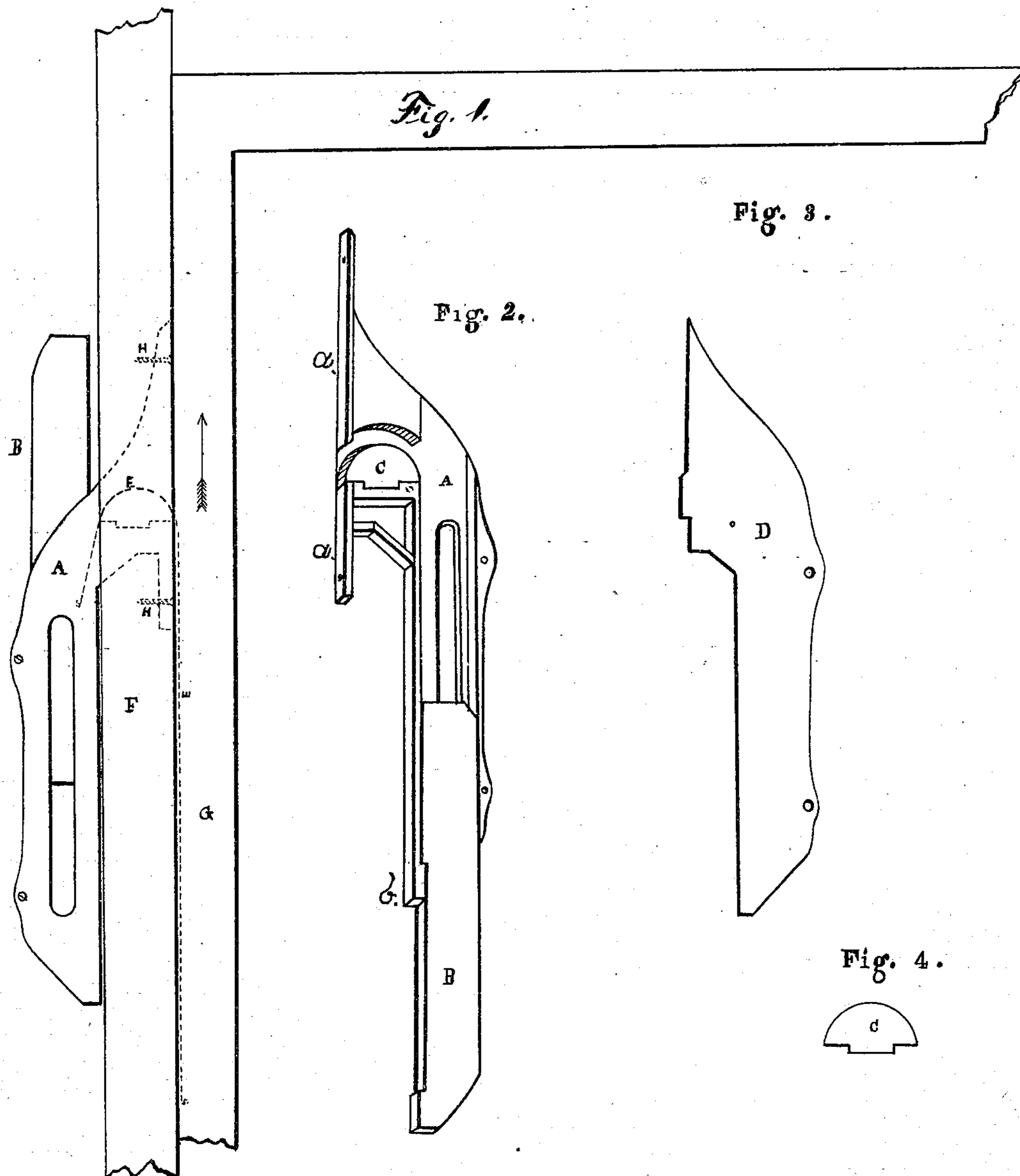


JOHN W. TRUSSELL.  
Improvement in Sash-Balances.

No. 127,997.

Patented June 18, 1872.



WITNESSES:

*J. R. Gray*  
*George E. Pillsbury*

INVENTOR:

*John W. Trussell*

# UNITED STATES PATENT OFFICE.

JOHN W. TRUSSELL, OF AUGUSTA, MAINE.

## IMPROVEMENT IN SASH-BALANCES.

Specification forming part of Letters Patent No. 127,997, dated June 18, 1872.

### SPECIFICATION.

Specification describing certain Improvements in Sash-Balances, invented by J. W. TRUSSELL, of Augusta, in the county of Kennebec and State of Maine.

This invention relates to balancing sash, and is adapted principally to car-windows, but is also applicable to house and other windows; and it consists in an extension of the pulley-frame or cord-guide, of metal or other material, to form a case for a peculiarly-constructed sash-weight, so as to guide and retain the same when connected with the cord, or to facilitate its removal and necessary repairs in the event of the breaking of the cord or other accident; also, in combining the cord-guide and weight so that they may be introduced and removed together, and thus constitute an improved sash-balance, as will be hereafter more fully described.

Figure 1 is a front view of the window and frame with my devices attached. Fig. 2 is a view of my combined pulley-frame and weight-guide case with the cap or cover removed. Fig. 3 is a view of the cap or cover detached. Fig. 4 is a view of the glass cord-guide.

Like letters in the drawing indicate like parts.

A is the case, which holds the weight in its proper position, and is cast or formed continuously with the pulley-frame, being with a removable cap or cover, D, and having a stop, *b*, on its interior side. B is the weight or balance to the window, cast flat, channeled on one side half its length for the sash-cord, and then raised, and adapted to be hung at or near its center. C is the guide or pulley, prefera-

bly of glass, over which the cord passes and works when the window is raised or lowered, the case A having face-plate *a*. D is the cap or cover to the case A, which also extends over one side of the pulley-frame. E is the cord, which is attached through a suitable hole to the weight below its upper end, at or near its center, so as to increase the scope of movement of the same. The dotted line shows the position of the cord when the window is down. F is the stud or casing of the window-frame, through which the case A with its contents is put into position. G shows the window-sash, and H the points at which the case A is fastened to the stud F.

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

1. A weight-guide and stop, formed on or attached continuously to a pulley or guide-block frame, in combination with a flat sash-weight adapted to be hung at or near the center, substantially as shown and described.

2. The improved sash-balance, consisting of the combined pulley-frame and weight-guide case A attached together, having face-plate *a*, cap or cover D, glass or other cord-guide C, and stop *b*, and the sash-weight B, channeled and recessed and provided with the cord E, so constructed that the whole may be inserted into or removed from the window-frame together, all combined, arranged, and operating substantially as shown and described, for the purpose set forth.

J. W. TRUSSELL.

Witnesses:

A. T. THOMPSON,  
J. S. CUSHING.