

No. 618,551.

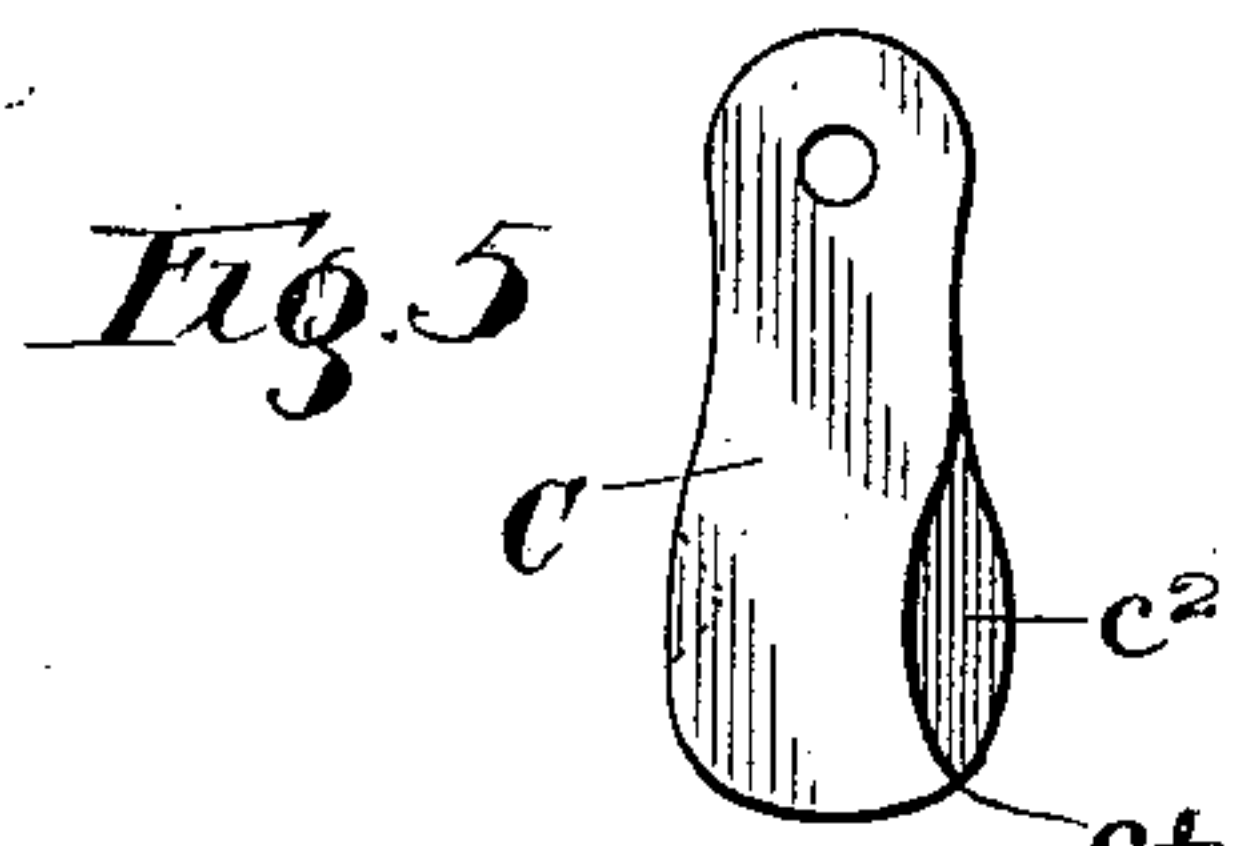
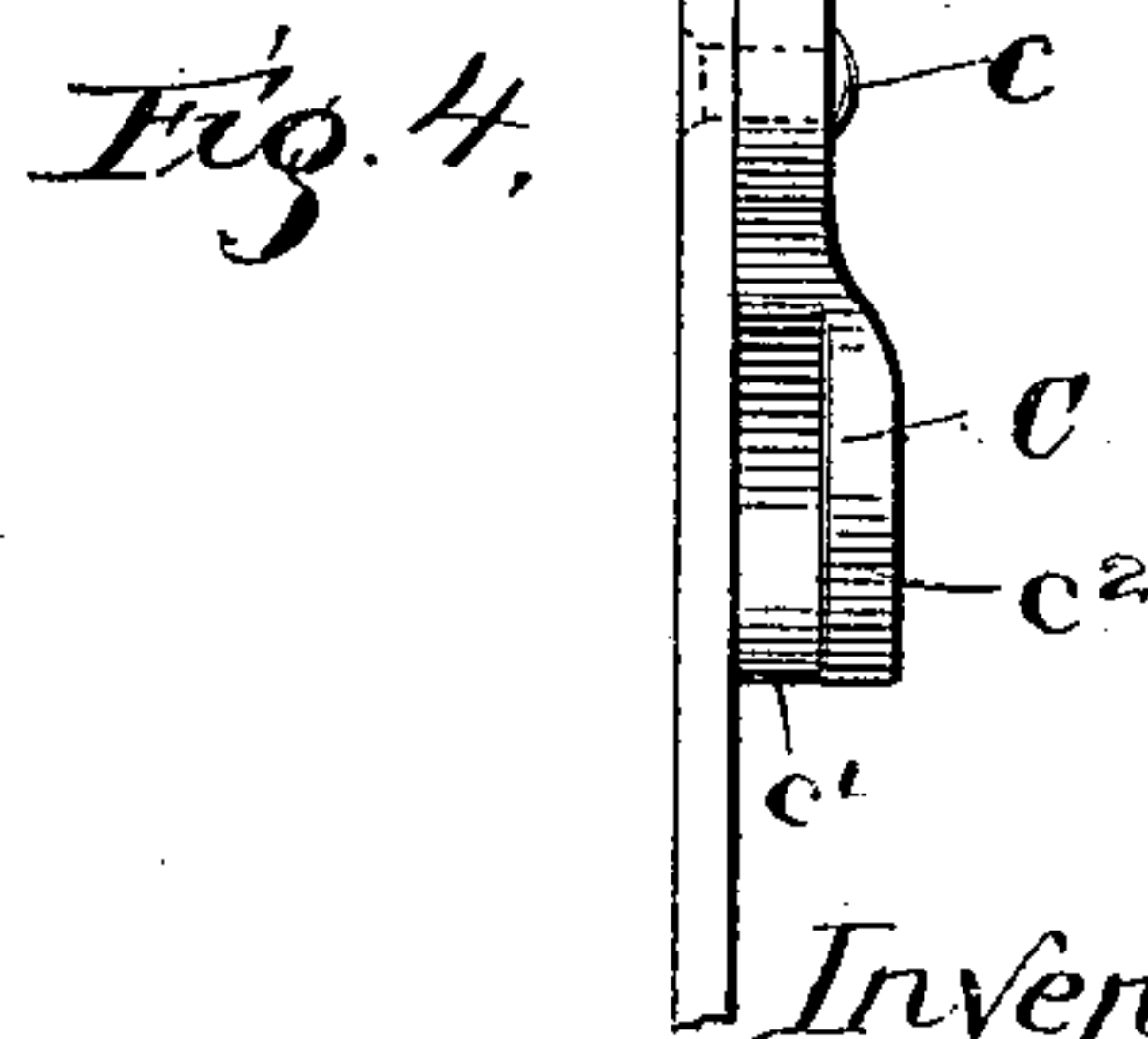
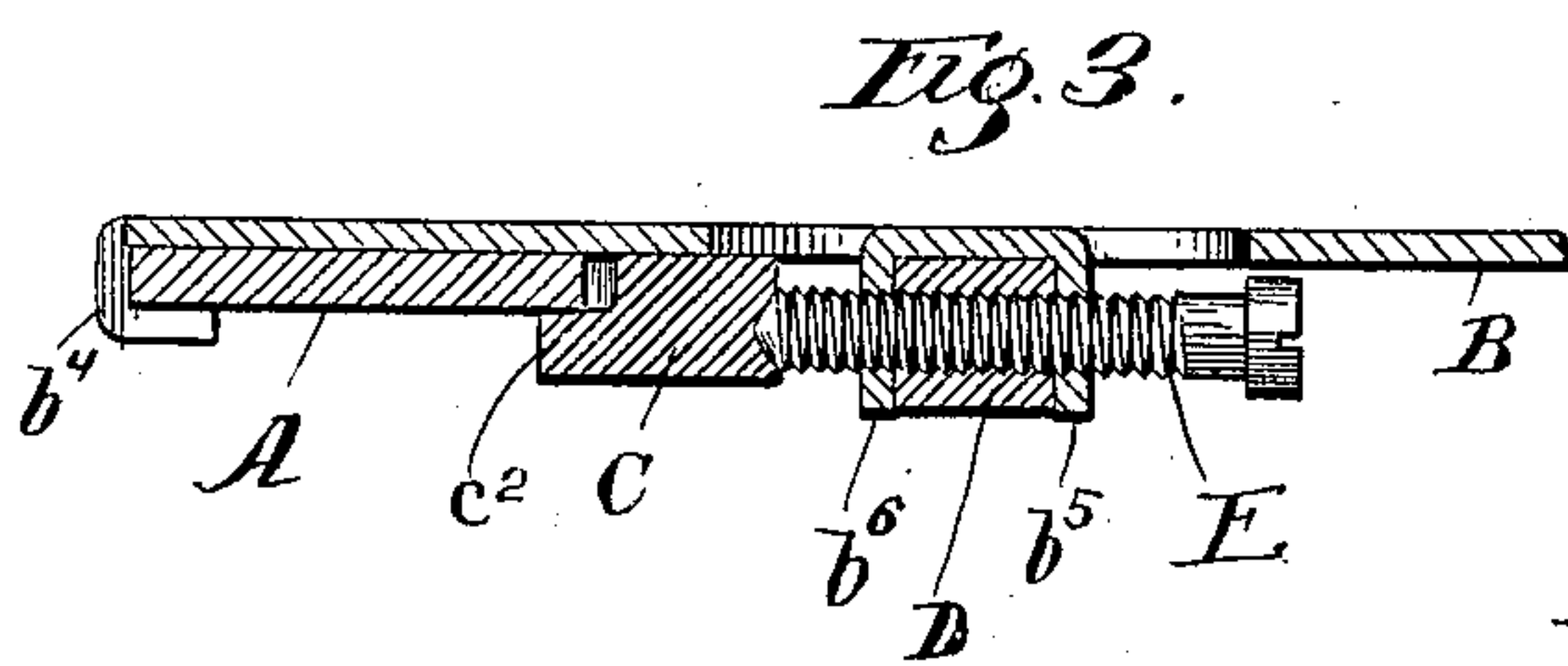
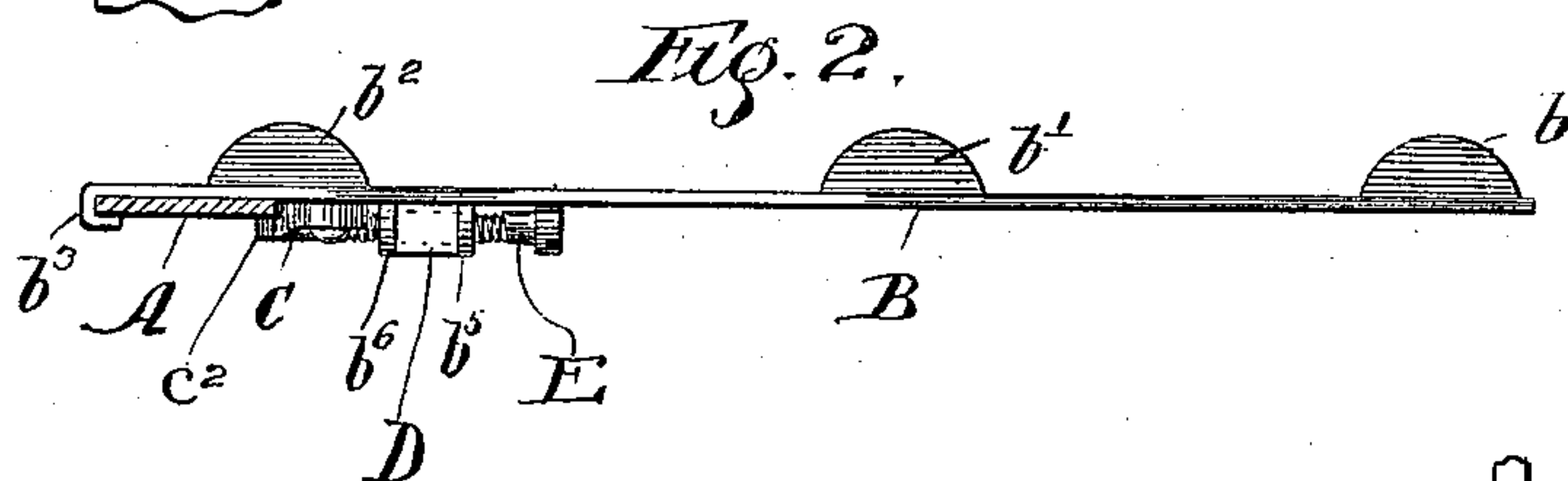
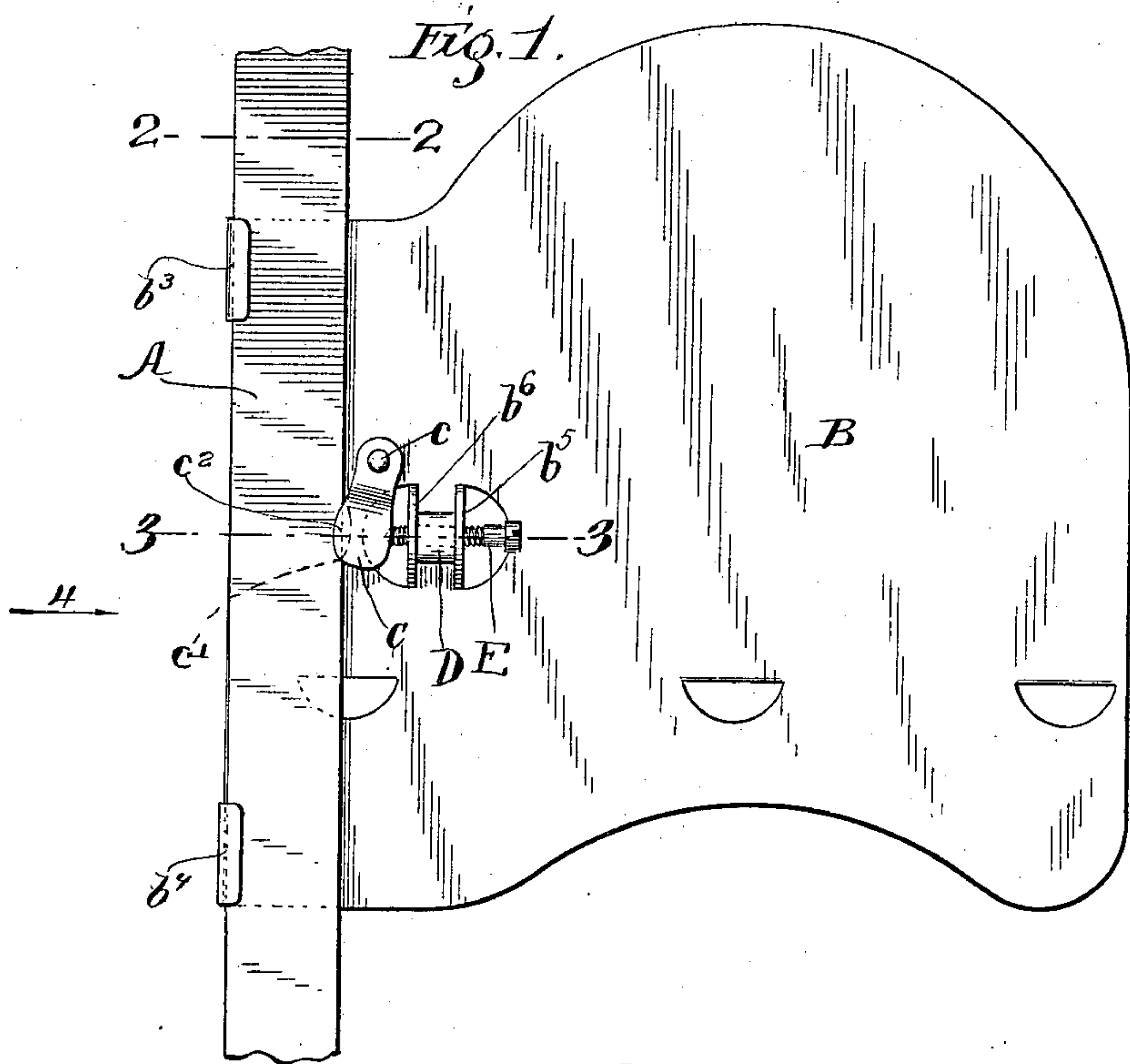
Patented Jan. 31, 1899.

W. H. & F. A. WINSLOW & J. L. KAIL.

SHELF BRACKET.

(Application filed Jan. 12, 1898.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM H. WINSLOW, FRANCIS A. WINSLOW, AND JACKSON L. KAIL, OF CHICAGO, ILLINOIS, ASSIGNORS TO THE WINSLOW BROTHERS' COMPANY, OF SAME PLACE.

SHELF-BRACKET.

SPECIFICATION forming part of Letters Patent No. 618,551, dated January 31, 1899.

Application filed January 12, 1898. Serial No. 666,401. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. WINSLOW, FRANCIS A. WINSLOW, and JACKSON L. KAIL, citizens of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Shelf-Brackets, of which the following is a specification.

Our invention relates to certain improvements in shelf-brackets designed for the purpose of cheapening brackets of the class which are intended to support shelves in stacks or tiers, as is customary in the more recently-constructed libraries.

The invention consists in certain novel features of construction, which will be fully described and claimed below.

In the drawings, Figure 1 is a side elevation of a bracket and supporting-bar. Fig. 2 is a top plan of the same, showing the bar in horizontal section in line 2 2. Fig. 3 is a broken view of a horizontal section in line 3 3, looking downward. Fig. 4 is a broken edge view of the bracket, looking toward the edge which engages with the supporting-bar; and Fig. 5 is a rear view of a biting-pawl, the function of which will be hereinafter set forth.

The supporting-bar A here shown is an upright flat metal strip, and the bracket B is preferably a flat piece of sheet metal cut and bent to form the necessary lugs and hooks to receive the shelf and engage the supporting-bar. As here shown, three tongues b b' b^2 are stamped inward to carry the shelf. Two other tongues b^3 b^4 upon the edge of the bracket are bent outward and forward upon themselves to form hooks adapted to engage the rear edge of the supporting-bar. Upon the face of the bracket a biting-lug or pawl C is pivoted at c and has a sharp corner c' , adapted to bite into the forward edge of the supporting-bar, and an adjacent flange c^2 , adapted to extend alongside of said bar upon the side opposite from the back bracket and prevent said bracket from swinging inward before the shelves are in position. Adjacent to this pawl two tongues b^5 b^6 are struck outward from the sheet metal and between them is held a nut D, in which is threaded a screw E, bearing upon the pawl C. By

means of this screw the pawl may be adjusted toward or from the supporting-bar, as may be desired, or said pawl may be jammed tightly against the bar to secure the bracket against movement. When the pawl is so adjusted as to slide loosely upon the bar, the bracket may be raised without resistance, and it may also be lowered if care is taken to pull forward upon the lower portion of the bracket. If the bracket is released, however, the forward edge will drop and the pawl will bite into the supporting-bar and hold the bracket against downward movement. The advantage of this portion of the invention is due to the fact that in adjusting the different shelves the pawls may be loosened and the brackets raised or lowered, as desired, until all are in the proper position, during which time they will sustain themselves automatically. After this has been done the pawls may be clamped tightly to the supporting-bars, preventing the displacement of the brackets by jarring or by accidental blows upon the forward edge.

We claim as new and desire to secure by Letters Patent—

1. The combination with a sheet-metal bracket provided with two adjacent tongues stamped up from the metal of said bracket, of a nut secured against lateral movement and rotation between said tongues and having threaded therein a clamping or adjusting screw; substantially as described.

2. A bracket, B, having the hooked tongues, b^3 , b^4 , the pivoted biting-pawl, C, the tongues, b^5 , b^6 , the nut, D, held between said tongues and the screw, E, threaded in the nut and bearing against the pawl; substantially as described.

3. The sheet-metal bracket, B, having a series of shelf-supporting tongues stamped inward from the metal of the bracket, a series of hooked tongues bent from the rear edge of the bracket, a pair of adjacent tongues stamped up from the metal of the bracket, a nut held between said adjacent tongues and a clamping or adjusting screw threaded in said nut; substantially as described.

4. A sheet-metal bracket having a series of shelf-supporting tongues stamped inward from the metal thereof, a series of hooks bent

outward from the rear edge thereof, a biting-pawl pivoted to the face thereof, a pair of tongues stamped outward from the metal thereof adjacent to said pawl, a nut secured
5 between said last-mentioned tongues and a screw threaded in said nut adapted to bear upon said pawl; substantially as described.

5. The combination with an upright and a horizontal bracket adapted to engage one side
10 of the same, of an approximately vertical pawl pivoted to the bracket to swing against the opposite side of the upright, and a screw

mounted upon the bracket in position to force such swinging of the pawl.

In witness whereof we have hereunto set
our hands, at Chicago, in the county of Cook
and State of Illinois, this 29th day of Decem-
ber, A. D. 1897.

WILLIAM H. WINSLOW.
FRANCIS A. WINSLOW.
JACKSON L. KAIL.

Witnesses:

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