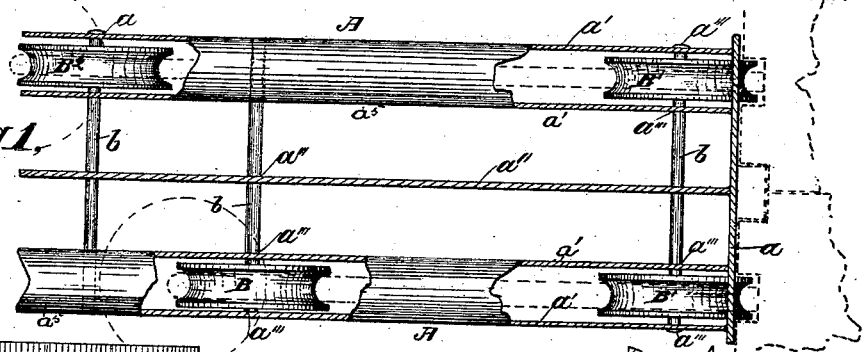
(No Model.)

A. B. TADLOCK.

SASH CORD GUIDE.

No. 265,888. Patented Oct. 10 1882.

Fig 1.



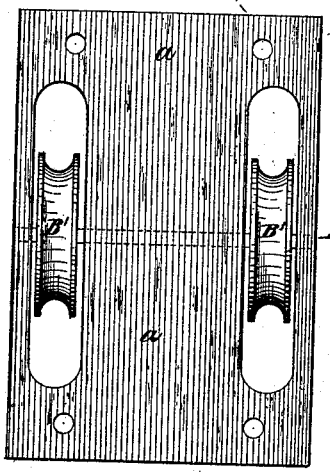
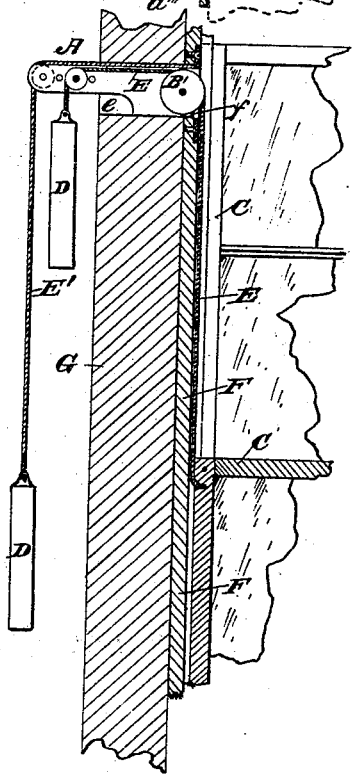


Fig 2

Fig 3.



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UNITED STATES PATENT OFFICE.

ALEXANDER B. TADLOCK, OF KNOXVILLE, TENNESSEE.

SASH-CORD GUIDE.

SPECIFICATION forming part of Letters Patent No. 265,888, dated October 10, 1882.

Application filed October 11, 1880. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER B. TADLOCK, M. D., a citizen of the United States, residing at Knoxville, in the county of Knox and State of Tennessee, have invented an Improved Window-Pulley, of which the following is a specification.

The object of my invention is to provide a simple and cheap device for balancing window-sashes, and is especially adapted for the windows of frame houses.

The invention relates to a double sash-cord guide, which consists of parallel longitudinal plates connected by curved top plates so as to form inverted-U-shaped housings, in which front and rear sheaves are inclosed. Rods passing through these plates and riveted or otherwise secured thereto serve as bearings upon which the cord-sheaves turn, and also as stay-rods for adding to the strength or rigidity of the device. The sheave supporting and inclosing plates are secured to or form an integral part of a vertical face-plate, which is attached to the window-casing after the sheave-frame has been fitted in position through a mortise made in said casing and the adjacent studding.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a top view of my improved window-pulley as constructed for a pair of sashes. Fig. 2 is a front view thereof. Fig. 3 is a vertical longitudinal section on the lines 3 3, Figs. 1 and 2, showing the device inserted through its mortise in the frame and studding, so as to bring the weight within the space between the boarding.

The letter A designates a frame for supporting the sheaves required for guiding the balancing-cords of a pair of window-sashes. This frame is constructed of the longitudinal plates a', which are arranged together in pairs connected at the top by arched or curved plates a^5, forming part of or made in one piece with the plates a'. In this manner I produce a housing closed at the top and open at the bottom, which is of an inverted-U shape in cross-section. The front ends of the plates a' are rigidly secured to or are made integral with a face-plate, a. The frame composed of the above-mentioned parts may, if desired, be formed in one piece by casting in a suitable mold; but, as shown in the drawings, I make use of thin plates or members instead of the solid or thick metal sheave-housings generally employed. A central longitudinal plate, a'', may be provided when a brace for the frame and additional bearing for the sheave-rods b are deemed desirable. These rods b, three in number, pass through the various plates and have their bearings therein at the points a'''. The front rod carries two sheaves, B′, for guiding both sash-cords. The intermediate rod has a sheave, B, for guiding one of the cords, and sheave B^2 on the other rod serves to receive the other sash-cord. These cords (designated by the letters E and E′) are by the sheaves referred to directed into the space between the studding and boarding, where the weight D has sufficient room to play up and down. C may represent sashes, F the casing, and G the studding, of an ordinary frame house.

e f are mortises formed in the casing and studding to receive the pulley-frame A, which is secured by suitable nails or screws passed through its face-plate a into the casing.

In practice I make the front sheaves two inches in diameter and the rear sheaves one and one-half inch in diameter, and I place them in the frame about five and one-half to six and one-half inches apart from center to center.

My improved pulley may be used in the construction of new frame buildings; but it is more particularly designed for old frame houses. A pulley-frame such as described and represented can be introduced by mortising a hole two and one-half inches by two and one-half inches through the casing and adjacent studding, through which the weights with cords are pushed. The cords are then made to pass over the sheaves of the frame, which is introduced into the mortise and then secured by screws, the cords being finally attached to the sashes, as usual.

The pulley-frames can be varied as to length and the rear sheaves be so arranged as to adapt their position to the width of the casing and studding.

I am aware that sash-cord guides constructed of a plug or cylindrical shell containing front and rear sheaves and adapted to be secured

in a mortise in the window-casing have heretofore been proposed. These devices, however, involve the use of a solid or thick metal plug, whereas I employ a frame which is light and simple and possesses the requisites of strength and rigidity. The construction shown by me also insures a convenient and easy fitting of the entire device in the window-casing, and, the sheaves being located in a housing closed at the top and open at the bottom, it is evident that they can be readily attached, and are also protected from dirt, plastering, &c., as the latter cannot lodge in the sheaves and prevent the working of the cords.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

The combination of the inverted-U-shaped housings a' a^5, face-plate a, transverse rods b, passing through said housings, front pair of sheaves, B', intermediate sheave, B, and rear sheave, B^2, with the mortised casing F and studding G, sashes C, and weighted cords E E', as and for the purpose herein set forth.

A. B. TADLOCK.

Witnesses:

CHAS. H. BROWN,

THOS. A. SMITH.