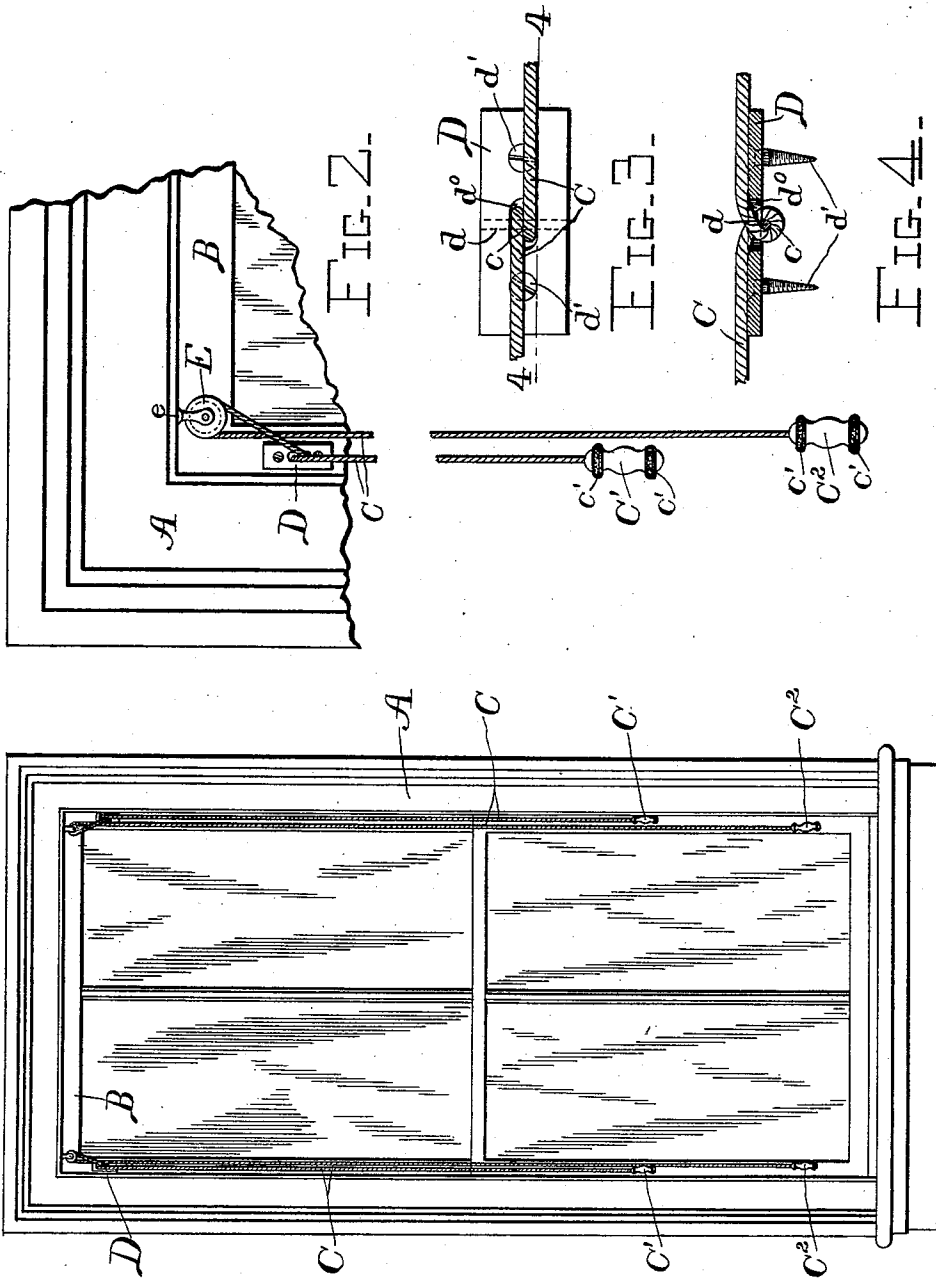


(No Model.)

S. T. BEER.  
SASH LIFT.

No. 564,499.

Patented July 21, 1896.



Witnesses  
D. H. Blahelock,  
J. Stephen Ginstad

FIG. 1--

Inventor  
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# UNITED STATES PATENT OFFICE.

SAMUEL T. BEER, OF NEW ORLEANS, LOUISIANA, ASSIGNOR OF NINETENTHS TO HENRY BEER, OF SAME PLACE.

## SASH-LIFT.

SPECIFICATION forming part of Letters Patent No. 564,499, dated July 21, 1896.

Application filed April 24, 1896. Serial No. 588,932. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL T. BEER, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Sash-Lifts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in sash-lifters for use in raising and lowering sashes of windows, more especially the upper sash, and for like purposes; and the said invention consists of certain novel features hereinafter described and claimed.

Reference is had to the accompanying drawings, in which the same parts are indicated by the same letters throughout the several views.

Figure 1 represents an interior elevation of a window-frame and window, showing the upper sash fitted with my improved sash-lift. Fig. 2 is a detail view, on an enlarged scale, showing one of the sash-lifts. Fig. 3 is a detail view showing a plan of the detachable plate secured to the sash, and represents the manner of securing the hoisting-cord therein; and Fig. 4 represents a section along the line 4 4 of Fig. 2.

A represents the window-frame in which the window-sashes are mounted.

B represents the upper sash, which is constructed in the ordinary way.

C represents a stout cord, which is provided at each end with handles C' and C<sup>2</sup>, each having disks of soft rubber c' secured at either end of the handle and projecting beyond the outer edge thereof, so that if the said handles be let go carelessly or in any other way be allowed to strike against the glass pane the said glass may not be broken. This cord is bent over, as at c, and passed through the holes d<sup>o</sup> in the plate D. This cord is held in the said plate by the tongue or pin d, which may be either secured at one or both ends to the said plate or may be separate therefrom, as may be desired.

The plate D is detachably secured to the window-sash in any convenient way, as by means of the screws d'. One end of the cord C leads down directly from this plate D, while

the other end of the cord is rove over the pulley E, secured to the window-frame by any suitable support e, and this end of the cord terminates in the handle C<sup>2</sup>. It will be obvious from an inspection of Figs. 1 and 2 that pulling down on the handle C' will cause the upper sash B to open or descend, while pulling down on the other handle C<sup>2</sup> will cause the upper sash B to close or ascend. I have shown two of such cords in Fig. 1, one on each side of the window, whereby the effect of balanced pressure may be obtained, but it will be obvious that a single cord may be used at either side of the window, or a single cord secured to the middle of the upper portion of the upper sash may be used.

A suitable mortise should be provided in the sash-frame B for the plate D, and the tongue or pin d' should preferably be flush with the sash-frame. By having a suitable recess in the sash-frame beneath the opening d<sup>o</sup> in the plate D, the cord C may be readily fed around the said tongue d, and thus the position of the two handles C' and C<sup>2</sup> may be adjusted, the nip of the said cord on the said tongue being sufficient to prevent the cord from slipping in the ordinary operation of pulling up and down the window-sash; or the plate D may be detached and the position of the handles C' and C<sup>2</sup> adjusted, as may be desired.

It will thus be seen that a simple and efficient means is provided by which the upper sash of a window may be conveniently raised and lowered, as may be desired.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In a sash-lift, the combination with the cord C bent over as at c, of the plate D perforated as at d<sup>o</sup> and detachably secured to the window-sash, and the pin d projecting through the bent portion c of said cord across said perforation d<sup>o</sup>, and the pulley E secured to the window-frame and guiding one end of said cord substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL T. BEER.

Witnesses:

S. S. JONES,  
CHANDLER C. LUZENBERG.