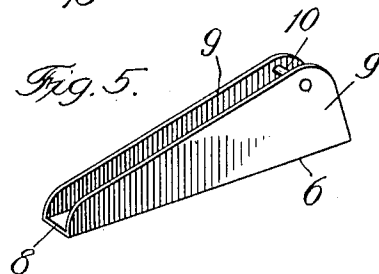
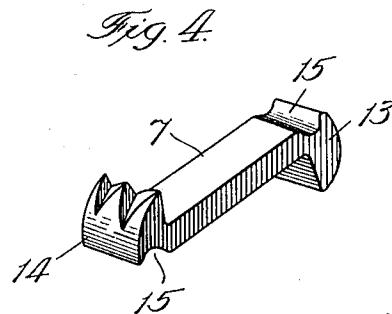
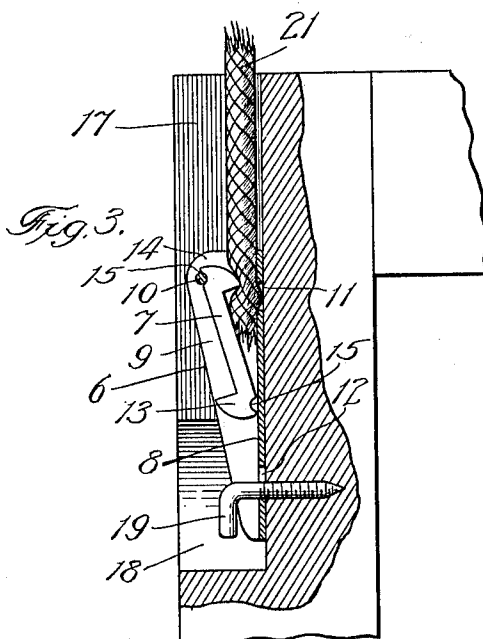
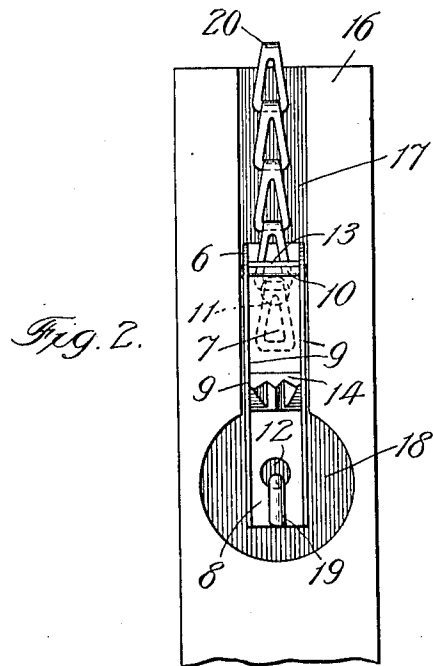
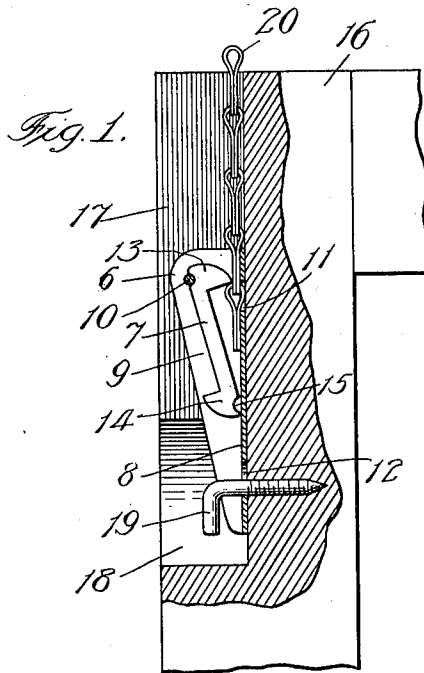


O. V. FLORA.
SASH CORD FASTENER.
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Patented Mar. 19, 1912.



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UNITED STATES PATENT OFFICE.

ORLANDO V. FLORA, OF MADISON, INDIANA.

SASH-CORD FASTENER.

1,020,751.

Specification of Letters Patent.

Patented Mar. 19, 1912.

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To all whom it may concern:

Be it known that I, ORLANDO V. FLORA, a citizen of the United States, residing at Madison, in the county of Jefferson and State of Indiana, have invented a new and useful Improvement in Sash-Cord Fasteners, of which the following is a specification.

My object is to provide a simple and improved device for fastening counter-weight carrying cords or chains to window-sashes.

In the accompanying drawing—Figure 1 is a broken view, partly in section, of the upper corner-portion of a sash and showing my improvement employed for fastening the sash to a weight-chain; Fig. 2, an edge elevation of the same; Fig. 3, a view corresponding with Fig. 1, but showing my improvement employed for fastening the sash to a weight-cord; and Figs. 4 and 5, perspective views of the members of my improved fastener.

The fastener consists of two separable members 6 and 7; the member 6 is in the form of a channel-piece having a base 8 and similar sides 9, which are preferably shaped, as shown, to taper from one end-portion to the other. Extending across the channel at the deeper end thereof is a fulcrum-pin 10, which is fixed to the sides 9; and in the base 8, in the relative positions shown, are a shoulder-forming opening 11 and an attaching-opening 12. The member 7 is, in effect, a lever cooperating with the member 6 to form a cord or chain clamp. It consists of a stem provided at opposite ends with the heads 13 and 14. The head 13 presents a straight-edged chain-engaging jaw at one side of the stem, and the head 14 presents a serrated cord-engaging jaw at the opposite side of the stem. Each head is formed at the side opposite its jaw with a pin-engaging fulcrum-socket 15.

To adapt a sash 16 for the application of my improved fastener, grooves 17 are provided in the upper end-portions of the stiles. The grooves, which may be of standard construction, terminate at their lower ends in the usual enlargements 18, and in each of said enlargements is a headed stud 19, which may be in the form of a screw-hook, as shown.

To attach the sash to a weight-chain 20, such as is illustrated in Figs. 1 and 2, the

chain is passed into the channel-piece 6 and the lever 7 is caused to engage at the socket 15 of its head 13 with the pin 10. The lever is then swung to the position shown, so that its head 13 and the opening 11 present stops for the opposite sides of the chain. The device is then passed at its opening 12 over the head of the stud or hook 19 to extend in the groove 17. When a cord 21 is employed as the flexible suspending medium it is engaged and clamped in the same manner by the serrated head 14 of the lever and held by said head and the opening or shoulder 11, as indicated. Any strain upon the chain or cord tends to draw the lever more firmly into its clamping position.

The device is in few parts and of simple and inexpensive construction; it may be quickly applied and removed and when in place operates as a particularly secure and desirable means for its purpose.

While I prefer to construct my improved fastener as shown and described, it may be variously modified in the matter of details of construction without departing from the spirit of my invention as defined by the claims.

What I claim as new and desire to secure by Letters Patent is—

1. In a device for fastening, in a sash-groove, the end of a flexible, sash-suspending medium, the combination of an elongated channel-piece fitting in said groove and connected with the sash, a lever pivoted at its upper end in the upper end portion of the channel-piece, to extend with its long arm downwardly, and provided adjacent to its pivot with a clamping-jaw cooperating with the base of the channel-piece, for the purpose set forth.

2. In a device for fastening, in a sash-groove, the end of a flexible, sash-suspending medium, the combination of an elongated channel-piece fitting in said groove and connected with the sash, a lever pivoted at its upper end in the upper end-portion of the channel-piece, to extend with its long arm downwardly, and provided adjacent to its pivot with a clamping-jaw, and a shoulder in the base of the channel-piece, adjacent to said pivot, cooperating with said clamping-jaw, for the purpose set forth.

3. In a fastener of the class described, the combination of a channel-piece, having a

base provided toward one end with a stud-
engaging opening and toward its opposite
end with a shoulder, a reversible clamping
lever provided at one end with a straight-
5 edged chain-engaging jaw and at its oppo-
site end with a serrated cord-engaging jaw,
and a separable pin and socket connection

for each end of said lever adapted to connect
said lever with the channel-piece adjacent
to said shoulder, for the purpose set forth. 10
ORLANDO V. FLORA.

In presence of—
CLARENCE P. FLORA,
ERWIN B. FLORA.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
