

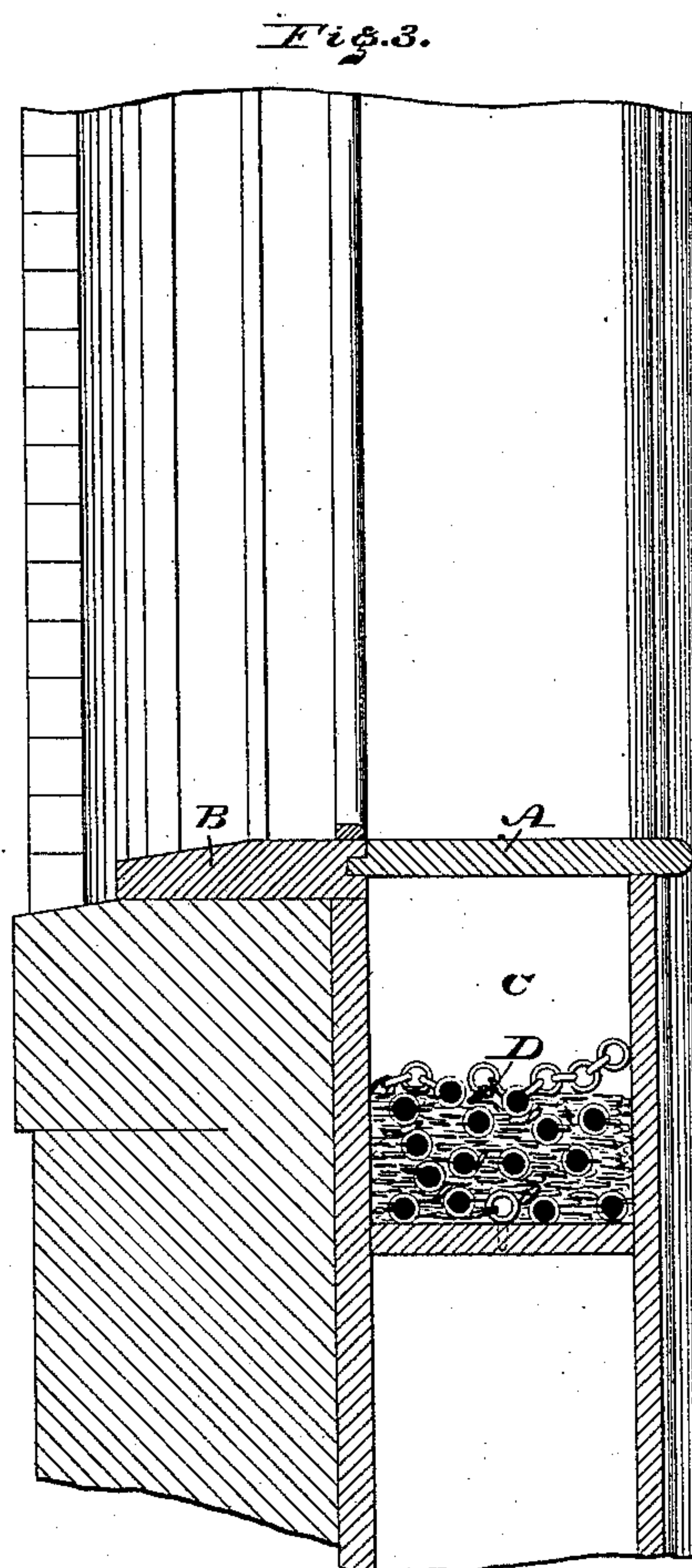
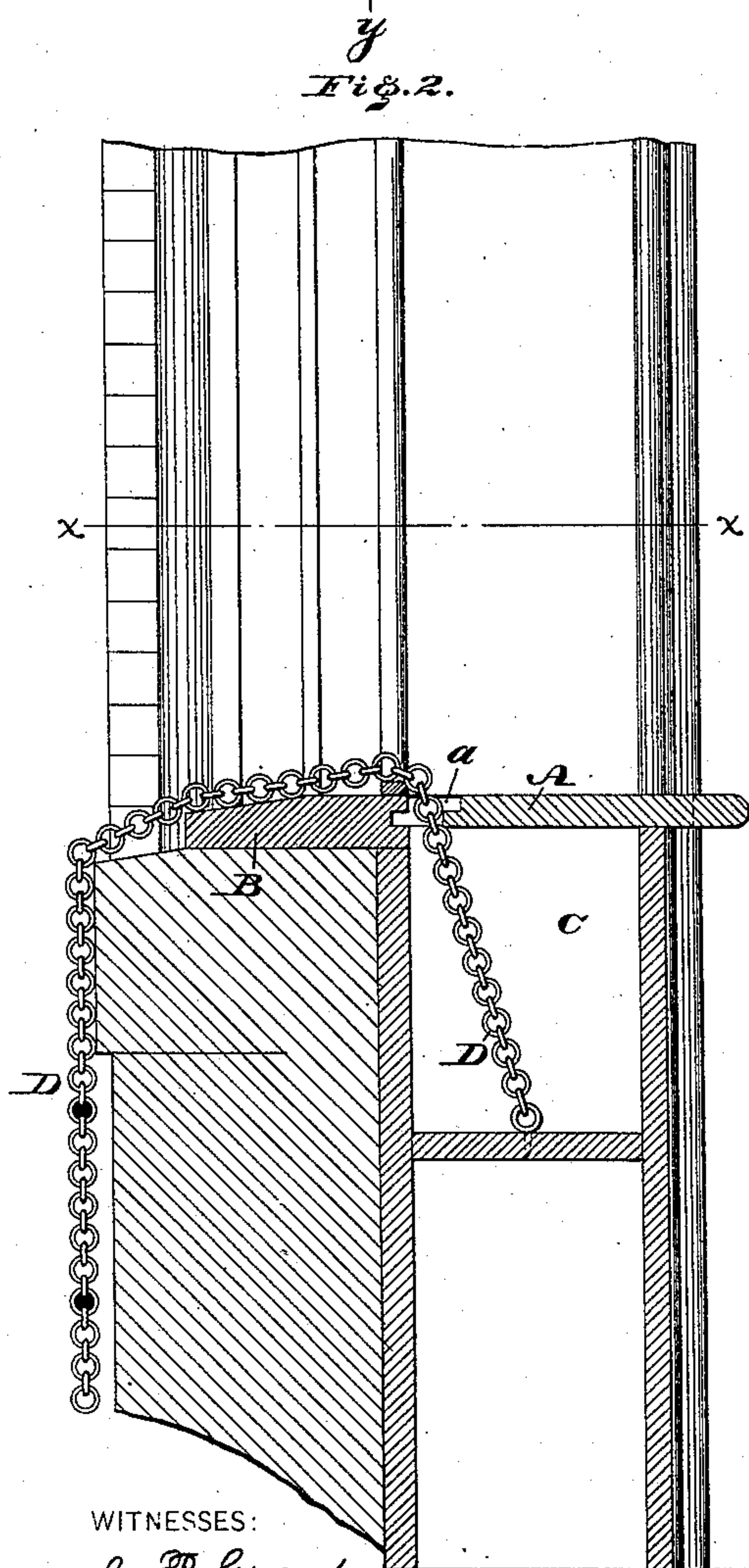
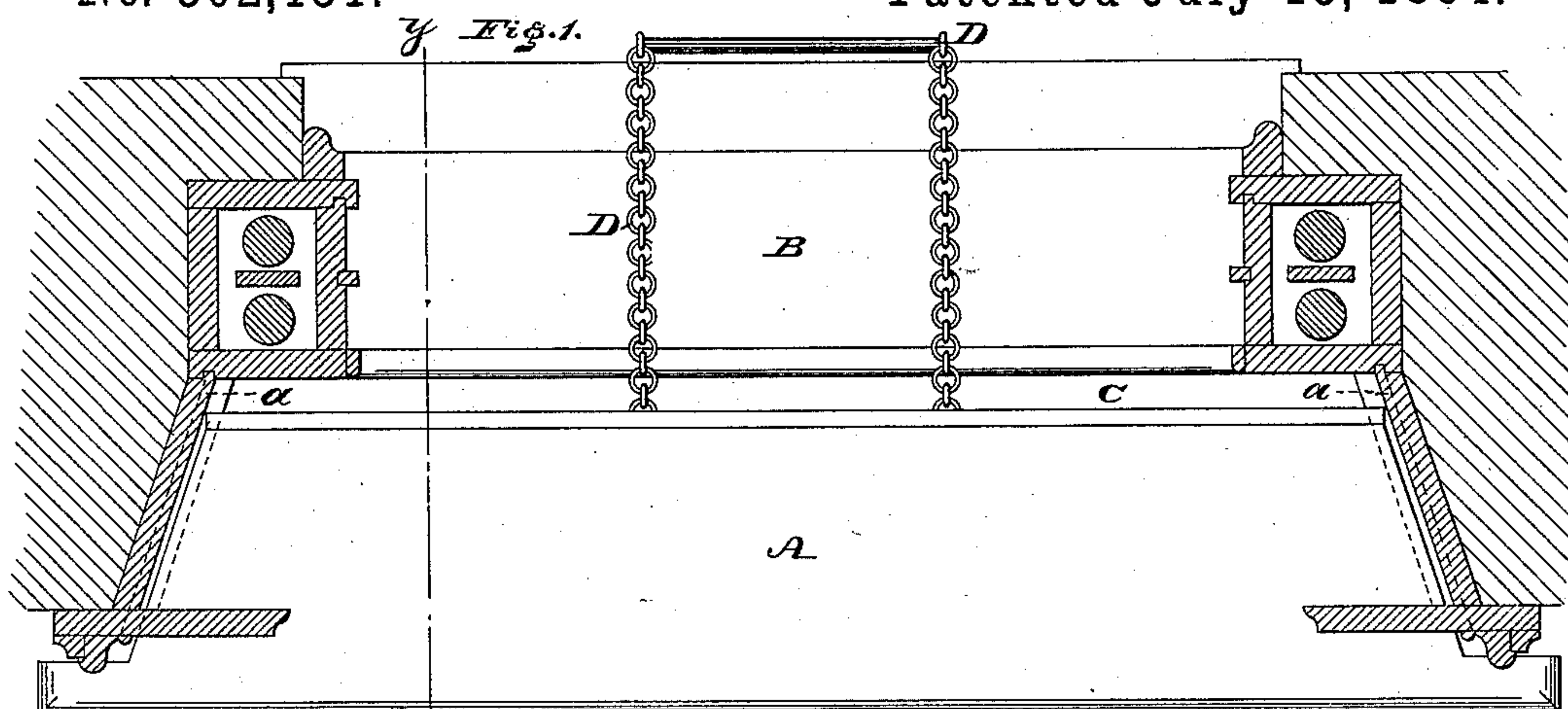
(No Model.)

C. E. METZLER.

FIRE ESCAPE.

No. 302,151.

Patented July 15, 1884.



WITNESSES:  
*Sp. P. Grant,*  
*W. F. Kircher*

INVENTOR:  
*Christian E. Metzler,*  
BY *John A. Diederich* ATTORNEY.



# UNITED STATES PATENT OFFICE.

CHRISTIAN E. METZLER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF  
ONE-HALF TO ISAAC A. SWEIGARD, OF SAME PLACE.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 302,151, dated July 15, 1884.

Application filed February 6, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHRISTIAN E. METZLER, a citizen of the United States, resident in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Fire-Escapes, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a horizontal section, in line *x x*, Fig. 2, of a fire-escape embodying my invention. Fig. 2 is a vertical section thereof in line *y y*, Fig. 1. Fig. 3 is a vertical section showing the normal position of the parts of the fire-escape.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in providing a window with a removable sill, and a box located below said sill for containing a ladder, which, in the event of fire, is available for immediate service, all as will be hereinafter fully set forth and claimed.

Referring to the drawings, A represents the inner sill of a window, and B the outer sill thereof. C represents a box secured to the bottom of the window-frame or the wall of the apartment below the sill A, the latter being the cover of the box. Securely attached to the bottom of the box, or the sides thereof, if desired, is a flexible ladder, D, which is formed of chains or ropes and rounds, and is adapted to be packed or folded in said box.

The operation is as follows: In the event of fire the sill A is removed, thus uncovering the box C and exposing the ladder D. The ladder is then thrown out of the window over the front sill, and thus the occupant or occupants of the room may escape therefrom. In order to prevent the parties who seek to escape from the room from falling into the box, the sill is returned in position limited by the ladder, as shown in Fig. 2, so that they may step thereover in reaching the ladder.

When the ladder is not in service, it is folded within the box, and the latter closed by the sill, it being evident that the general appearance of the bottom of the window-frame is not materially altered, and the ladder is always within reach. It will also be seen that the ladder is always securely connected with the box, so that no time is lost in seeking a place of attachment therefor, it only being necessary in times of danger to remove the inner sill and

throw out the ladder and reapply said sill to the window-frame, so that the occupant or occupants of the room may readily reach the ladder, the inner sill providing ready means of reaching the front sill where the rounds of the ladder are accessible, and on which the ladder is rested while suspended from the box.

The sides of the window-frame are grooved, as at *a*, to receive the removable sill, retain the same in position, and provide a sufficiently tight joint between the contiguous parts. Besides this, when the sill is returned in position and abuts against the ladder, the front of the sill receives its support from the sides thereof, which sides rest on the lower walls of the grooves *a*, thus preventing dropping of the sill.

I am aware that it is not new to employ the space or box below a window-sill as a receptacle for the flexible ladder of a fire-escape, and to make the sill removable in order to provide access to said ladder. I am also aware that it is not new to connect a fire-escape ladder with the inner sill of a window in such manner that the ladder may be thrown out of the window and rested on the outer window-sill thereof, the inner sill being afterward partly closed on the contiguous portion of the ladder, wherefore I disclaim such features.

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

1. A window having a horizontally-arranged inner window-sill, a box below the same, and a flexible ladder connected with said box, said sill being adapted to be moved into the room so as to uncover the ladder and allow it to be placed in operative position, and then be returned against the ladder closing the box, so that it may be stepped on to reach the ladder, as stated.

2. A window having a sliding window-sill, a box below the same, and a flexible ladder, the side of the frame being horizontally-grooved, as at *a*, to guide the sill as it is moved out and in, and support the front of the sill when partly closed against the ladder when the latter is thrown out over the front sill, substantially as and for the purpose set forth.

CHRISTIAN E. METZLER.

Witnesses:

JOHN A. WIEDERSHEIM,  
A. P. GRANT.