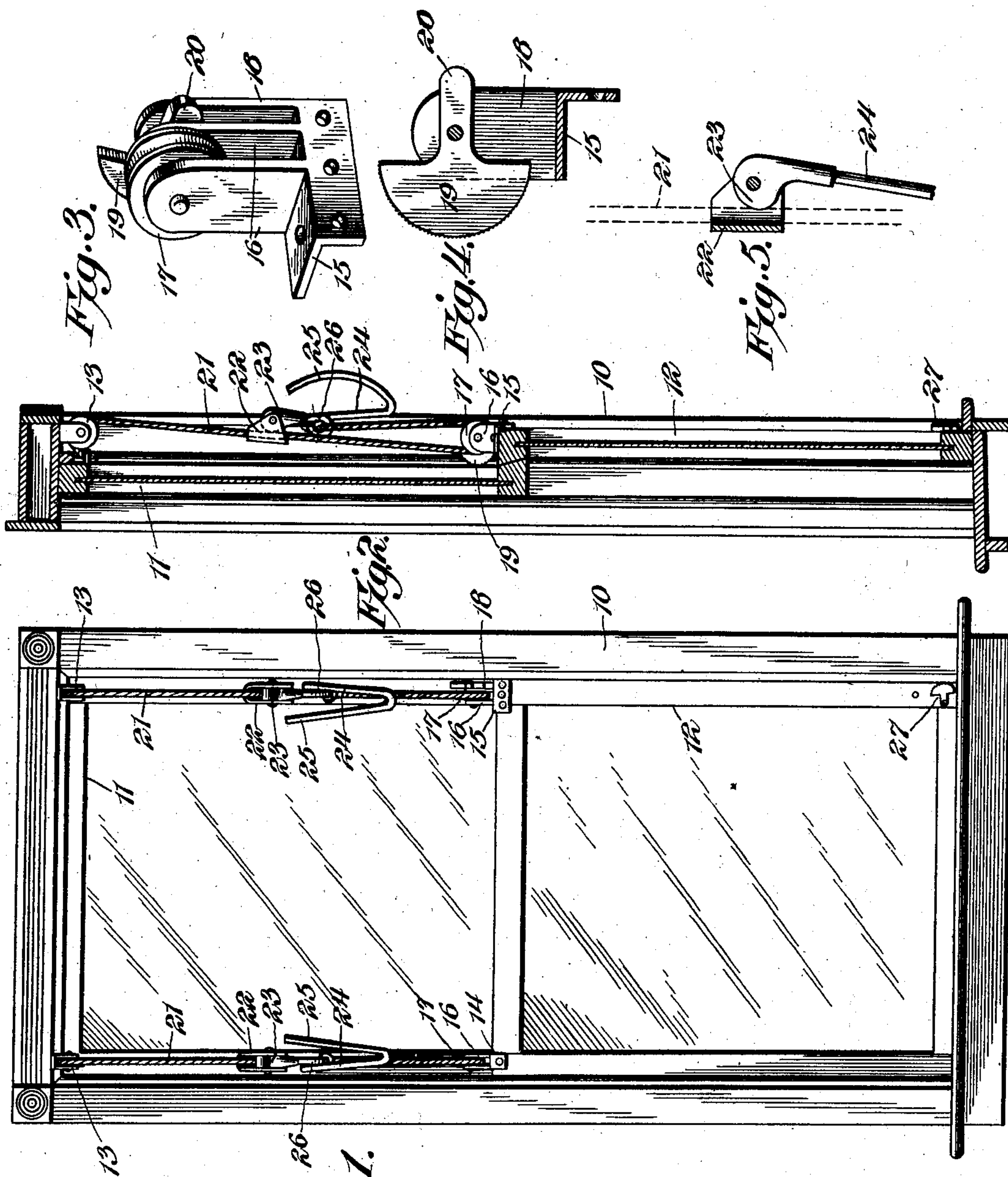


No. 753,908.

PATENTED MAR. 8, 1904.

G. W. OGDEN.  
SASH BALANCE.  
APPLICATION FILED APR. 4, 1903.

NO MODEL.



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By

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Witnesses

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# UNITED STATES PATENT OFFICE.

GEORGE WASHINGTON OGDEN, OF PROSPERITY, WEST VIRGINIA.

## SASH-BALANCE.

SPECIFICATION forming part of Letters Patent No. 753,908, dated March 8, 1904.

Application filed April 4, 1903. Serial No. 151,157. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE WASHINGTON OGDEN, a citizen of the United States, residing at Prosperity, in the county of Raleigh and State of West Virginia, have invented a new and useful Sash-Balance, of which the following is a specification.

This invention relates to that class of windows having connected counterbalancing-sashes; and the object is to provide a simple connection between the sashes, the operation of which will be readily understood and which will permit various adjustments of the two sashes, said connection constituting locking means for the sashes under certain conditions and coacting under other conditions with locking devices to hold the sashes against movement.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a side elevation of a window having the improvement applied thereto. Fig. 2 is a vertical sectional view through the window. Fig. 3 is a detail perspective view of the bracket carried by the lower sash. Fig. 4 is a sectional view through the same. Fig. 5 is a sectional view through the clutch.

Similar reference-numerals indicate corresponding parts in all the figures of the drawings.

An ordinary window-frame 10 is illustrated in the accompanying drawings, and in said frame is slidably mounted an upper sash 11 and a lower sash 12. Suspended from the upper portion of the frame 10 and in front of the upper end of the upper sash are pulleys 13, and upon the top of the lower sash contiguous to its corners are fastened brackets 14 and 15. These brackets are provided with upstanding ears 16, between and to which are journaled pulleys 17, located directly below the upper pulleys 13. The bracket 15 is provided with an extra ear 18, located at one side of one of the ears 16, and between these adjacent ears is pivoted a locking-dog having a cam portion 19, movable into engagement with the upper sash, said cam also having a suitable handle portion 20.

Flexible connections in the form of cords

or cables 21 are secured to the upper portion of the upper sash 11 and pass over the pulleys 13. Thence extending downwardly they pass around the lower pulleys 16. Slidably mounted on the cables 21 between the pulleys are clutches comprising sleeves 22, surrounding the cables and carrying pivoted cams 23, which are movable into and out of engagement with said cables. The cams are provided with depending handles 24, having upturned terminals 25 and intermediate coiled portions 26. The free ends of the cables are secured in said coiled portions. A suitable locking device in the form of a dog 27 is preferably located on the lower portion of the lower sash and is arranged to clamp against the window-frame.

It will be understood that the sashes counter-balance each other, and thus when one is raised the other will be simultaneously and correspondingly lowered, so that ventilation will be permitted over the top of the upper sash. When both sashes are closed and the lower one is locked by the dog 19, it will be seen that both of the sashes are secured against movement. This fastening is made more secure by means of the locking-dog carried by the lower sash 12, which can be engaged with the frame 10. If it is desired to lower the upper sash without moving the lower one, the cam 19 is moved out of engagement with the upper sash, the clutches are freed from the cords and lowered, whereupon the upper sash can be let down a considerable distance and after being locked will be securely held. The clutches therefore constitute simple means which will permit the independent adjustment of the sashes, and they are readily accessible, while their operation may be easily understood.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

5 In a window, the combination with an upper and a lower sash, of a bracket mounted on the upper edge of the lower sash and including a plurality of upstanding ears, a locking-cam journaled between certain of the ears and movable into and out of engagement with  
10 the upper sash, a pulley journaled between certain of the ears, said pulley being located beside but independent of the cam, a cable se-

cured to the upper sash and passing about the pulley, and means for adjustably securing one end of the cable to an intermediate portion of  
15 the same.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE WASHINGTON OGDEN.

Witnesses:

GEO. W. COOK,

R. B. SUMMERFIELD.