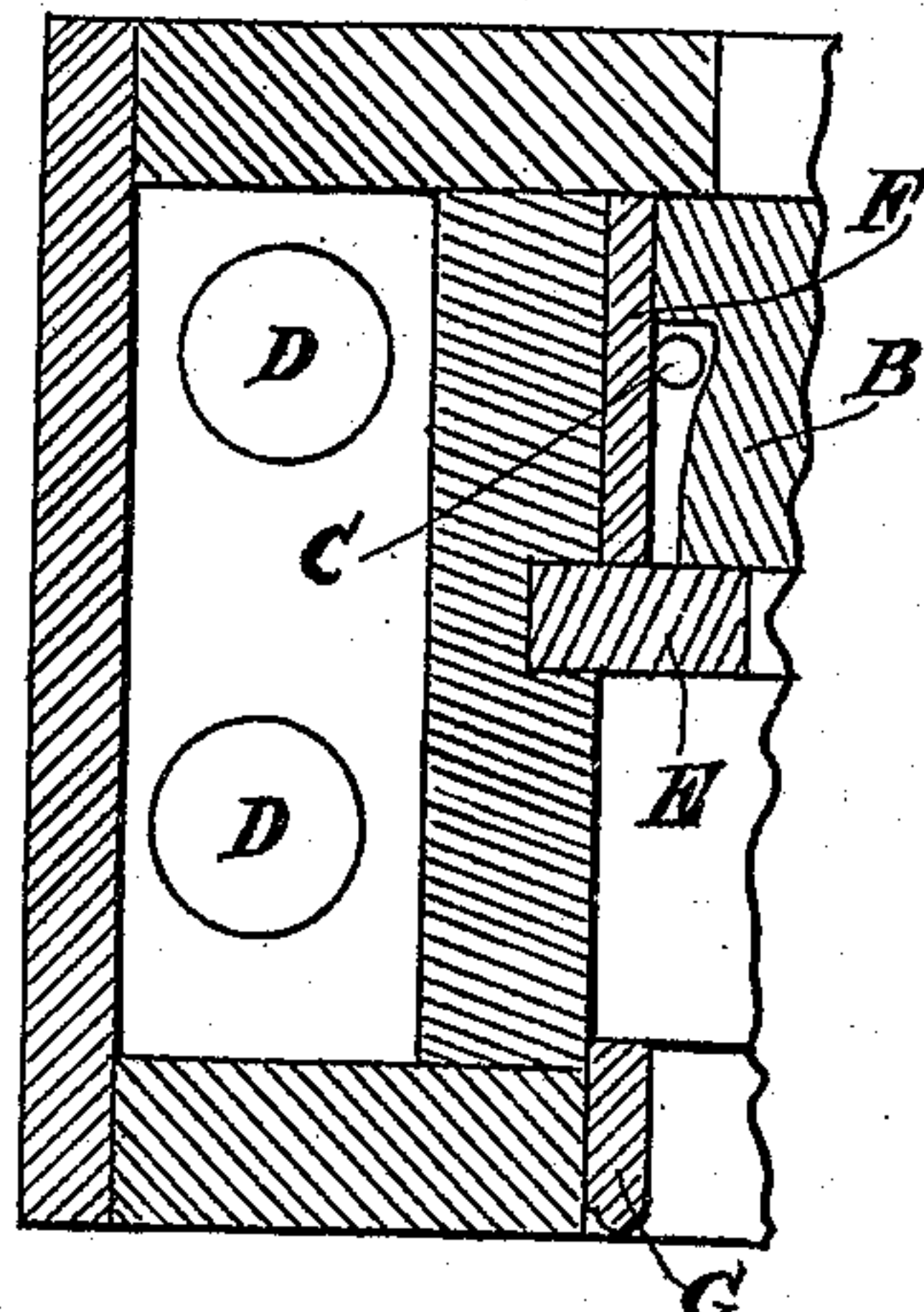
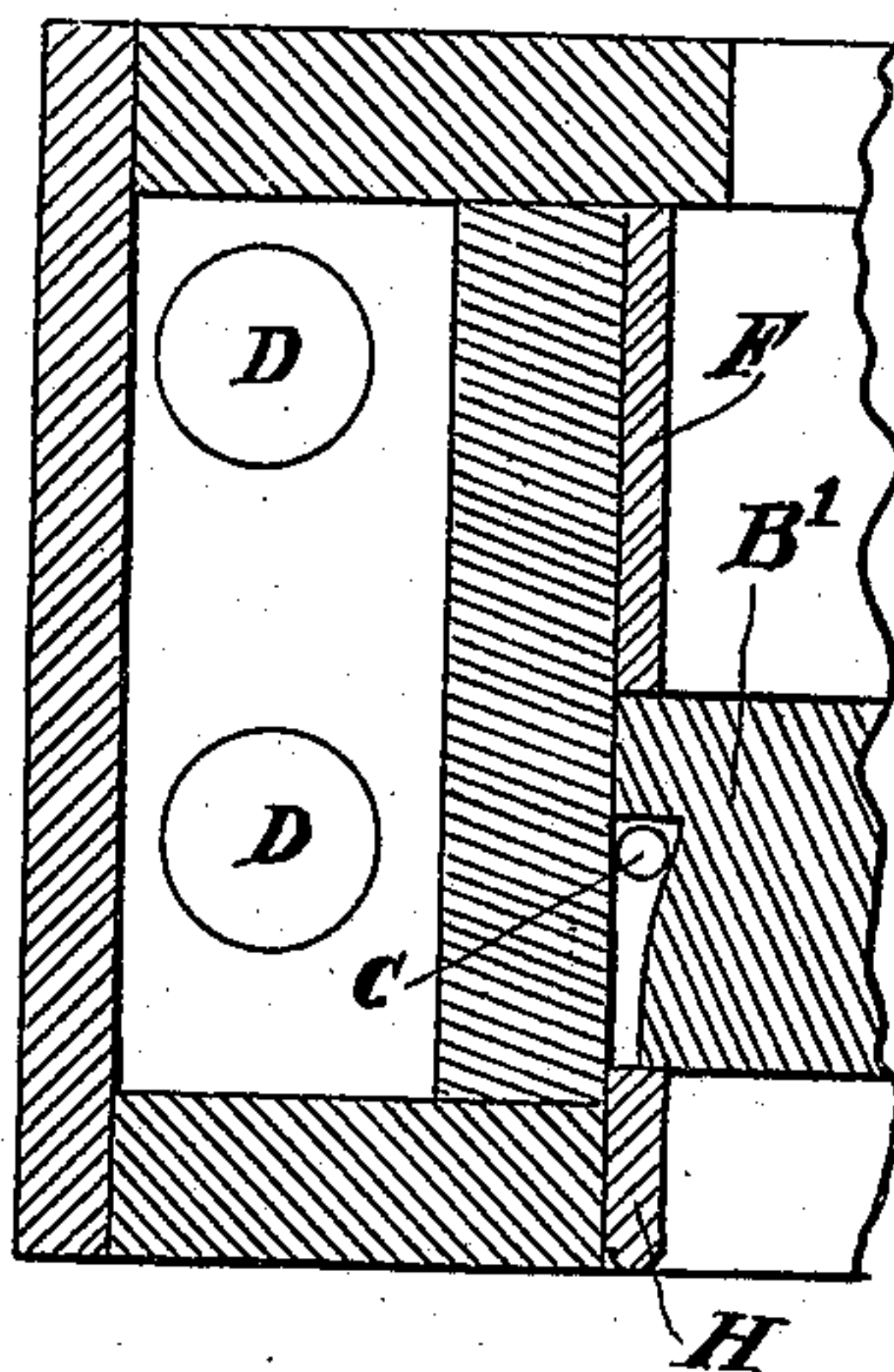
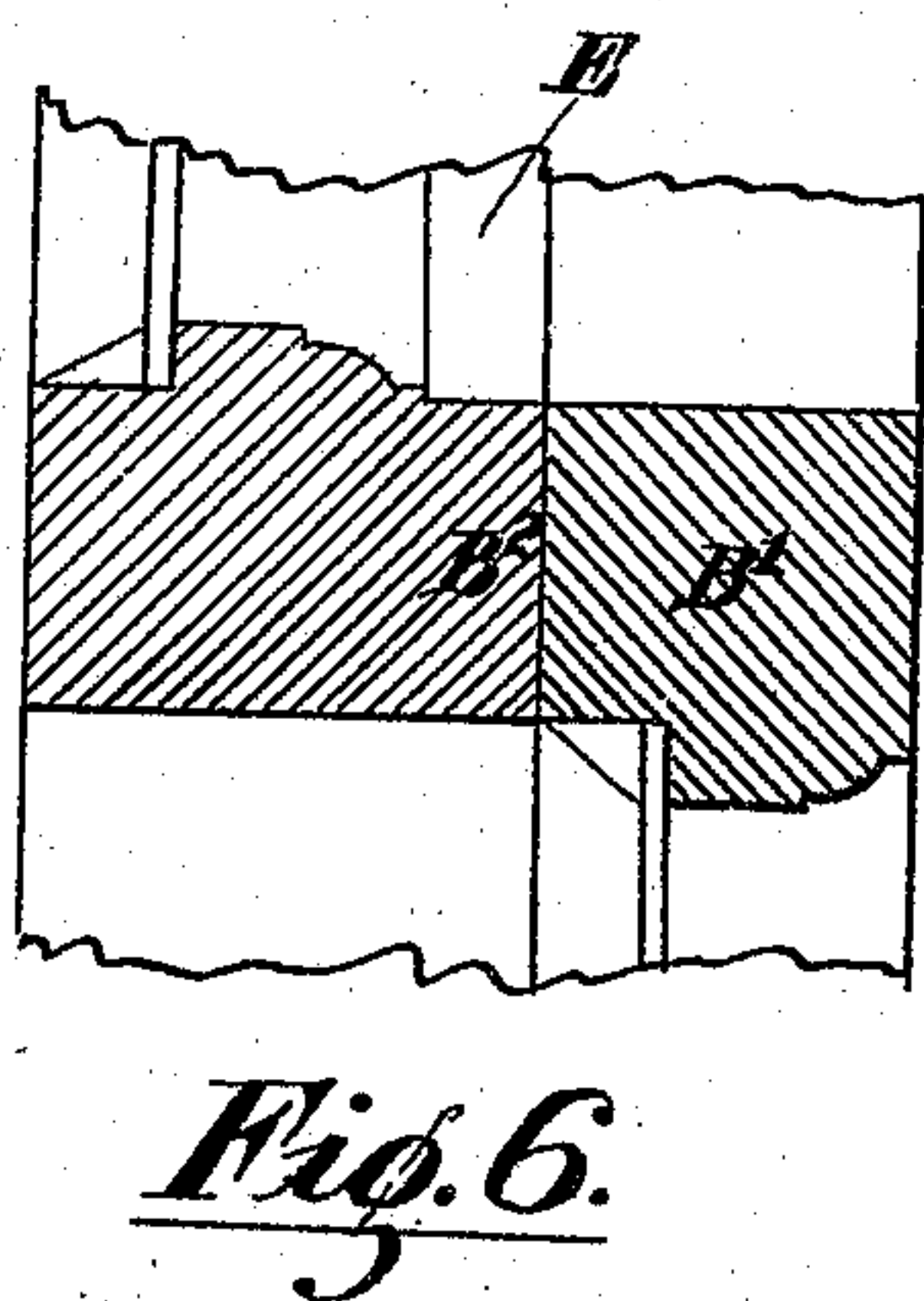
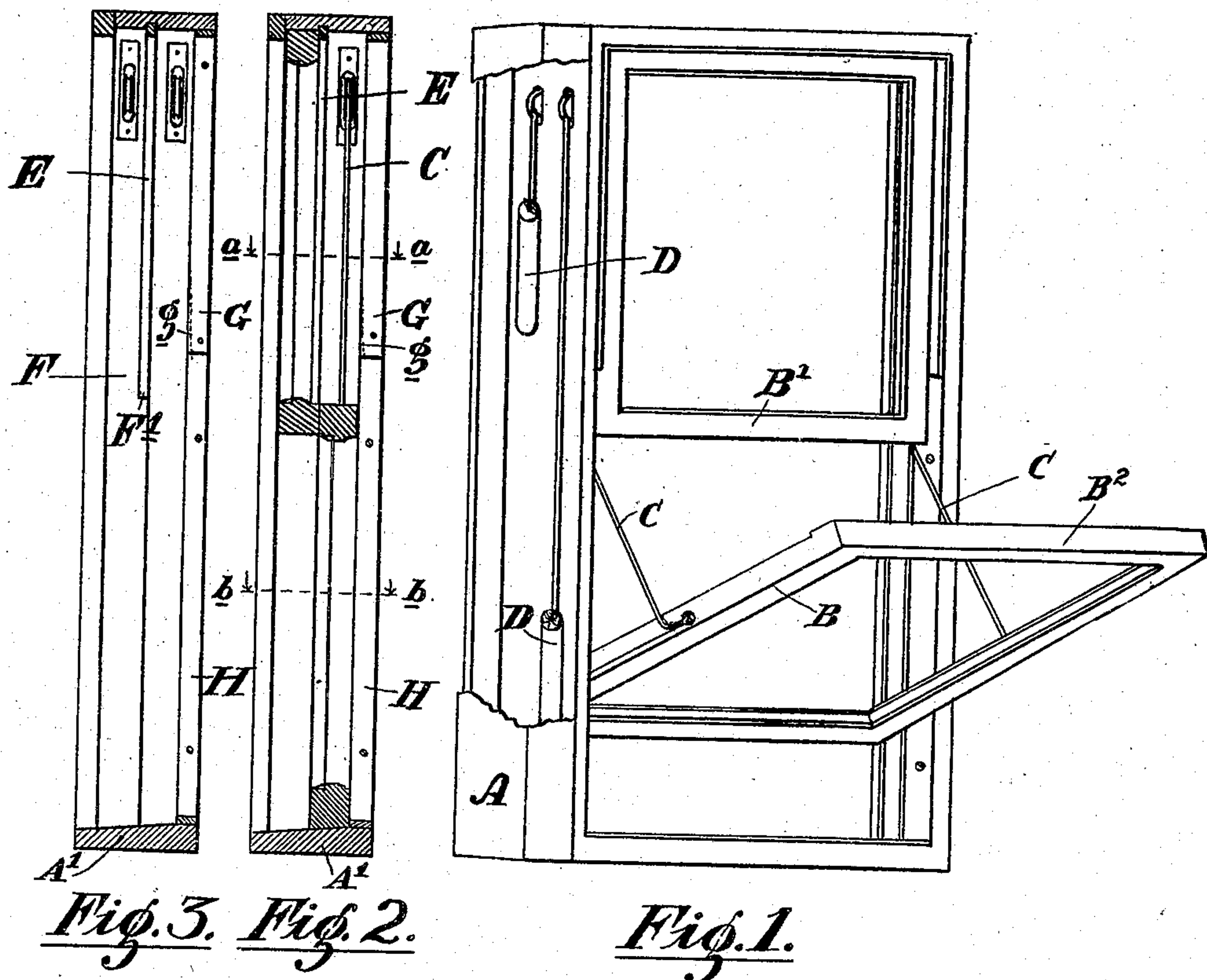


No. 881,239.

PATENTED MAR. 10, 1908.

T. A. HODGSON.
WINDOW FRAME AND SASH.
APPLICATION FILED JULY 6, 1906.



WITNESSES:-

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UNITED STATES PATENT OFFICE.

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WINDOW FRAME AND SASH.

No. 881,239.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed July 6, 1906. Serial No. 325,191.

To all whom it may concern:

Be it known that I, THOMAS ANDERSON HODGSON, of the city of Ottawa, in the county of Carleton, Province of Ontario, Dominion of Canada, builder, having invented new and useful Improvements in Window Frames and Sashes, do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to windows, and more particularly to that class of vertically movable windows counterbalanced by weights suspended from cords running on pulleys.

One object of my invention is to improve that type of sliding windows wherein the lower and upper sashes are of unequal width, so as to be tilted, for the purpose of cleaning, without being disconnected from their suspending cords.

A further object of my invention is the provision of means whereby I may apply my improvement on windows now in general use without altering the frame stiles.

I accomplish these results by the device described and illustrated in the drawings and in which similar letters denote similar parts throughout the several views.

In the drawings,—Figure 1 is a perspective view showing the lower sash raised, the upper sash lowered and tilted inwardly. Fig. 2 is a section through the frame and the sashes. Fig. 3 is a section through the window frame, the sashes being removed. Fig. 4 is a cross section, on a larger scale, on the line *b—b* Fig. 2. Fig. 5 is a cross section, on a larger scale, on the line *a—a*—Fig. 2. Fig. 6 is a section, on a larger scale, through the lower and top rail of the upper and lower sash respectively.

A, is the window frame, better known as the English box frame; this frame is of the same construction as now in general use, except that for the purpose of my improvement, I dispense with the parting stops extending the full length of the frame, and use instead parting stops E extending from the top of the frame to the top of the lower rail of the upper sash as shown in Fig. 2. In order to reduce the width of the outer sash guideway, I provide a filling in strip F which is secured to the frame and corresponds in width at its upper part to the width between the inner side of the outside casing, which serves as the outside stop, and the parting

stop E. At its lower part, this strip F extends, in width, to the space between the inner edge of the outside stop, and the outside edge of the parting stop E. It will be seen therefore that the inner edge of the filling in strip F forms one part of the outer stop for the lower sash and that the parting stop E forms the other part. The inner stops, for the lower sash are made in sections, the lower section H being somewhat longer than the height of the lower sash B, the upper section G is permanently secured to the frame and it carries a groove *g* at its outer lower end; this groove is intended to maintain the sash cord when the sash is tilted. A groove serving the same purpose as the above is also made at the outer lower end of the parting stop E, at *F*¹.

My window sashes differ from the ordinary sashes in the following manner. Each stile has recesses for the cords as usual but these recesses are carried from the center of the stile to the inner edge thereof. Such recesses enables the sash to be tilted by drawing the bottom inwards, it therefore permits the tilting of the upper sash without raising the lower sash beyond the top of the frame.

My device operates as follows: To tilt the upper sash it is only necessary to raise the lower sash up to the top of the frame and to lower the upper sash down to the bottom of the frame, when the frame is pulled inward from the bottom; by means of the inward recesses on the sash stiles the cord will clear the stiles gradually as the sash is canted and the upper rail of the sash will slide along the outer guideway stop during the whole process of the tilting. The tilting of the lower sash is produced by the mere removal of the sectional stops, when the same action as above explained with relation to the upper sash takes place, except that the top rail of the sash slides on the edge of the filling in strip F.

It will be evident that my improvement although very simple is of great importance and very effective, easily applied, and of good workmanship.

What I claim is:—

1. In a window, an upper sash of less width than the lower sash, a guideway in the frame for said upper sash, a parting stop of the length of the upper sash less the width of the lower bar of said upper sash, and a

cord recess in said sash extending to the inner edge of its stile.

2. In a window, an upper sash of less width than the lower sash, a guideway in
5 the frame for said upper sash, a parting stop of the length of the upper sash less the width of the lower bar of said upper sash, and a cord recess in said sash extending to the inner edge of its stile; a lower sash of greater
10 width than the upper sash, a guideway in the frame for said lower sash, an outside stop for said guideway consisting partly of the

edge of the outer guideway and partly of the parting stop, a cord recess in said sash extending to the inner edge of its stile and 15 sectional inner stops for said sash.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

Ottawa, Canada, July 4th, 1906.

THOMAS ANDERSON HODGSON. [L. s.]

Witnesses:

H. DOUGLAS,
W. DAVIS.