

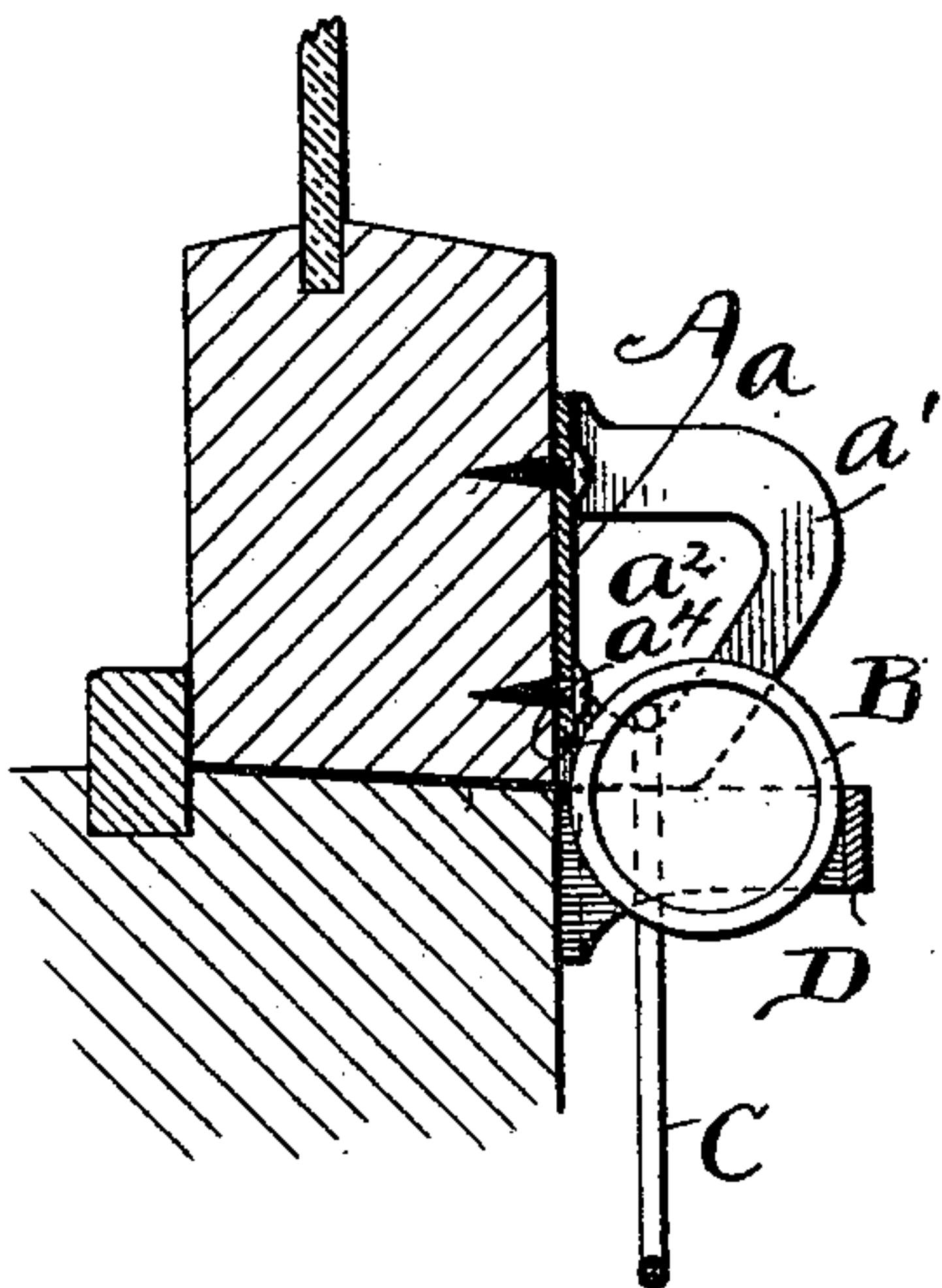
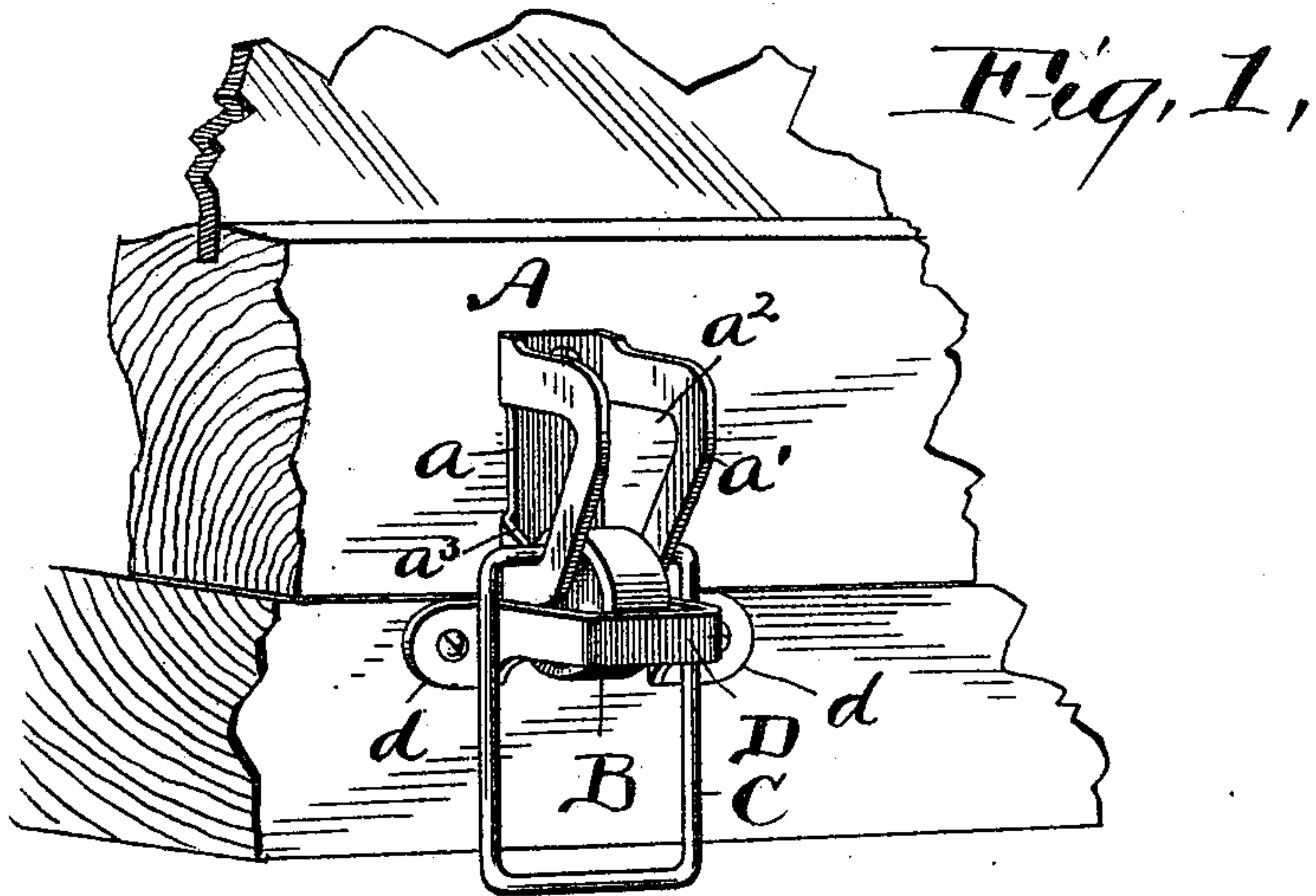
No. 624,120.

Patented May 2, 1899.

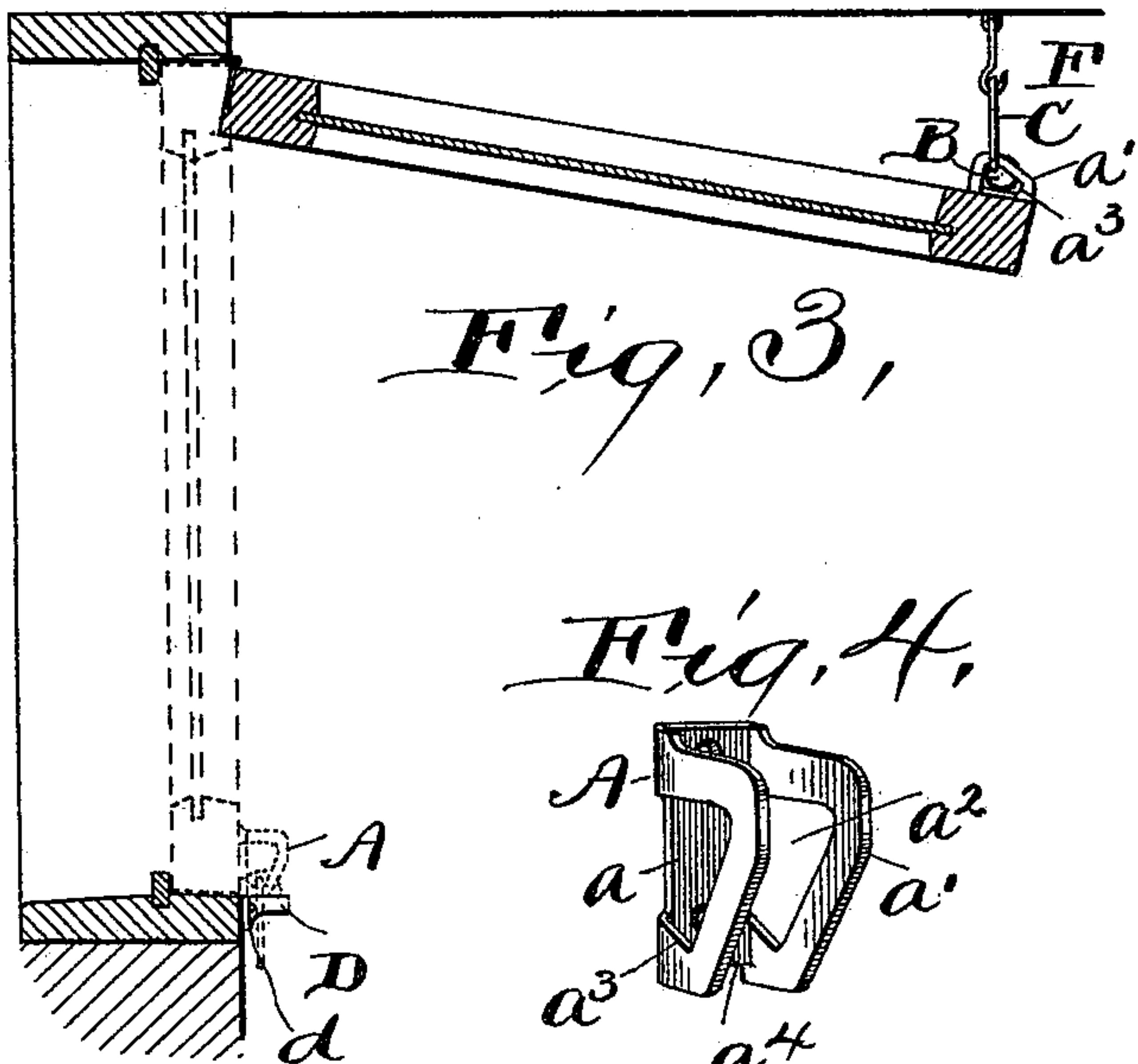
T. B. STEVENS.  
SWINGING WINDOW LOCK.

(Application filed June 22, 1898.)

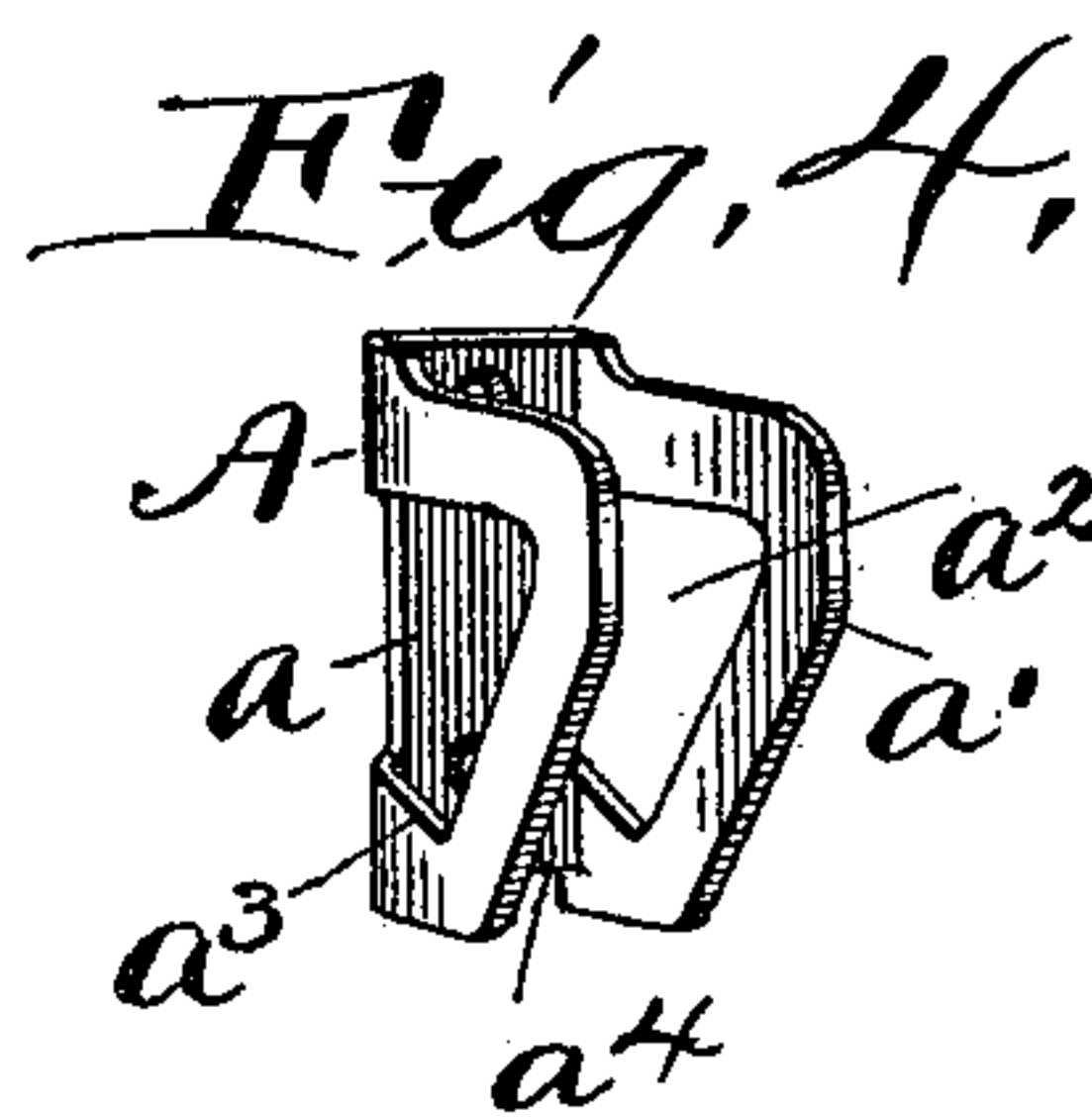
(No Model.)



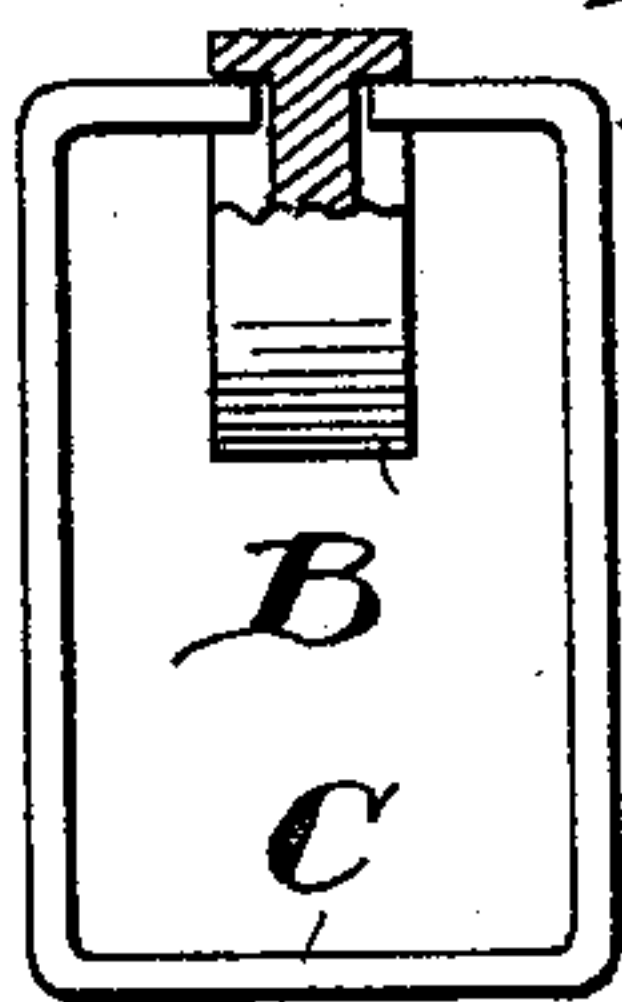
*Fig. 2,*



*Fig. 3,*



*Fig. 4,*



*Fig. 5,*

Witnessed,  
E. B. Gilchrist  
Philip C. Knowlton

Inventor:  
Theodore B. Stevens  
By his attorney  
Thurston & Bates



# UNITED STATES PATENT OFFICE.

THEODORE B. STEVENS, OF CLEVELAND, OHIO.

## SWINGING-WINDOW LOCK.

SPECIFICATION forming part of Letters Patent No. 624,120, dated May 2, 1899.

Application filed June 22, 1898. Serial No. 684,138. (No model.)

*To all whom it may concern:*

Be it known that I, THEODORE B. STEVENS, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Swinging-Window Locks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

The invention relates to an automatic lock for windows or transoms which are hinged on a horizontal axis; and it consists in the construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of the lock properly attached to a window and its casing and in the locked position. Fig. 2 is a central vertical sectional view. Fig. 3 is a view of the same when the window is open. Fig. 4 is a perspective view of the casing A; and Fig. 5 is a view, partly in section, of the locking-roller and bail.

A represents a casing having a back plate  $a$  and two parallel sides  $a'$   $a'$ , which are integral with and project forward from the back plate at right angles thereto. This casing is intended to be attached by screws, which pass through the back plate, to the lower rail of windows or transoms which swing from their upper edge, the lower edges of the sides  $a'$   $a'$  being placed substantially in the plane with the lower edge of the rail. In the sides are the openings  $a^2$ , which are V-shaped at their lower ends  $a^3$ . The locking member is a roller B, which lies between the sides, where it is held by a bail C, the ends of which are bent inward, passing through the openings  $a^2$  and into the ends of the roller B. Under normal conditions these inwardly-bent ends of the bail rest in the V-shaped ends of the openings, whereby the roller which hangs on said ends is in the proper position to act in the manner to be presently described to perform its functions.

The member with which the roller engages is a loop or staple D, which is attached to the lower rail of the window-frame, preferably by screws, which pass through laterally-projecting wings  $d$ . The top edge of the front side of this loop should be substantially in the plane of the edge of the window-opening.

When the window closes, the depending roller engages with the front side of the loop D and is lifted thereby, and it falls behind it when the window is closed. When, now, an attempt is made to open the window, the lower edge of the back plate  $a$  of casing A engages with the roller and the roller engages with the front side of the loop D, whereby the opening of the window is prevented. The lower edge of the back plate  $a$  of casing A is cut away for an eighth of an inch, more or less, as shown at  $a^4$ , whereby a plane passing through this edge which engages with the roller and through the line of contact between the roller and loop will be above the center of the roller, wherefore a pressure on the window in the opening direction instead of tending to force the roller upward and out of the loop forces it downward and keeps it in the locking position.

I do not claim herein, broadly, a casing with a cut-away edge back of the roller, as such construction is shown and claimed in my application for a lock, filed March 6, 1899. I herein claim the cut-away portion only in combination with the particular casing shown.

To open the window, one has only to grasp the bail and pull. The intumed ends of the bail ride up the inclined wall of the opening  $a^2$ , thereby lifting the roller so far that it will roll over the front side of the loop. The bail in the form shown is also useful for engagement with a hook or nail F to hold the window open.

Having described my invention, I claim—

1. In an automatic lock for a swinging window-sash, a struck-up casing of sheet metal consisting of three sides, namely a back plate having holes for fastening-screws, and a pair of side plates integral with the back plate and bent at substantially right angles thereto, said side plates having holes passing through them, which holes are V-shaped at their lower ends and thus come to a point, a roller lying between the side plates, and means passing through said holes and engaging with said roller and by resting in said pointed lower ends of the holes holding the roller in the casing in the desired position for cooperating with a fixed member, substantially as described.

2. In a swinging-window lock, the combination of a casing A having a back plate whose lower edge is cut away as at  $a^1$ , and two sides having holes which are V-shaped at their lower ends, a roller between sides, and a bail  
5 having inturned ends which pass through said openings and enter the open ends of the roller whereby said roller is supported in the proper position, with a loop D adapted to be

secured to the window-casing, substantially as specified.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

THEODORE B. STEVENS.

Witnesses:

E. L. THURSTON,

PHILIP E. KNOWLTON.