

No. 791,645.

PATENTED JUNE 6, 1905.

A. J. PARK.
MEANS FOR SUSPENDING AND OPERATING WINDOW SASHES.
APPLICATION FILED SEPT. 10, 1904.

Fig. 1.

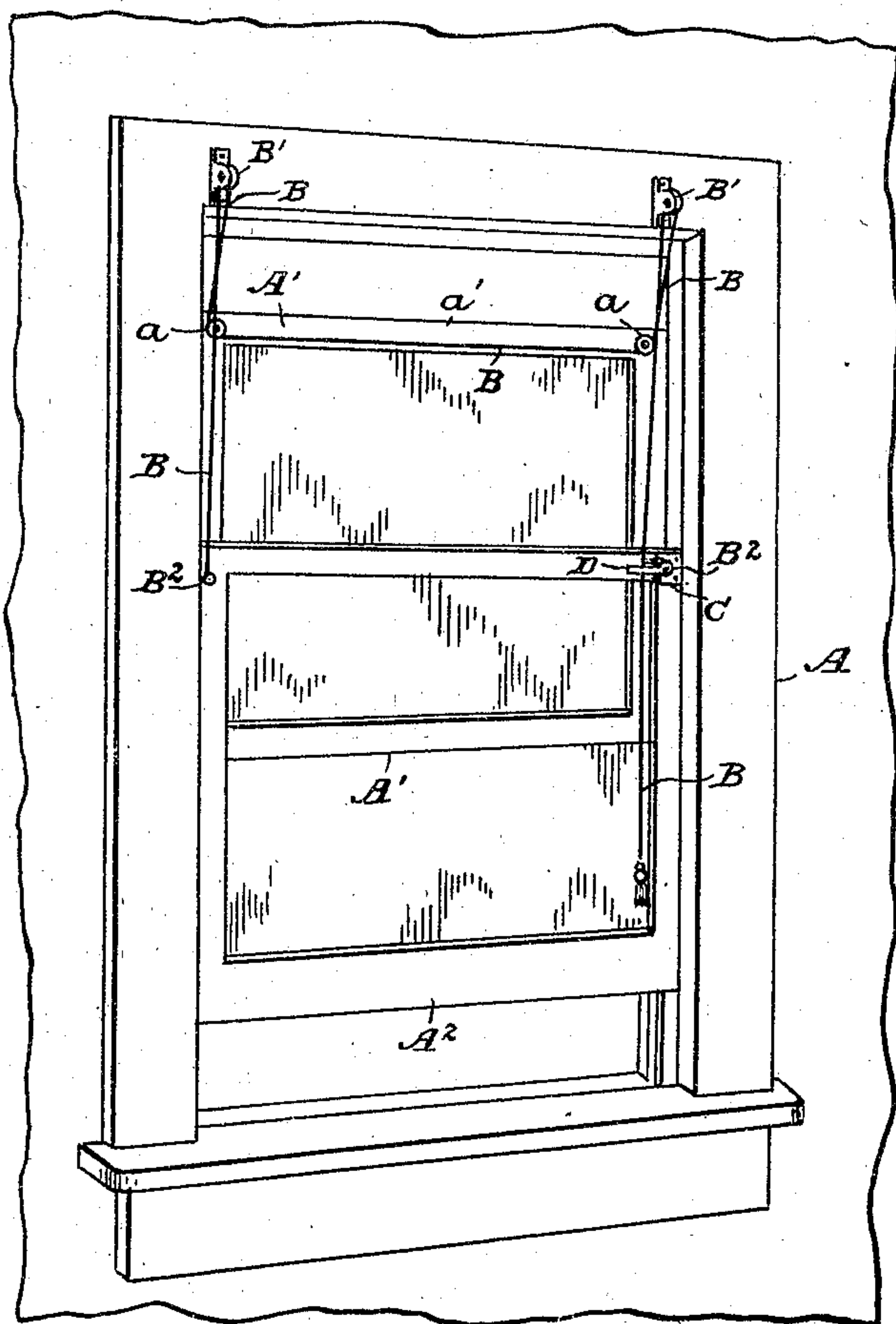


Fig. 2.

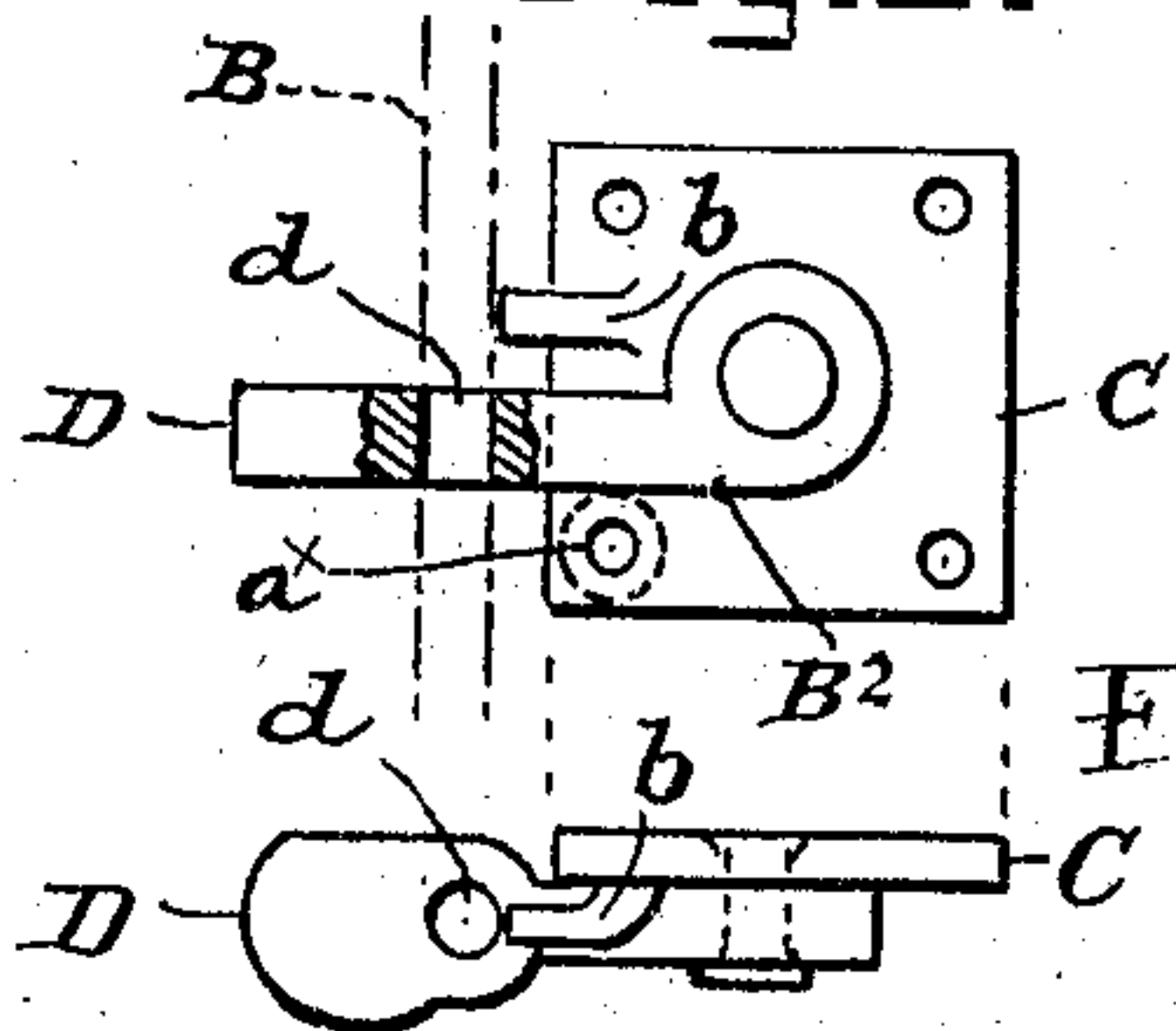


Fig. 3.

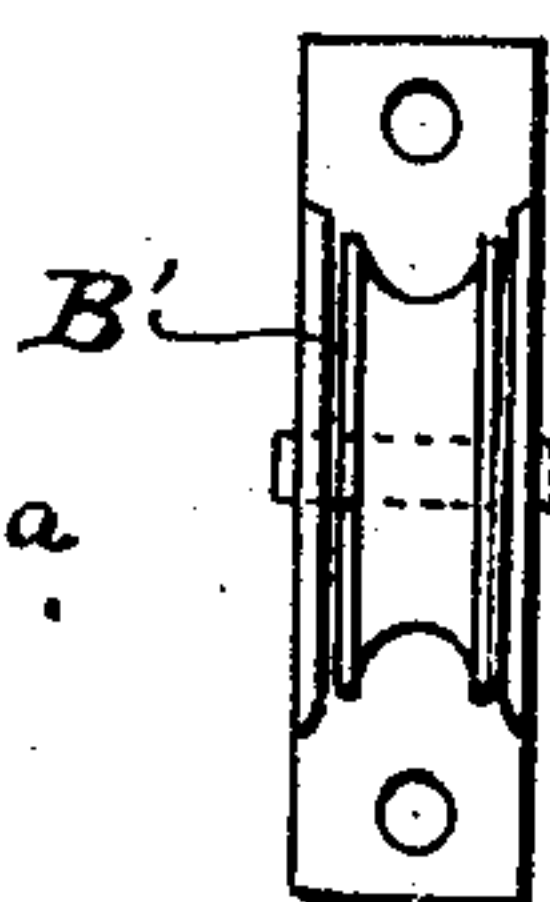
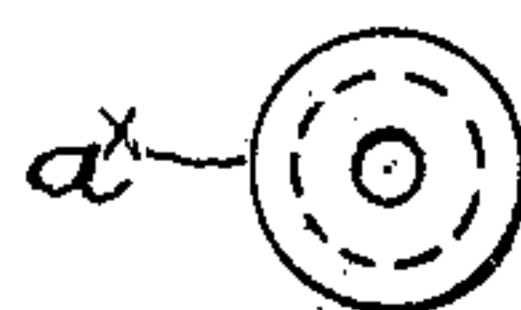


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

ADOLPHUS JAMES PARK, OF AUCKLAND, NEW ZEALAND.

MEANS FOR SUSPENDING AND OPERATING WINDOW-SASHES.

SPECIFICATION forming part of Letters Patent No. 791,645, dated June 6, 1905.

Application filed September 10, 1904. Serial No. 223,980.

To all whom it may concern:

Be it known that I, ADOLPHUS JAMES PARK, a subject of the King of Great Britain, residing at Auckland, New Zealand, have invented certain new and useful Improvements in Means for Suspending and Operating Window-Sashes, of which the following is a specification,

This invention relates to improvements in the means whereby window-sashes may be suspended in their frames without the use of the ordinary sash-cords and weights and may be easily operated to open or close the sashes; and it consists in novel clamping devices for the cord.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a window with the invention applied thereto. Fig. 2 is a detail front view of the locking device, on a larger scale. Fig. 2^a is a top view of the same. Fig. 3 is a detail view of one of the pulleys B'. Fig. 4 is a detail view of the lower stop.

In carrying out the invention a pair of inverted pulleys are mounted in the top of the window-frame A, one near each side thereof. A pulley *a* is also loosely mounted on the inside face of the top bar *a'* of the top sash A', at each end thereof. A flexible wire cord B of any approved strength is passed across the top of the top sash A', each of its two ends being then passed upward around the pulley B' at the respective side of the sash and then downward around the pulley secured within the window-frame on that side. The end or ends of the cord B are continued downward and pass through clip B² or clips secured one on each side of the top of the bottom sash A². The clipper B² or clips are so constructed as to allow of the cord B passing freely through them when the end or ends are given a downward pull, but which will bind upon the cord B and hold it when the upward pull caused by the weight of the top sash A' is exerted upon it.

A suitable form of clip consists of a metal

plate C, adapted to be secured upon the face of the lower sash A² and to which a lever-arm D is pivoted at one of its ends, while its other end is free and is formed with an opening *d* in it, through which the cord B may be passed. A stop *a*^x is located below the arm or lever D, against which the arm will tend to drop and rest by gravity in a horizontal position, at which time the wall of the passage *d* is vertical, allowing the cord B to be drawn freely through the same. When, however, the cord is released and allowed to move upwardly, the friction of the cord in the opening will raise the lever against the action of gravity. Above the lever is located a stop or member *b*, so that as the lever swings upwardly the cord is bent or kinked, and thereby held against movement by frictional contact between said parts. The top sash A' will thus be held by the weight of the lower sash A², and the lower sash A² may be raised and closed and the upper sash A' lowered and raised simultaneously by operating the lower sash A². The top sash A' may be lowered independently of the lower one by allowing the cord B to run through the clips D and may be raised again by pulling on the end or ends of the cord B. The clips will hold the cord at any points, so that the top sash A' may be suspended at any height. The lower sash A² may be raised independently of the top one by pulling on the ends of the cord B and lifting the sash A² at the same time. When the pull is released, the sash will be caught and held at the desired height.

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

The combination with the window-casing and upper and lower sash of a pair of pulleys secured at the top of the casing and a pair of pulleys carried by the upper rail of the upper sash, a cord having one end secured to one side of the top rail of the lower sash and passing thence over said pulleys and having its free end depending in proximity to the other side of the lower sash and clamping means for said free end comprising an arm pivotally

connected to the lower sash and having an opening through which said depending end passes, said arm being adapted to be held by gravity in a horizontal position and to swing
5 upward against a stop to clamp said depending end automatically when it is released, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ADOLPHUS JAMES PARK.

Witnesses:

BRAYBROOKE FEATHERSTONE GRIFFIN,
WILLIAM JAMES DALTON.