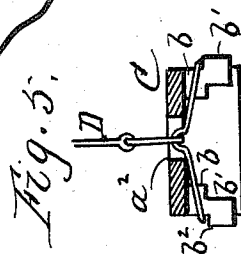
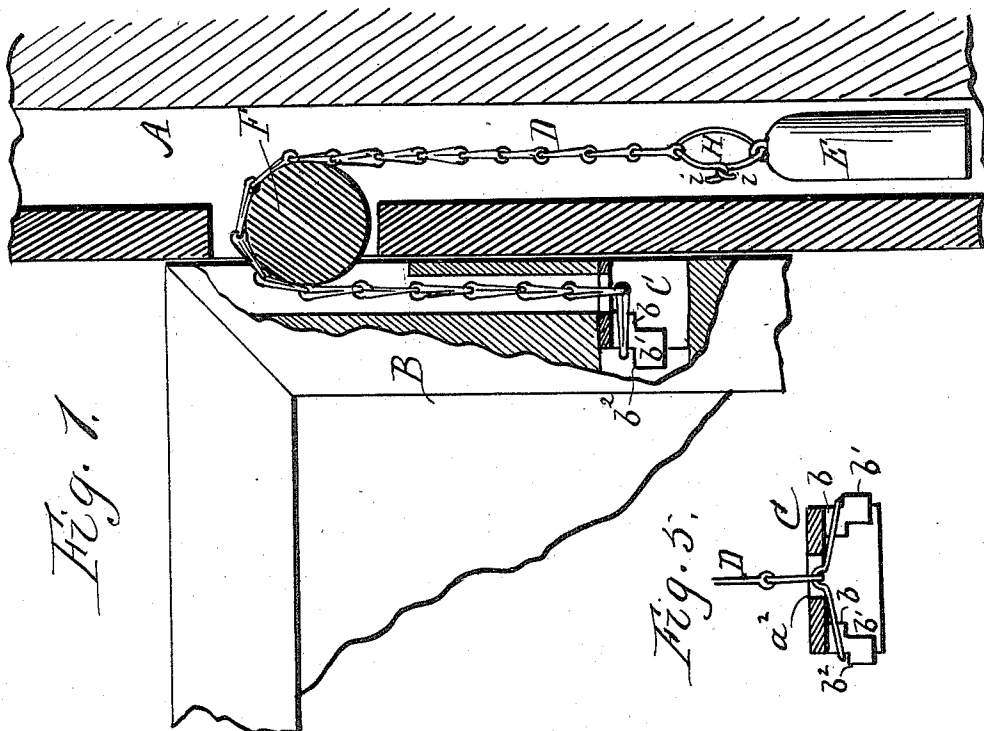
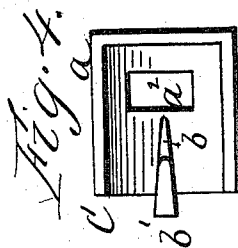
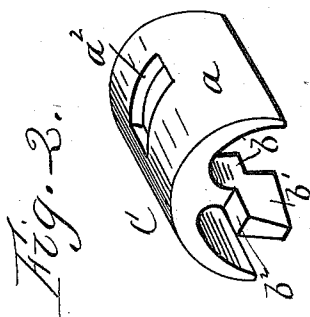


(No Model.)

C. H. OCUMPAUGH.
SASH CORD FASTENER.

No. 579,440.

Patented Mar. 23, 1897.



Witnesses.

C. R. Osgood
E. J. Lewis

Inventor.

Chas. H. Ocumpaugh
per R. F. Osgood,
Attorney.

UNITED STATES PATENT OFFICE.

CHARLES H. OCUMPAUGH, OF ROCHESTER, NEW YORK.

SASH-CORD FASTENER.

SPECIFICATION forming part of Letters Patent No. 579,440, dated March 23, 1897.

Application filed November 14, 1896. Serial No. 612,122. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. OCUMPAUGH, of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Sash-Cord Fasteners; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings accompanying this application.

My improvement relates to that class in which a chain is used to suspend the sash, and a fastening is used provided with a lug over which the last link of the chain hooks.

The invention consists of a fastener provided with an improved hook or lug whereby the terminal link that hooks thereon stands horizontally and at right angles to the vertical length of the chain, as hereinafter described and claimed.

In the drawings, Figure 1 is a sectional side elevation of a portion of a sash and its casing provided with my improvement. Fig. 2 is a perspective view of the cord-fastener. Fig. 3 is an end elevation of the same. Fig. 4 is a bottom view. Fig. 5 is a sectional view showing a modification.

A indicates the casing, and B the sash.

C is the cord-fastener, consisting of a segmental socket-piece adapted to fit in a round hole bored in the edge of the sash.

D is the chain connected with the fastener, E the counterweight, and F the pulley over which the chain runs.

Through the top of the wall a of the socket-piece is made an opening a^2 for the passage of the chain, and at the back or inner end is the lug b , to which the last link of the chain is attached. The lug b has an extension b' , the whole formed in one piece, the extension b' being offset from the lug and standing farther back, so as to form a horizontal shoulder b^2 at the top. The lug is wedge-shaped, being thinnest at its inner end, and it is attached at the top to the flange and extends centrally and longitudinally of the casting. In practice the last link of the chain is hooked over the lug, said link standing horizontally and at right angles to the main length of the chain, as shown in Fig. 1. A cord can be used with the same facility by providing a link at its end. The object of this construction is to furnish a more secure hold for the end of the

chain and to obviate any possibility of disconnection when the chain is under strain on the securing link, and also to obviate disengagement of the link by rebounding of the weight or sash and the sudden temporary slackening of the chain. The said strain is lessened by the double bearing of the link in the fastener, the bearings being transverse to the link's length near its ends and on opposite sides. The dropping of the link from its retaining-lug is obviated by the transverse wedge-shaped shoulder b^2 , upon which said link hangs securely, however often or suddenly the chain be slackened. Heretofore the lug has been located at the bottom of the fastener and in direct line with the chain, the latter simply hooking over the end and standing in a vertical line its whole length. In such case the chain is very liable in constant use to become detached, especially by sudden jerks produced by closing the sash violently, thereby producing reaction of the weight and slackening the chain.

In some cases a sash-cord has been secured to a conical pin situated in or near the direction of the cord and having its pointed end downwardly extended. From such a pin a chain-link would easily fall, and on it a cord hitch would be insecure. The present improvement affords a secure and convenient fastening.

In some cases the fastener may have lugs at both ends to engage a two-part-chain terminal. The last link may be divided and spread in opposite directions, or two links may be used to connect with both lugs, as shown in Fig. 5. Greater strength and a more uniform action are attained, which is desirable, especially in heavy sashes.

H is a wire loop connected with the long end of the chain for the attachment of the weight E. Said loop has a closed bend at top and bottom and two hooks i i at the sides, whereby it can be connected and disconnected at any time.

Having described my invention, what I claim is—

1. In a sash-cord fastener, the combination, with the sash and chain, of the fastener consisting of the socket-piece provided with the opening a^2 , and a lug b projecting from the wall of said piece and having a laterally-ex-

tended shoulder to support a link, or the like, in a vertical line, substantially as set forth.

2. In a sash-cord fastener, the combination with the sash and chain, of the fastener consisting of the socket-piece provided with the opening a^2 , and a lug b projecting down from the wall of said piece and having a laterally-extended shoulder to support a link, or the like, in a vertical line, said shoulder being wedge-shaped and thickest at its free end substantially as set forth.

3. A sash-cord fastener consisting of the

socket-piece provided with opening a^2 and a lug b extending from the wall of said piece at each end thereof in combination with a chain having a two-part terminal to engage with both lugs, as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

CHARLES H. OCUMPAUGH.

Witnesses:

R. F. OSGOOD,

C. R. OSGOOD.