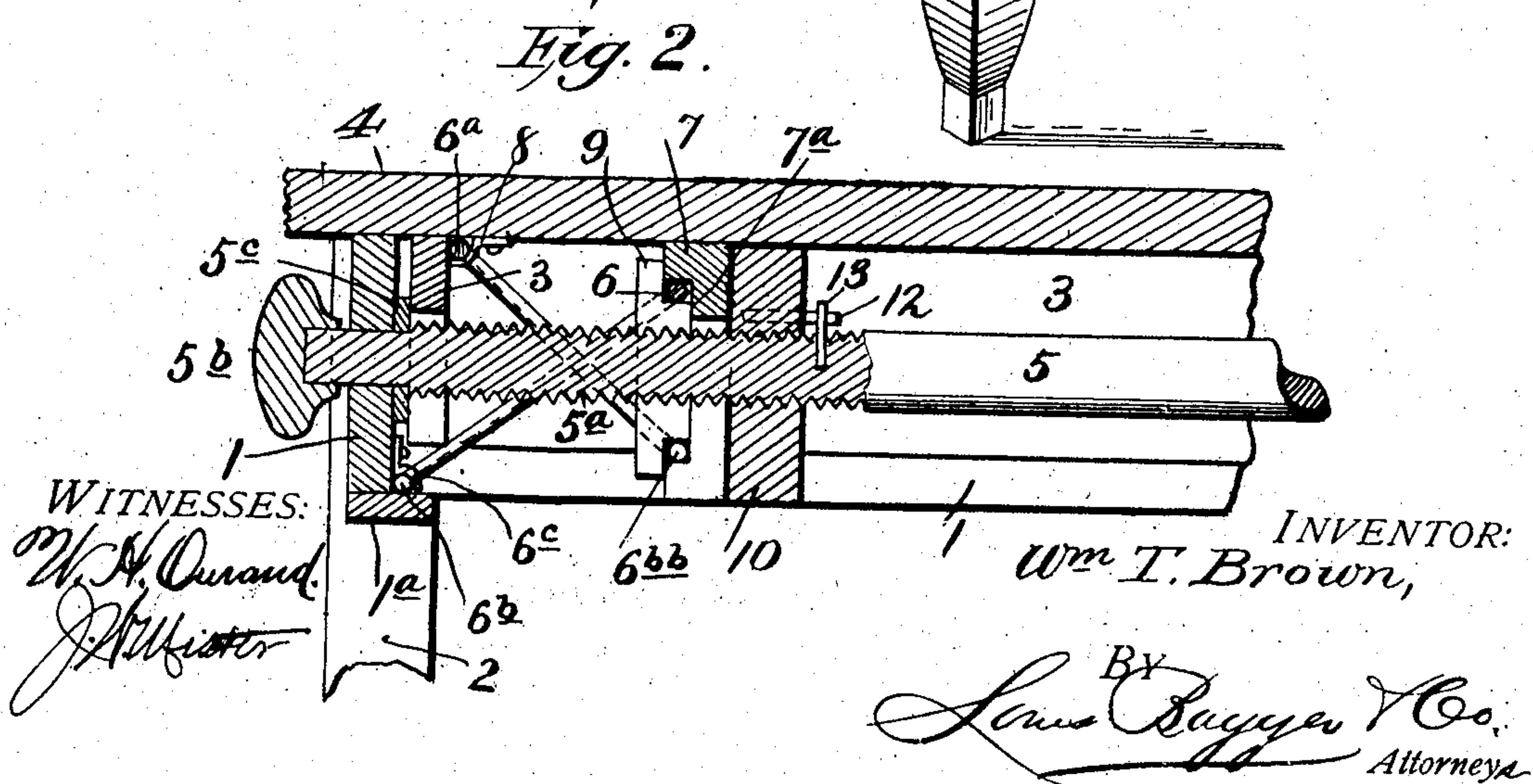
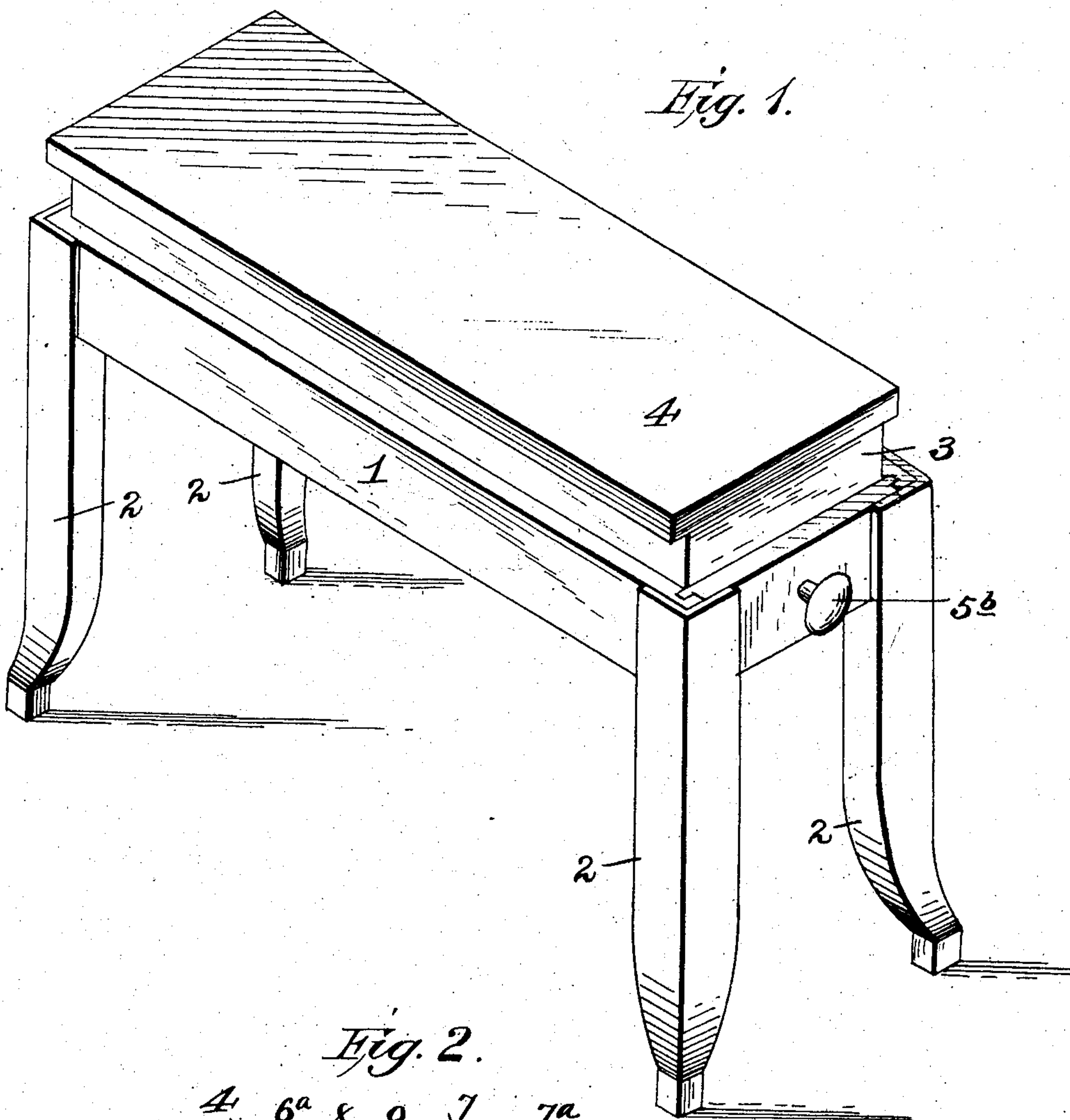


No. 780,859.

PATENTED JAN. 24, 1905.

W. T. BROWN.
EXTENSION PIANO STOOL.
APPLICATION FILED JULY 18, 1904.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 3.

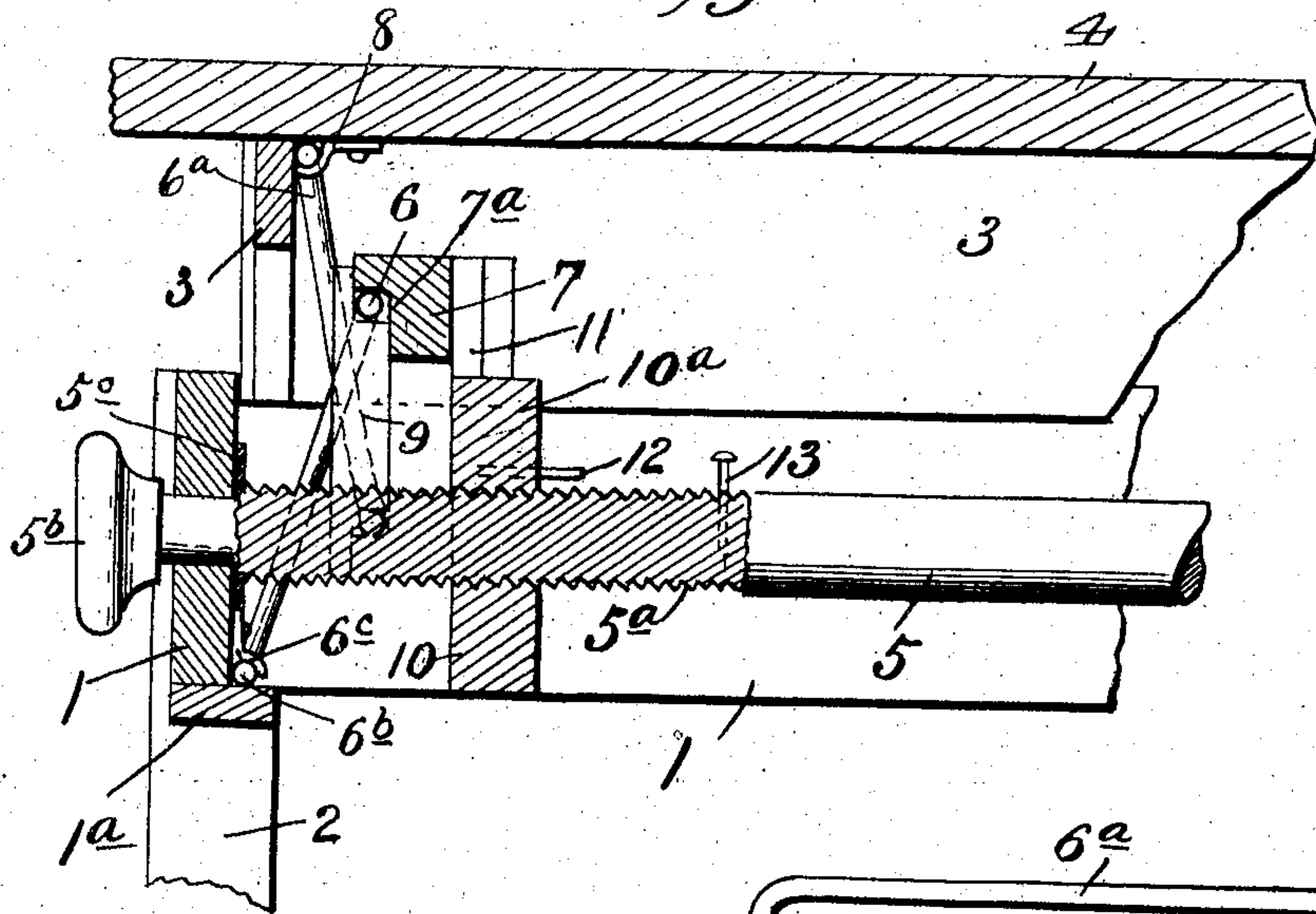


Fig. 4.

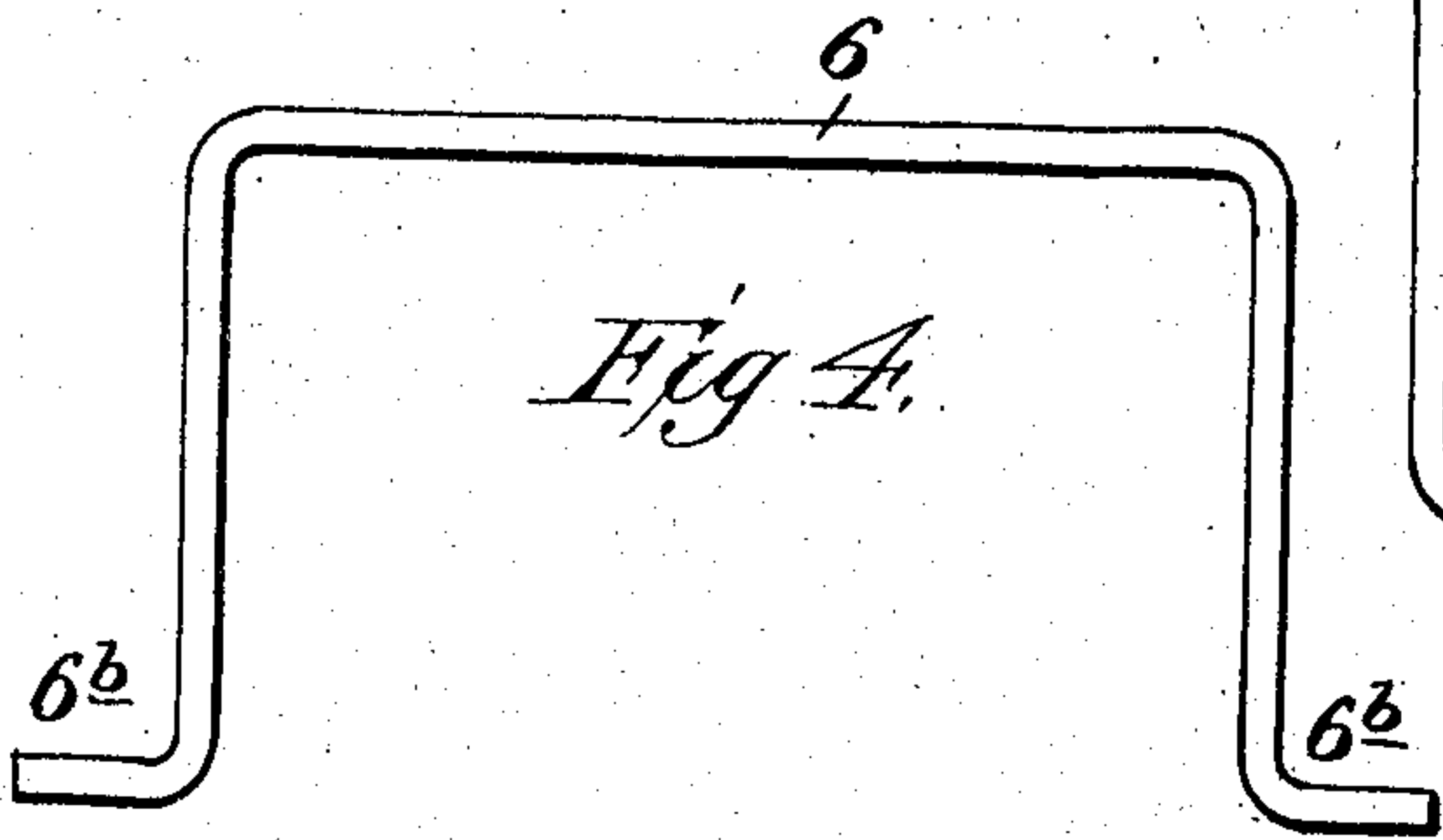


Fig. 5.

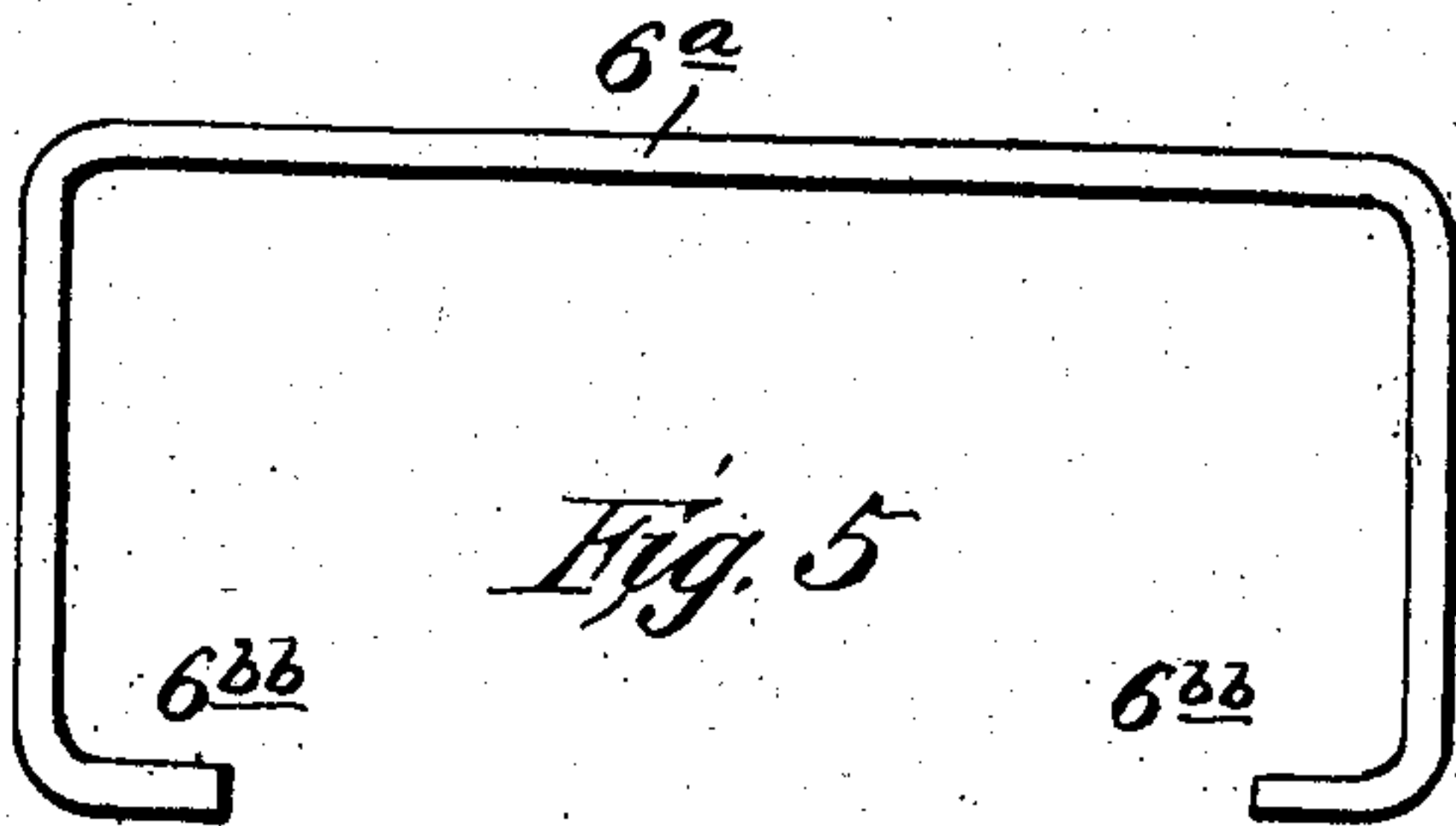


Fig. 6.

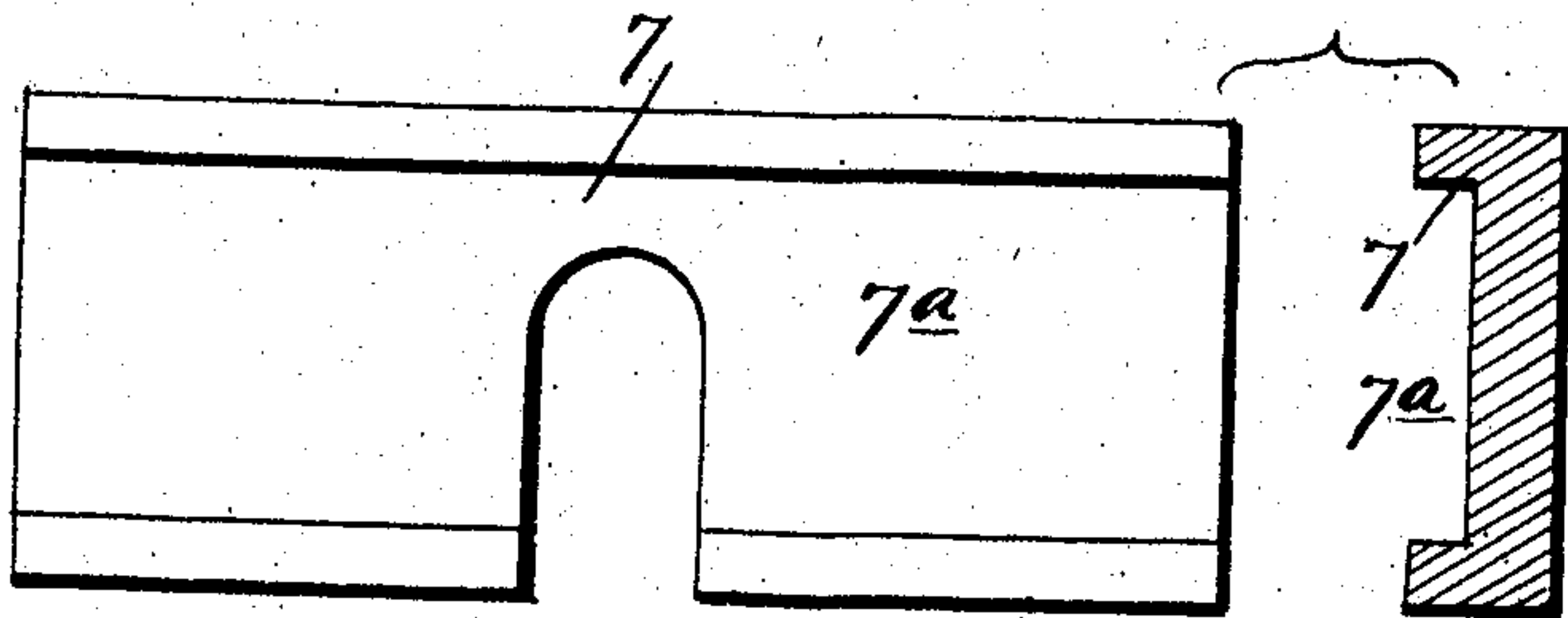
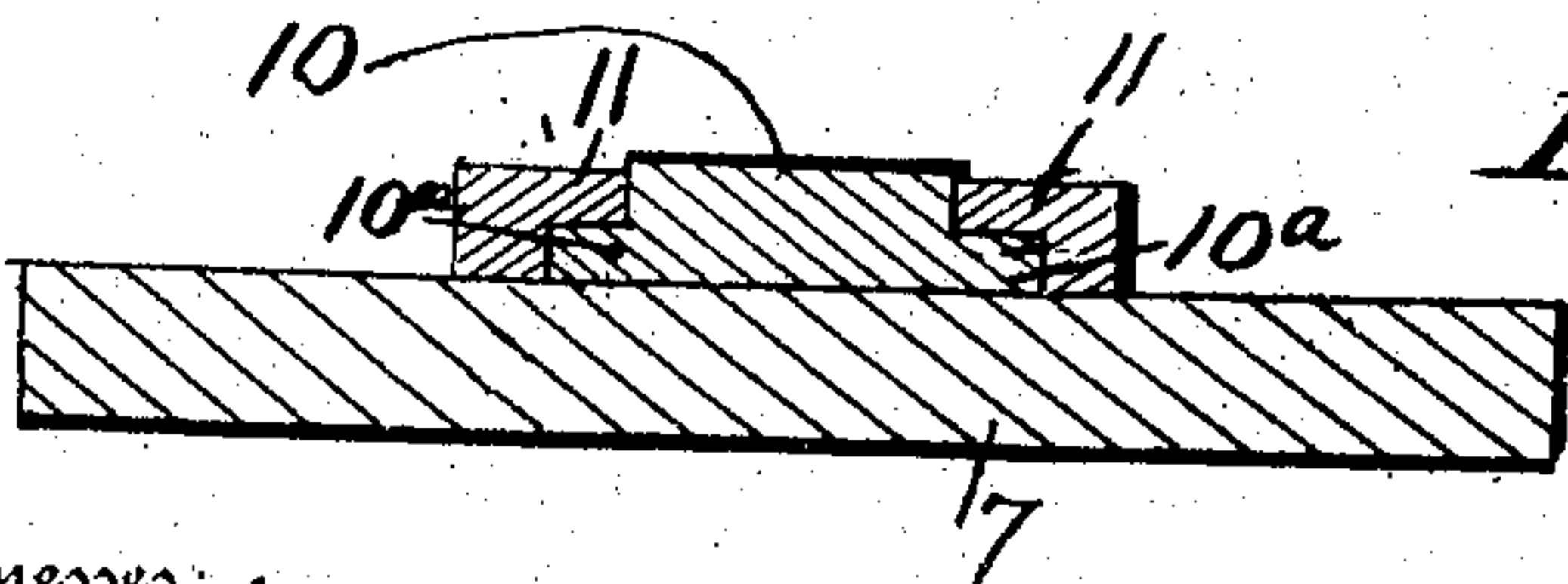


Fig. 7.



Witnesses:

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By

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UNITED STATES PATENT OFFICE.

WILLIAM THOS. BROWN, OF JACKSONVILLE, ILLINOIS.

EXTENSION PIANO-STOOL.

SPECIFICATION forming part of Letters Patent No. 780,859, dated January 24, 1905.

Application filed July 18, 1904. Serial No. 217,053.

To all whom it may concern:

Be it known that I, WILLIAM THOMAS BROWN, a citizen of the United States, residing at Jacksonville, in the county of Morgan and State of Illinois, have invented new and useful Improvements in Extension Piano-Stools, of which the following is a specification.

My invention relates to improvements in what may be termed piano "benches" or "stools," especially for use as in playing duets, it of course being equally applicable for use in connection also with organs, &c. It has for its object, among other things, to provide for simplicity and compactness; to enable the assembling or putting together of the parts with facility and accuracy; to dispense with the use of tongued and grooved slides and guides, consequently their necessary friction and tendency to render the operation unsatisfactory from swelling and shrinkage, and to secure readiness or promptness of action of the parts as the same is actuated.

Said invention consists of certain structural features, substantially as hereinafter more fully disclosed, and particularly pointed out by the claims.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a perspective view thereof. Fig. 2 is a broken vertical longitudinal section of the same with the parts collapsed or the seat in its lowest position. Fig. 3 is a like view thereof with the parts extended or the seat at its maximum elevation. Figs. 4 and 5 are detached views of a pair of the bail-like levers employed in connection with the adjustment or movement of the seat, respectively. Fig. 6 is a front view and a sectional view of one of the end slides connected up with a pair of bail-like levers above noted. Fig. 7 is a plan view of said slide with the follower or guides upon said slide receiving flanges of said follower produced in horizontal section.

In the carrying out of my invention I provide an outer frame 1, to which is suitably secured legs 2 for supporting the same in elevated position, and within said outer frame is arranged an inner frame 3, having secured thereto the seat-board 4, adapted, as presently disclosed, to have vertical movement.

A shaft 5, having near its ends opposite or right-hand and left-hand screw-threads 5^a, is suitably journaled in the ends of the outer frame 1, the inner frame 3 being adapted to permit its unobstructed passage. Each end of said shaft is provided beyond the ends of said outer frame with a suitable knob 5^b for its convenient actuation, as in effecting the adjustment of the seat-board, while upon said shaft are slipped or inserted washers 5^c, interposed between shoulder-terminals of the screw-threads of said shaft and the inner surfaces of the inner frame.

A pair of levers 6 6^a is arranged within the bench or stool at each end thereof, each lever being, preferably, of bail shape and having lateral terminals or pivots 6^b 6^{bb}, respectively, said levers being arranged one within and crossing the other. The lever or bail 6 has its arm-connecting or cross bar bearing within keepers 6^c, secured upon the inner surface of the base portion or bar 1^a of the outer frame 1, while its lateral end portions or pivots 6^b are pivotally arranged within the upper corner of the recess 7^a of a slide 7, disposed transversely within, but independently movable of the inner frame 3. The lever or bail 6^a has its cross or arm-connecting bar pivotally arranged at the upper corner edge formed between the inner surface of the forward cross-piece of the frame 3 and the lower surface of the seat-board 4, keepers 8, suitably secured in position, being provided for forming a bearing for said arm-connecting bar. The lower end terminals or pivots 6^{bb} of the lever or bail 6^a are pivotally arranged or bear in the lower corner edge of the recess 7^a of the slide 7. Common means in the form of buttons or clamps 9, suitably applied to the slide 7, effects the holding of both the levers 6 6^a to the slide 7, said buttons or clamps having inner stepped portions coöperating with said recess to form bearings for said levers at those points.

For the right-hand and the left-hand screws of the shaft 5 are provided followers 10, operating, of course, in reverse directions, each having lateral cleats or extensions 10^a contiguous to the slide 7 and received within guides 11, projecting from the latter for the guid-

ance of the movement of said slide, as in aiding to effect the adjustment of the seat-board as the screw-shaft 5 is actuated and presently more fully disclosed. Said followers are provided upon opposed surfaces with projections or studs 12, while the screw-shaft 5 has projecting therefrom at right angles to the plane of said studs projections or studs 13, designed to effect engagement with the first-noted studs when the follower has been moved to the position indicated by Fig. 2 to limit the movement of the latter as the seat-board is lowered to its initial position.

It will be noted that, assuming the seat-board is in the position last indicated, by suitably actuating the screw-shaft 5 the followers 10 will be caused to move in reverse directions and toward the ends of the bench or stool, being initially distant from said ends. The right-lined movement thus imparted to said followers will of course act upon the slides 7 and the latter in turn exert endwise movement upon the bails or levers 6 6^a. Instantly with the application of such movement to said levers the slides 7 will move upward accordingly, moving said levers or bails correspondingly, carrying with them the seat-board, which actuation of said parts may be continued according to the required altitude it may be desired to impart to said seat-board, the latter being automatically sustained after such operation of parts, as it is apparent the relation of the follower with said screw-shaft is such as to effect an interlocking action therebetween when out of operation, resulting in locking the other parts as against movement.

Latitude is allowed as to details herein, as they may be changed as circumstances suggest without departing from the spirit of my invention.

I claim—

1. A bench, or stool of the character described, employing pairs of levers pivoted to the seat-board and to the seat-frame, respectively, slides having pivotal connection with said levers, and screw-actuated followers adapted to operate said slides.

2. A bench or stool of the character described, employing pairs of levers of bail shape pivoted to the seat-board and to the seat-frame, respectively, slides having pivotal connection with said levers, and screw-actuated followers adapted to operate said slide.

3. A bench or stool of the character described, employing pairs of levers or bails piv-

oted to the seat-board and to the seat-frame, respectively, slides having pivotal connection with said levers, followers each having a sliding connection with said slides, and a common screw-shaft adapted to actuate said followers.

4. A bench or stool of the character described, employing pairs of levers or bails pivoted to the seat-board and to the seat-frame, respectively, slides having pivotal connection with said levers, followers having lateral cleats or extensions received within guides upon said slides, and a common screw-shaft adapted to reversely actuate said followers.

5. A bench or stool of the character described, employing pairs of levers or bails pivoted to the seat-board and to the seat-frame, respectively, slides each having a recess and a clamp, with stepped longitudinal edges adapted to cooperate with the corresponding edges of said recess to receive and form bearings for the arm-connecting bar of one lever and the end terminals of the other lever of each pair, respectively, followers having sliding connection with said slides and a screw-shaft adapted to reversely actuate said followers.

6. A bench or stool of the character described, employing pairs of levers or bails, a movable seat-board, slides and followers, each of said followers having a sliding connection with each of said slides, the cross-bars of a pair of levers being pivotally connected to a slide and to the seat-board, respectively, the end terminals of the levers being pivoted upon the outer frame of the bench or stool and upon said slide, respectively, and means for reversely actuating said followers.

7. A bench or stool of the character described, employing pairs of levers or bails, a movable seat-board, slides and followers, each of said followers having a sliding connection with each of said slides, the cross-bars of a pair of levers being pivotally connected to a slide and to the seat-board, respectively, the end terminals of the levers being pivoted upon the outer frame of the bench or stool and upon said slide, respectively, and a common screw-shaft having right-hand and left-hand screw-threads engaging said followers, respectively.

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

WM. THOS. BROWN.

Witnesses:

GEO. E. BAXTER,
C. B. SAWYER.