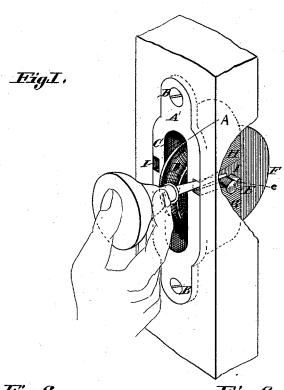
(No Model.)

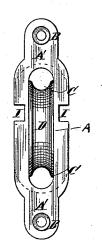
G. J. KÜHN. OILABLE SASH CORD GUIDE.

No. 418,030.

Patented Dec. 24, 1889.

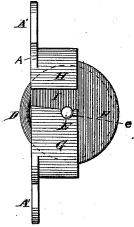


Fig, 2.



Attest; Charles Lickles, G.M. Hinchman Tr;

Fig.3.



Troverdor, George J Kihn

UNITED STATES PATENT OFFICE.

GEORGE J. KÜHN, OF ST. LOUIS, MISSOURI.

OILABLE SASH-CORD GUIDE.

SPECIFICATION forming part of Letters Patent No. 418,030, dated December 24, 1889.

Application filed March 30, 1889. Serial No. 305,477. (No model.)

To all whom it may concern:

Be it known that I, George J. Kühn, a citizen of the United States, residing in the city of St. Louis, State of Missouri, have invented a new and useful Improvement in Sash-Cord Guides, of which the following is a specification.

The object of my invention is to furnish means by which the axle of the sheave may to be oiled at any time without removal from the frame or housing; and my invention consists of certain features of novelty to be hereinafter described, and then particularly pointed out in the claim.

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

Figure 1 is a perspective view showing a 20 portion of a window-frame or other frame to which my device is applied, part of the frame being broken away. Fig. 2 is a face view of my device. Fig. 3 is a side view.

The object of my invention is accomplished 25 in a very simple manner and without holes in the housing, and with no ribs or any complicated oil-conductors, as heretofore employed, and which, on account of clogging of the oil, accumulation of dust, swelling of the 30 wood, &c., soon render the device worthless.

To these ends my device consists of the housing A, in the shape of a flattened ellipse, which is provided with the slot C for the sheave, and screw-holes B in the end lugs A' 35 for the reception of screws, side flanges F, that extend from the sides of the slot rearwardly, and swellings, enlargements, or protuberances G and H on the outer sides of the flanges, having between them at each side of 40 the face-plate recesses or cavities I. The enlargements G and H are about an inch in width at the ends and extend from both the upper and lower ends of the flanges F to within about one quarter of an inch of 45 each other upon the front or face plate and within twice that distance at the rear, according to the size of the pulley D. By the aid of such small oil-cans as may be found in every household having a sewing-machine,

50 oil may be deposited through the recesses be-

E of the pulley. The lower enlargements G extend back far enough so that the openings for the axle E extend through the flanges F in such a manner that a concavity e is formed 55 in each of the enlargements continuous with the lower half of the opening. Beside their use in forming the recess I, the swellings, enlargements, or protuberances G and H are intended to present an even surface to the 60 wood of the frame; also, a wide journal or rest for the pivot or axle E, enhancing in a very great degree its strength and durability.

The enlargements G and H may be cast upon either the inside or outside of the 65 flanges; but I prefer the latter, as this leaves no space for the rope to slip into between the flanges and the sheave in the event of the rope's displacement by a too rapid raising of the sash. This arrangement forms a perfect 70 oil-box, which can be readily cleaned by the use of a small rod or piece of wood, as there are no obstructions back of the recesses and axle to prevent the dislodgment of any accumulated matter.

I do not pretend to oil the pulley or sheave itself, but the axle thereof, and for the reason that, unlike most guides whose lower sheave revolves upon a stationary and ordinary iron pin riveted upon the outside of the flanges, 80 mine is shrunk by the aid of heat (or otherwise firmly attached, as shall be deemed best) upon a steel axle whose ends revolve in bearings fully a quarter of an inch in thickness, owing to the addition of the enlargements G, 85 forming a simple and thoroughly practical device for the purpose set forth.

I am aware that it is not broadly new to introduce oil into sash-cord guides for the purpose of lubricating the same. Neither is 90 it new to have the sheave and axle in one piece.

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

An integrally-cast sash-cord guide consisting of a flattened elliptical housing having flanges extending on each side of the pulley, opening rearwardly, enlargements or swellings Gand Hontheouter side of each flange, and the 100 fronts of which are flush with the front of the tween the enlargements directly onto the axle | housing, between which swellings are formed,

open-sided recesses extending rearwardly, and a pulley having an axle which may be lubricated from said recesses, the ends of said axle passing through and journaling in bearings consisting of holes in the flanges and concavities in the upper edges of the lower enlargements that are flush with the lower

open-sided recesses extending rearwardly, and a pulley having an axle which may be lubricated from said recesses, the ends of said as set forth.

GEORGE J. KÜHN.

Witnesses: J. S. Ensor, Chas. Jones, Jr.