

J. T. CRAW.
Sash-Holders.

No. 146,434.

Patented Jan. 13, 1874.

Fig. 1.

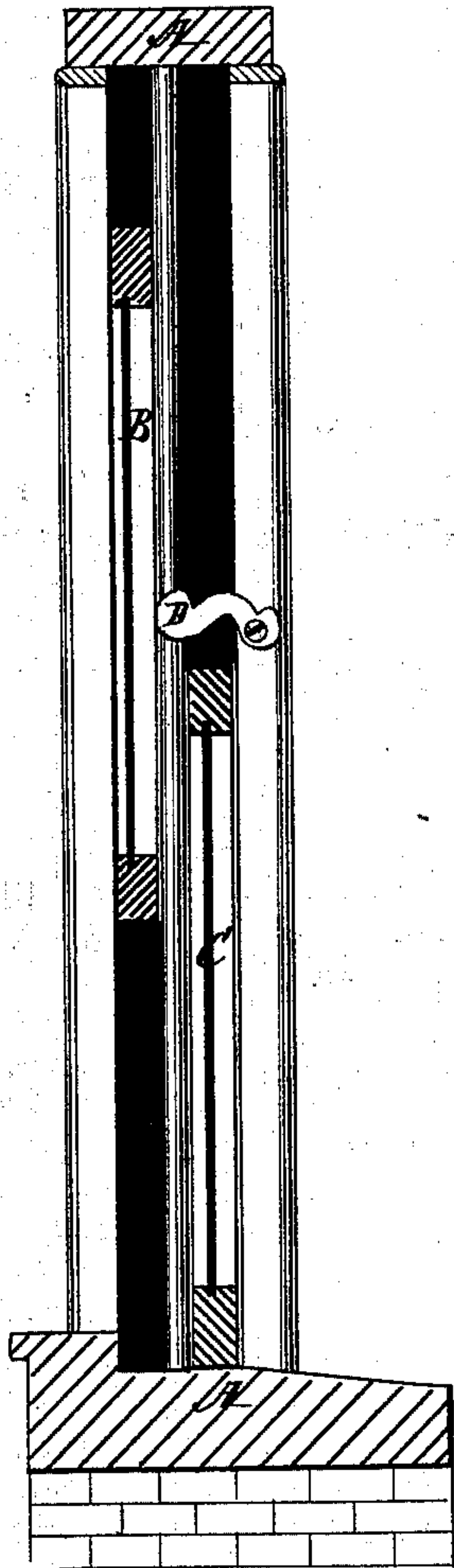
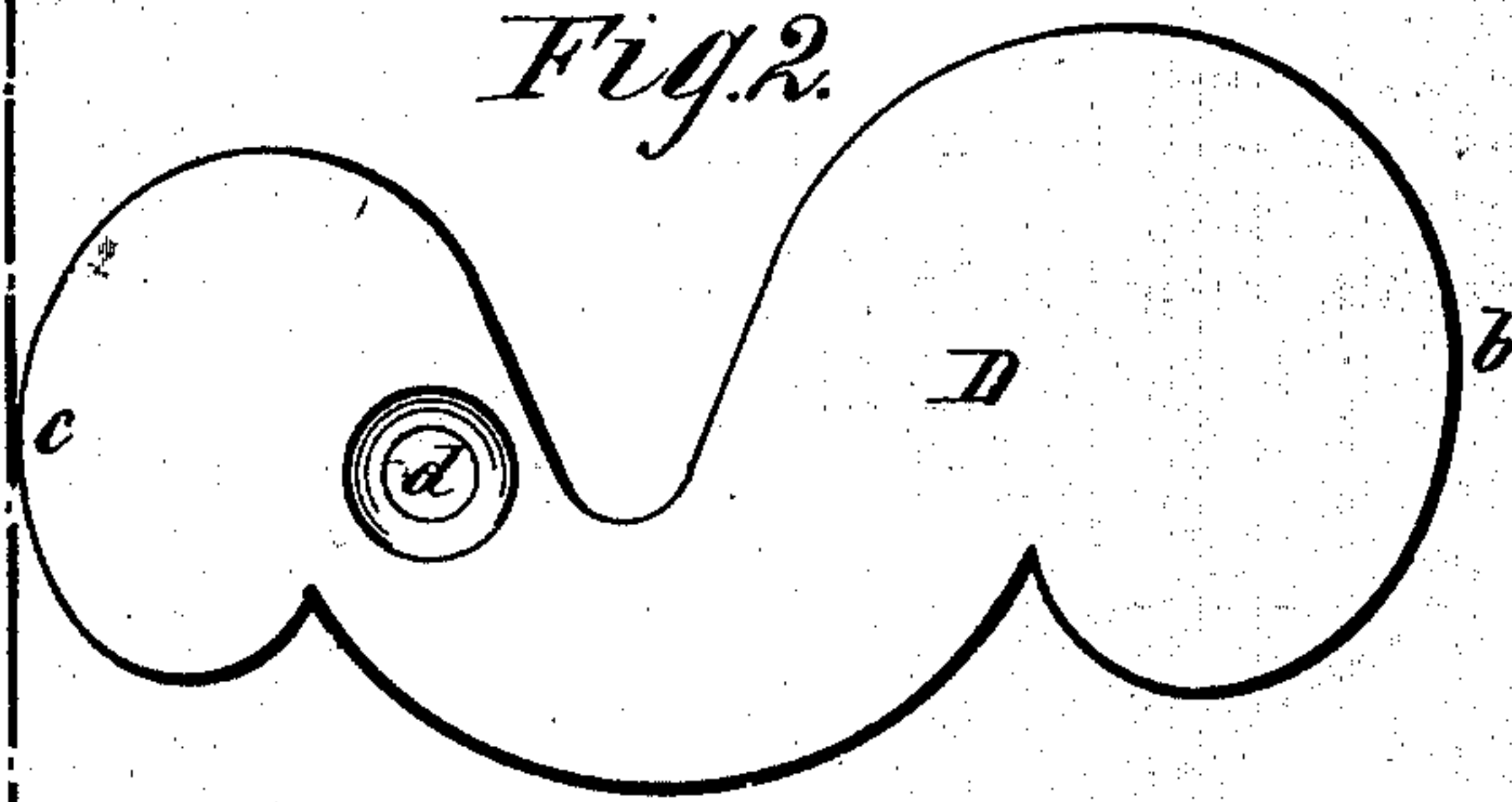


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOSEPH TAYLOR CRAW, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. **146,434**, dated January 13, 1874; application filed December 15, 1873.

To all whom it may concern:

Be it known that I, JOSEPH T. CRAW, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Window-Sash Lock and Holder; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a vertical sectional elevation of a window frame and sash; Fig. 2, a plan of my improved sash-fastener.

The invention relates to means whereby the upper and lower sash of a window may be alternately held by the same fastener; and it consists in a double cam, with arms of such relative length, and so constructed, as to strike or impinge, alternately on either sash as hereinafter described.

A represents the window-frame, and B C the upper and lower sashes. D represents my improved fastener, which is pivoted, through a hole, *d*, to the inside of frame. The curved sur-

faces *b c* are at such relative distances from the hole *d* that a certain portion thereof may be brought into frictional contact, the one with sash B, and the other with sash C.

As different portions of the curved surfaces *b c* are unequally distant from the hole *d*, or center of motion, the friction may be made greater or less. Thus it will be seen that either sash may be held at any desired elevation, each end of the fastener alternately serving as a handle and a sash-holder.

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

The combination, with sashes B C, of the double-cam sash-fastener D, pivoted, at *d*, to inside of window-frame, and having arms of different length, with cam-faces *b c*, as and for the purpose described.

JOSEPH TAYLOR CRAW.

Witnesses:

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