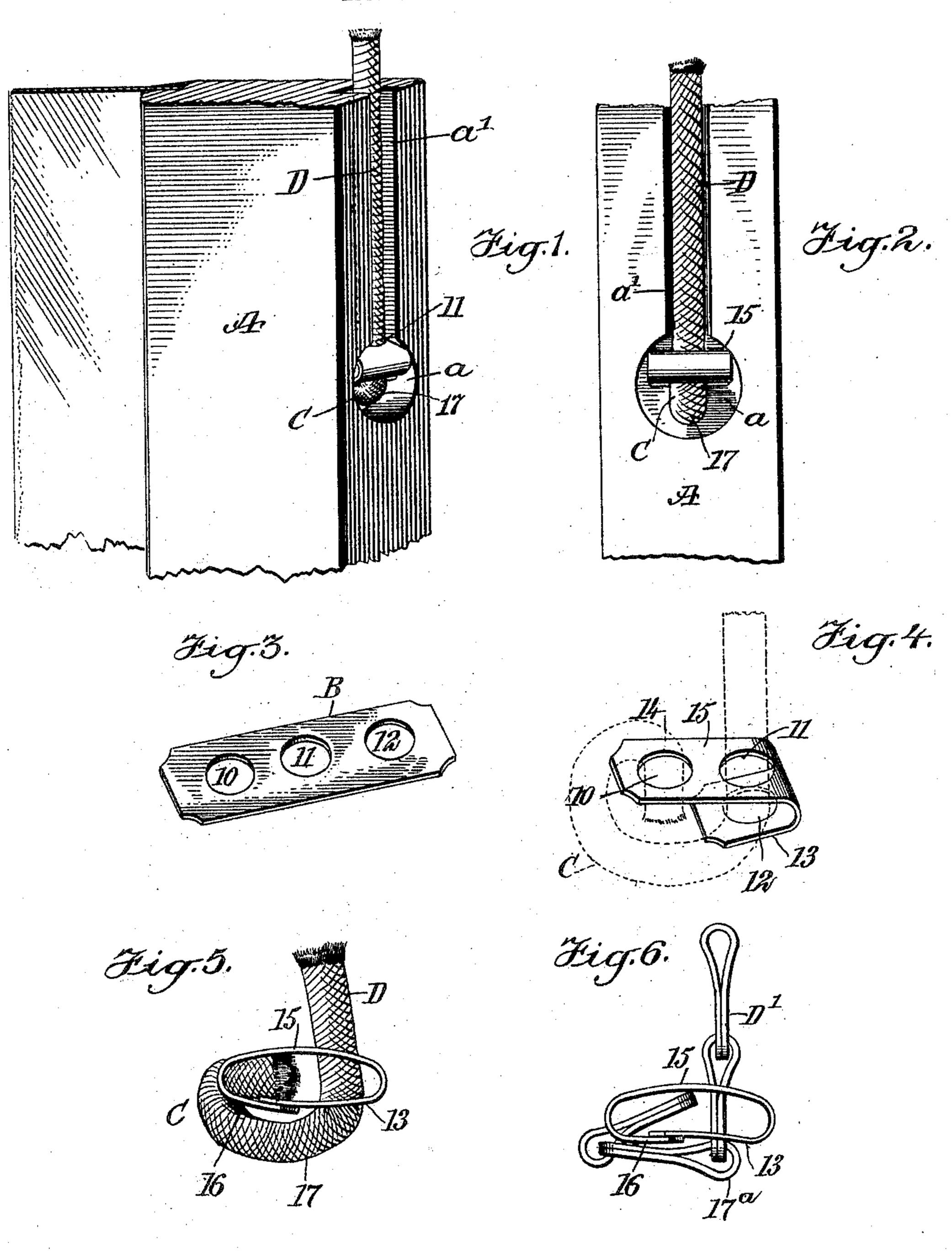
L. H. BROOME. SASH CORD FASTENER. APPLICATION FILED MAR. 7, 1905.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LEWIS H. BROOME, OF JERSEY CITY, NEW JERSEY.

SASH-CORD FASTENER.

No. 817,039.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed March 7, 1905. Serial No. 248,898.

To all whom it may concern:

Be it known that I, Lewis H. Broome, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and 5 State of New Jersey, have invented a new and Improved Sash-Cord Fastener, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a device adapted for use in connection with a sash cord or chain to produce a knot therein for the purpose of removably securing the cord or chain to the window-sash, said cord or chain being especially adapted for attachment to a weight.

A further purpose of the invention is to so construct the device that it will be simple, durable, and economic and so that the cord or chain can be expeditiously and conveniently laced thereto and the device bent over upon the lacing in such manner as to produce a knot which will effectually remain where seated in the sash until purposely removed and so that the greater the tension upon the cord or chain the more firmly will the knot be held in shape and in place, there being no possibility of the knot working loose.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a portion of a window-sash and the knotted end of a cord held therein. Fig. 2 is a side elevation of that portion of the window-sash shown in Fig. 1 and the cord and knot applied to the sash. Fig. 3 is a perspective view of the device in its normal shape. Fig. 4 is a perspective view of the device at such time being shown by dotted lines. Fig. 5 is a side elevation of a length of cord and the completely-formed knot at the end of the same; and Fig. 6 is a view similar to Fig. 5, but illustrating a length of chain and a complete knot at one end.

A represents a window-sash having the usual cord-hole a in its side, a longitudinal channel a' extending from the top of the sash to said hole. The device consists of a strip or blank B of tough sheet metal or such metal

as can be bent upon itself without cracking or breaking. This strip or blank B may be of any suitable length—about two inches, for example—and in said strip A three apertures 60 10, 11, and 12 are longitudinally produced, which apertures, as shown in Fig. 3, are preferably an equal distance apart, and the end apertures are a corresponding distance from the ends of the strip or blank.

C represents a knot which is produced by combining with the strip or blank B a cord D or a chain D'. Such a result is accomplished by bending the blank B upon itself to bring one end portion 13 below the upper portion in 70 such manner as to carry the end aperture 12 in vertical alinement or registry with the aperture 11. One end of the rope or chain, whichever is to be employed, is then passed down through the registering apertures 11 75 and 12, and the end of the rope or chain so passed is then directed upward over the outer end of the upper straight portion of the blank, then downward to a greater or less extent through the end aperture 10, as is shown 80 at 14 in Fig. 4. The projecting end of the cord is now directed to the lower member 13, and the end containing the aperture 10 is finally carried downward beneath the upper member in direction of said overlapping lower 85 member 13, as is shown in Figs. 5 and 6. Thus in the complete device it consists of a lower member 13, containing a single aperture 12, an upper member 15, provided with a single aperture 11, registering with the ap- 90 erture 12, and a second lower member 16, having the aperture 10 at its bend. When a cord D has been passed through the blank B and the blank has been folded on the cord in the manner described, the walls of the aper- 95 tures 11 and 12 will have biting engagement with the straight stretch of the cord, while the terminal of the cord adjacent to said stretch will be clamped between the members 15 and 16 of the blank and will be pinched by 100 the walls of the aperture 10, due to the said aperture being at the bend in the device.

It will be observed that by so securing the cord D a loop 17 is formed below the overlapping sections of the device, as is particularly 105 shown in Fig. 5, so that when the knot is in the hole a in the sash the greater the weight it has to sustain the greater will be the tendency of the weight to hold the knot in position and to keep the various elements of the 110 knot tied together. Furthermore, the peculiar formation of the knot serves to retain it in

position in the hole a when once placed therein, even when the cord is not under tension.

In Fig. 6 I have illustrated a knot 17^a, tied in the end of a chain D' in the same manner as has been described with reference to the rope or cord. One link, however, extends through the apertures 11 and 12, one link lies below the device, and the terminal link extends through the aperture 10 and is held-between the upper and lower members of the device, so that when the chain is brought into use to sustain a weight the weight having a tendency to draw the chain upward will cause the upper and lower members to be brought together more or less and at such time will serve to effectually clamp between them the introduced terminal link.

I desire it to be understood that the device is applicable for making knots in cords, ropes, or chains whenever a knot is desirable at an end of the same.

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

1. The combination with a cord or chain of means for forming a knot therein comprising a strip of pliable metal, which strip is bent upon itself to form an upper member and

overlapping bottom members, the upper member being provided with an aperture and one of the lower members with an alining aperture, the other lower member being provided with an aperture at its bend, the said sash cord or chain being passed through the alining apertures and carried through the alining apertures and carried through the cord or chain being clamped between the upper and lower members of the said knot-forming device.

2. In combination with a sash-cord, means 40 for forming a knot therein comprising a strip of pliable metal bent upon itself to form an upper member and overlapping bottom members, the upper member and one of the lower members being provided with alined 45 apertures to receive the cord, and the other lower member being provided with an aperture at its bend to receive the free end of the cord.

In testimony whereof I have signed my 50 name to this specification in the presence of two subscribing witnesses.

LEWIS H. BROOME.

Witnesses:

J. FRED. ACKER, JNO. M. RITTER.