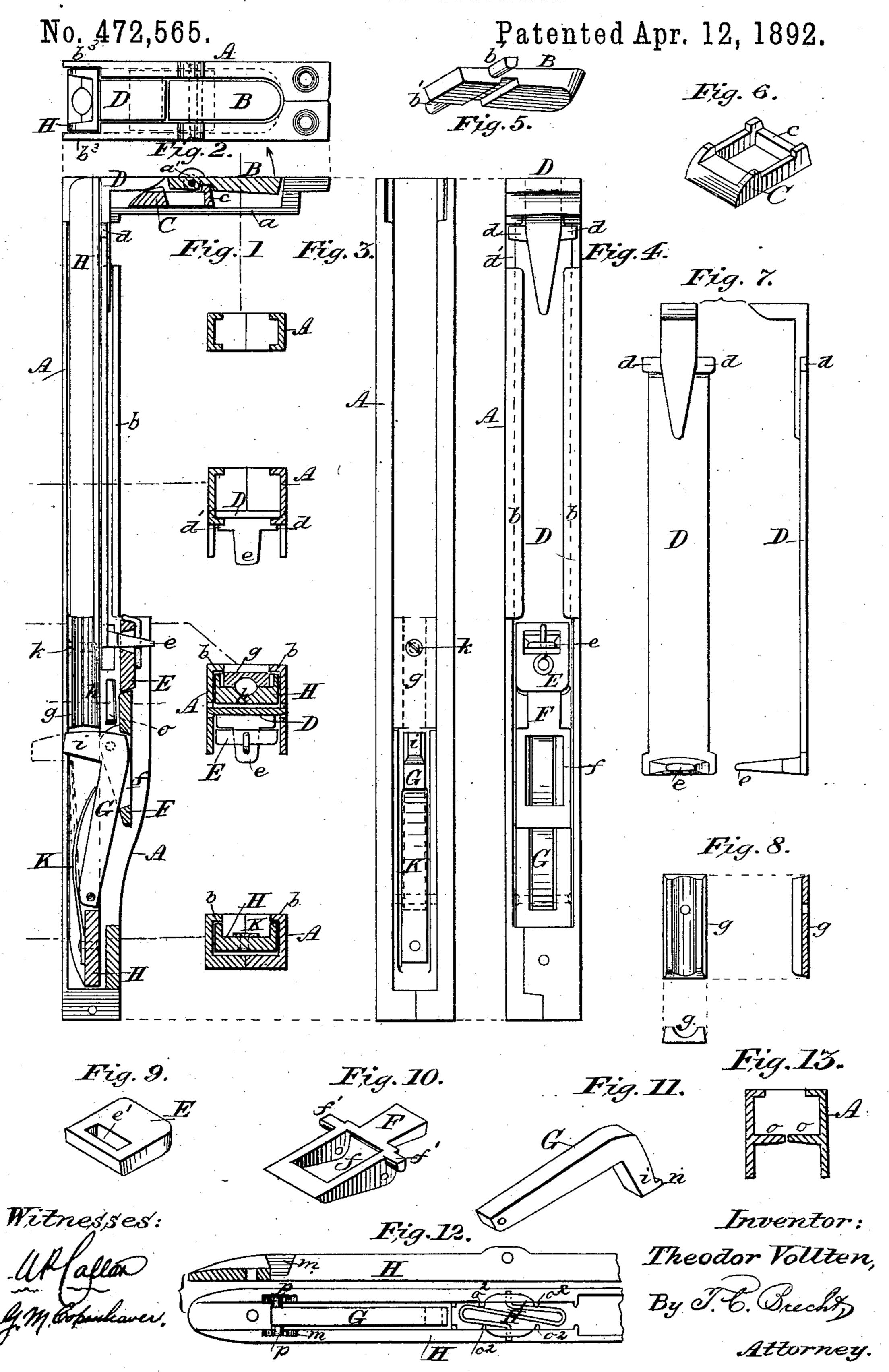
T. VOLLTEN.
SASH CORD FASTENER.



## United States Patent Office.

THEODOR VOLLTEN, OF WASHINGTON, DISTRICT OF COLUMBIA.

## SASH-CORD FASTENER.

SPECIFICATION forming part of Letters Patent No. 472,565, dated April 12, 1892.

Application filed June 2, 1890. Serial No. 353,992. (Model.)

To all whom it may concern:

Be it known that I, THEODOR VOLLTEN, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Sash-Cord Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements on Patent No. 365,654, granted to me June 28, 1887, for sash-cord fasteners; and the object is to improve the construction of the details thereof, so as to simplify and reduce the number of parts, and also to facilitate the casting

and finishing of the parts.

The invention consists in the construction of certain details and arrangement of parts, as will be more fully described hereinafter, and specifically pointed out in the claim, reference being had to the accompanying drawings, and the letters of reference marked thereon.

Like letters indicate similar parts in the different figures of the drawings, in which—

Figure 1 represents a sectional elevation of my improved sash-cord fasteners. Fig. 2 is a top or plan view of the same. Fig. 3 is an end elevation of the same. Fig. 4 is a rear elevation thereof. Figs. 5, 6, 7, 8, 9, 10, 11, 12, and 13 are detail views and modifications of various parts of the same. The remaining sections are details of Fig. 1.

In the drawings, A represents an anglepiece made in two parts and riveted together. It is let into the corners of the sash and secured by screws, and with its different parts is flush with the edges of the sash. The up-40 per part, extending at right angles to the vertical part, is provided with ways a, upon which a runner or slipper C is moved backward and forward, as occasion requires it, by a pivoted latch B, which engages with the cross-bar c 45 of the runner C. It supports on its outer end the vertical supporter D, forming in position the back of the angle-piece A, and it is provided at its upper end with lugs d, engaging with notches  $\overline{d'}$  in the sides of the piece A. 50 At its lower end the supporter D is provided l

with a projection e, upon which a rectangular looped piece E, having a rectangular slot e', is supported and secured, and bearing with its lower part on a pivoted looped piece F, having a rectangular opening f, with which 55

the pivoted catch G engages.

The supporter D slides up and down against the flanges  $b^{\prime\prime}$  of the angle-piece A. In contact with said supporter D is arranged the supporter H, held in place by the outward 60 projecting flanges  $b^3$  on the piece A, and is of channel shape. It has at its lower end the pivoted or hinged catch G, having a hookshaped end i, that engages under the lugs o in the grooved casting A. Said catch G is 65 normally forced inward by the action of the spring K and is forced outward by the action of the lever or looped piece F, to which force is applied through the sliding supporter H and the slotted or looped piece E. The 70 spring K is secured to the lower end of the supporter H and serves to force the catch G back into its normal position in the opening f of the pivoted looped piece F, and this spring-catch prevents the moving of the sup- 75 porter H. The angle-piece A is provided with two lugs o for engagement with the latch G to lock the sliding part H to the fixed angle-bar A. The sash-cords are secured in position by a removable holder g, having a semi- 80 circular or oval groove in it fitting over a similar groove in the supporter H, and are secured by a screw k.

In Fig. 5 the latch B is provided with the lugs b', which fit into the holes a' seen in 85 dotted lines in Fig. 1. By this means the rivet is dispensed with, which holds the latch in Fig. 1. In Fig. 10 a similar modification is shown to dispense with the rivet which secures the pivoted looped piece F in place, 90 the lugs f' entering into suitable holes to receive them in the sides of the angle-piece A.

In Fig. 12 is shown a modification of the supporter H, in which the end of the cord for the sash-weight is secured in the following 95 manner: Near the lower end are arranged a number of points  $o^2$  or a roughened surface, between which the end of the rope is first forced to prevent slipping. A spring-hook H' of peculiar shape is constructed to have elas-

ticity enough sidewise to engage when released from pressure by hand with two holes in the lugs l on the sides of the supporter H, thus firmly securing the rope in position therein. The hook G in this case is provided with pins p, secured to it, which are merely dropped into the notches m in the inner sides of the supporter H, and the hook is then held in place by the spring K. The hook G is also provided with a small projection n on the part i, as best seen in Fig. 11.

The operation is as follows: The angle-piece A is first let flush into the upper corners of the sash and secured by wood-screws s and t. 15 If it is desired to remove a sash, the windowstrip is removed at one side, the latch B is moved in the direction of the arrow, which moves the runner C from under the supporter D, bearing with its lower end on the pieces 20 E and F, which releases the spring-catch G and allows the supporter H, with the sashcords attached, to be removed, when it will be held in place in the sash-frame. The sash can then be removed for painting, glazing, 25 cleaning, repairing, &c. To replace the sash, the latch B is first returned to its normal position, which causes the raising of the supporter D by the runner C being moved under the

upper end of said piece D and raises the loop E and pivoted loop-piece F. The supporter 30 H, with the sash-cord attached, can then be replaced in its place in the angle-piece A and the sash moved up and down. The supporter and cord with the weight attached cannot be removed, however, until the hook *i* enters into 35 its hole in the frame, and said hole is placed near the upper end of the frame to prevent meddling of unauthorized persons.

Having thus described my invention, what I claim, and desire to secure by Letters Pat- 40

ent, is—

The combination of the supporter H, having the sash-cord attached to it and placed in the angle-piece A, with a spring-catch G pivoted to said supporter, and the carrier D, having projection e for carrying the loop-pieces E and F, holding said catch G until released, all arranged as shown, and for the purpose specified.

In testimony whereof I affix my signature in 50

presence of two witnesses.

THEODOR VOLLTEN.

Witnesses:

G. M. COPENHAVER,

M. P. CALLAN.