

(No Model.)

W. H. NAYLOR.
SASH CORD AND SECURER.

No. 476,163.

Patented May 31, 1892.

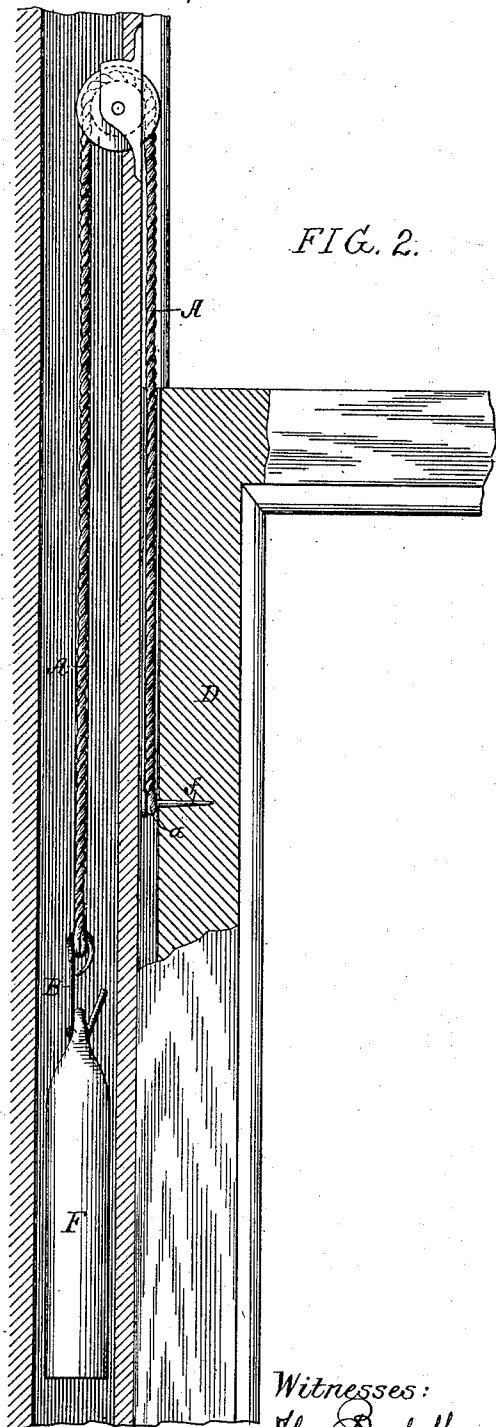


FIG. 2.

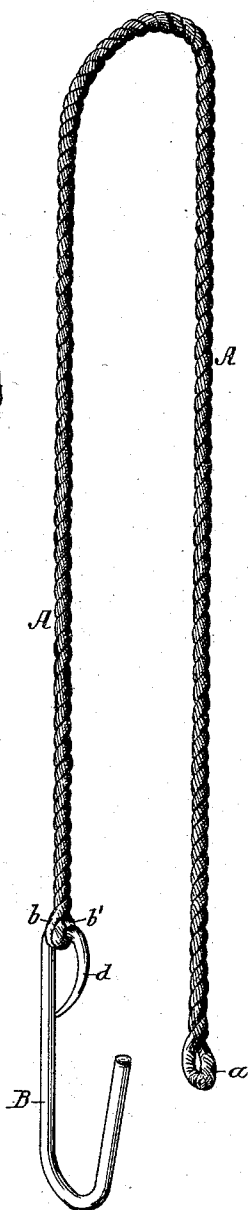


FIG. 1.

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UNITED STATES PATENT OFFICE.

WILLIAM H. NAYLOR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE
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SASH CORD AND SECURER.

SPECIFICATION forming part of Letters Patent No. 476,163, dated May 31, 1892.

Application filed August 21, 1890. Serial No. 362,654. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. NAYLOR, a subject of the Queen of Great Britain and Ireland, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Cords for Sashes and for other Purposes, of which the following is a specification.

The object of my invention is to provide an exceedingly strong and durable twisted sash-cord which will not stretch or untwist. This object I attain in the following manner, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved cord intended for use as a sash-cord, and Fig. 2 is a view showing its application to a window sash and weight.

Ordinary cords or ropes are objectionable for many purposes, because in order to attach them an eye, knot, loop, or other connection must be formed at each end for securing the various attachments or for preventing untwisting of the cord, and in the case of a sash-cord square weights must be employed in order to prevent the cord from untwisting.

In carrying out my invention I first make a twisted cord with an eye or loop at each end and then double this cord and again twist it so as to form a single eye or loop at one end of the cord and a double eye or loop at the opposite end, and to prevent untwisting of the cord this double eye or loop is engaged by a hook, ring, or other retainer. A cord of this character is extremely strong and durable, owing to the doubling and twisting of the cord during its manufacture, and the cord will not stretch materially in use.

In the drawings, A represents the cord, having at one end the single eye *a* and at the opposite end the two eyes *b' b'*, before referred to, these two eyes being engaged by the loop *d* of the hook B, whereby the eyes are retained and the cord prevented from untwisting, this loop having been introduced into the eyes during the process of manufacture of the cord, so that said eyes are pulled tightly upon the loop and the easy removal of the loop is thereby prevented. When a cord thus made is intended for use as a sash-cord, it can be readily applied, as shown in Fig. 2, that end of the cord having a single eye *a* being se-

cured to the sash-frame D by means of a hook, staple, or nail *f*, passed through the eye and into the sash, while the hook B engages with the usual eye at the upper end of the sash-weight F. As the cord cannot untwist, a round weight may be used instead of the square weight now generally employed, and as there is no material stretch in the cord and no elongation of the same due to untwisting, no rehanging of the sashes for the sake of taking up slack in the cord is ever required. The round weight, moreover, is preferable to the ordinary square weight, as it cannot become jammed in the weight-box as square weights sometimes do when they twist slightly so as to bring their corners against the sides of the box.

It will be evident that a cord of the character described is much more readily applied to the sash than the usual cord, which has to be drawn through recesses or openings in the sash-frame and then knotted so as to prevent it from being pulled out, and the formation of these recesses or openings in the sash-frame is also rendered unnecessary. It will be evident, however, that my invention is not limited to sash-cords, but may be used for other purposes, and in place of the simple hook B a ring or a snap-hook may be employed, and, if desired, such rings or hooks may be used at both ends of the cords in some cases.

Having thus described my invention, I claim and desire to secure by Letters Patent—

As a new article of manufacture, the within-described sash-cord, said cord being twisted so as to form a single eye at one end and two eyes side by side at the opposite end, a hook or equivalent retainer passing through the two eyes at the one end and bound therein by the twist in the cord, said hook securing the two eyes together, preventing the untwisting of the cord, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM H. NAYLOR.

Witnesses:

EUGENE ELTERICH,
HARRY SMITH.