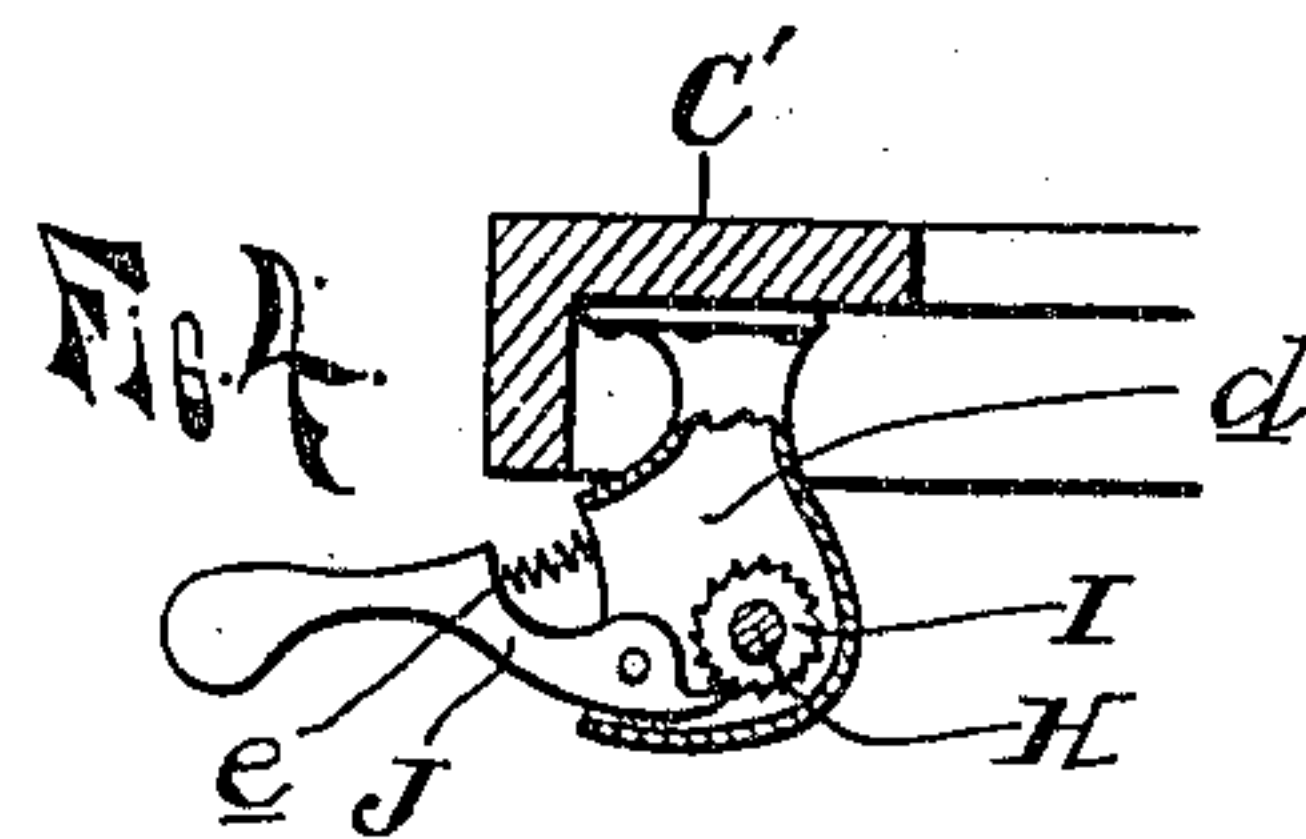
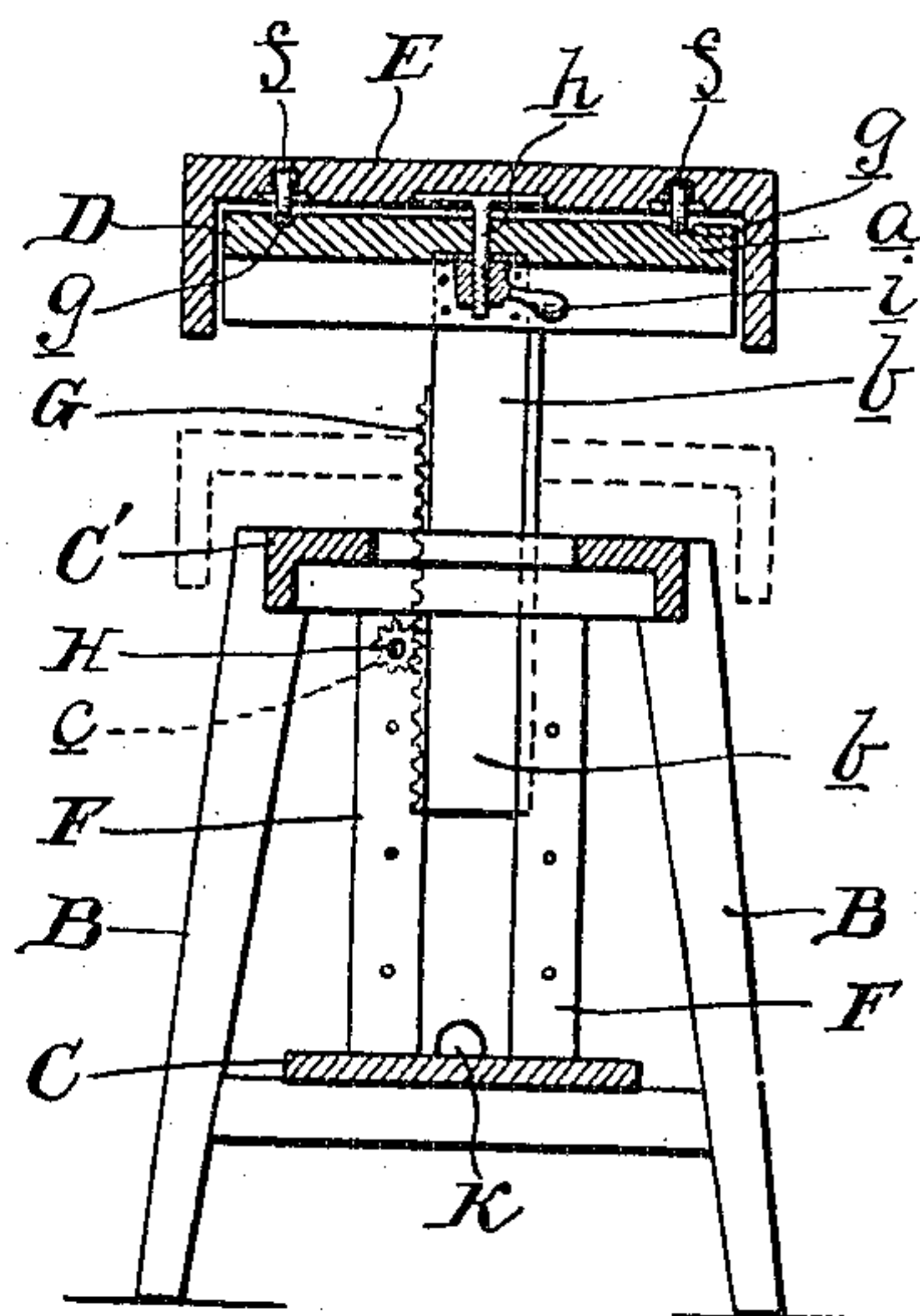
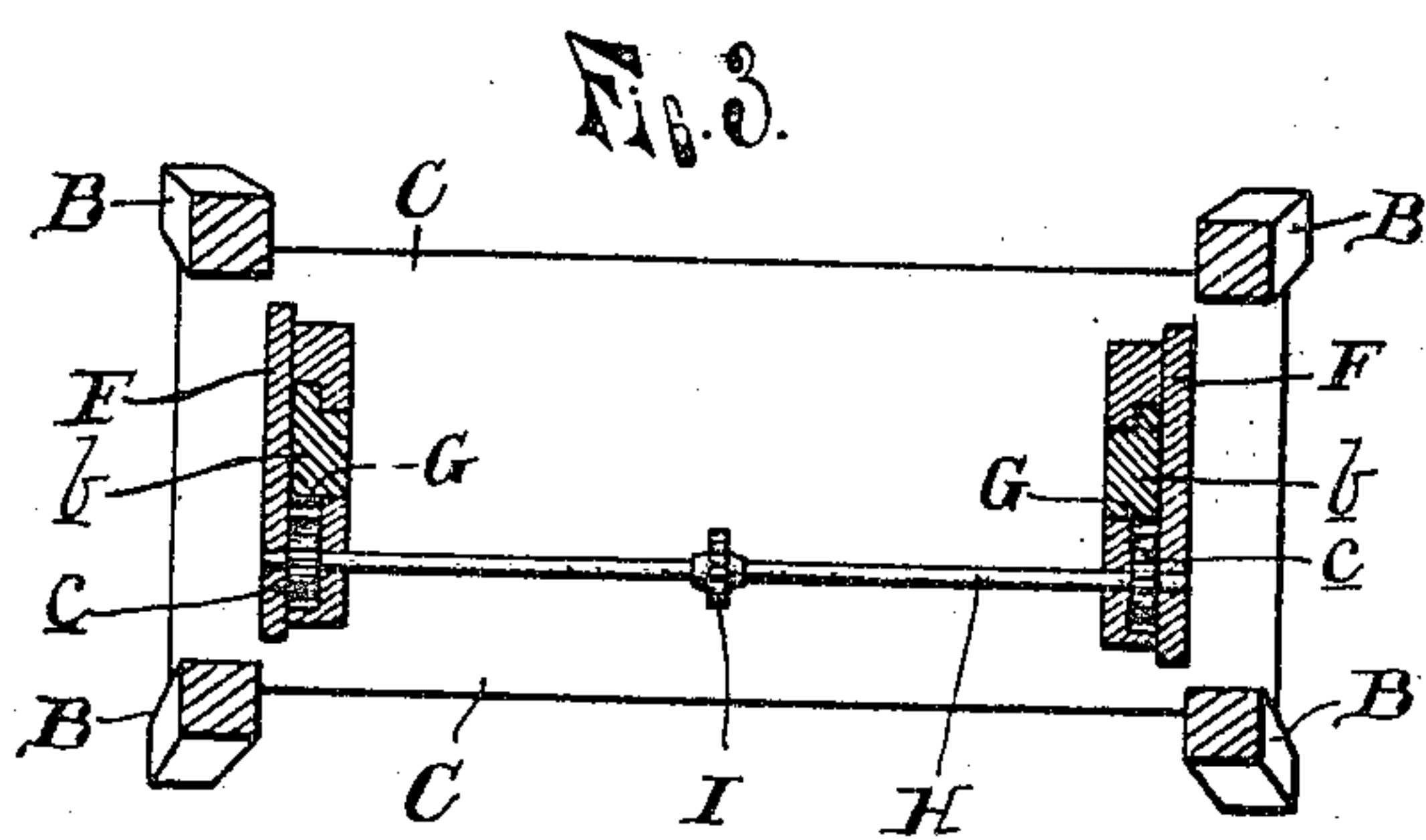
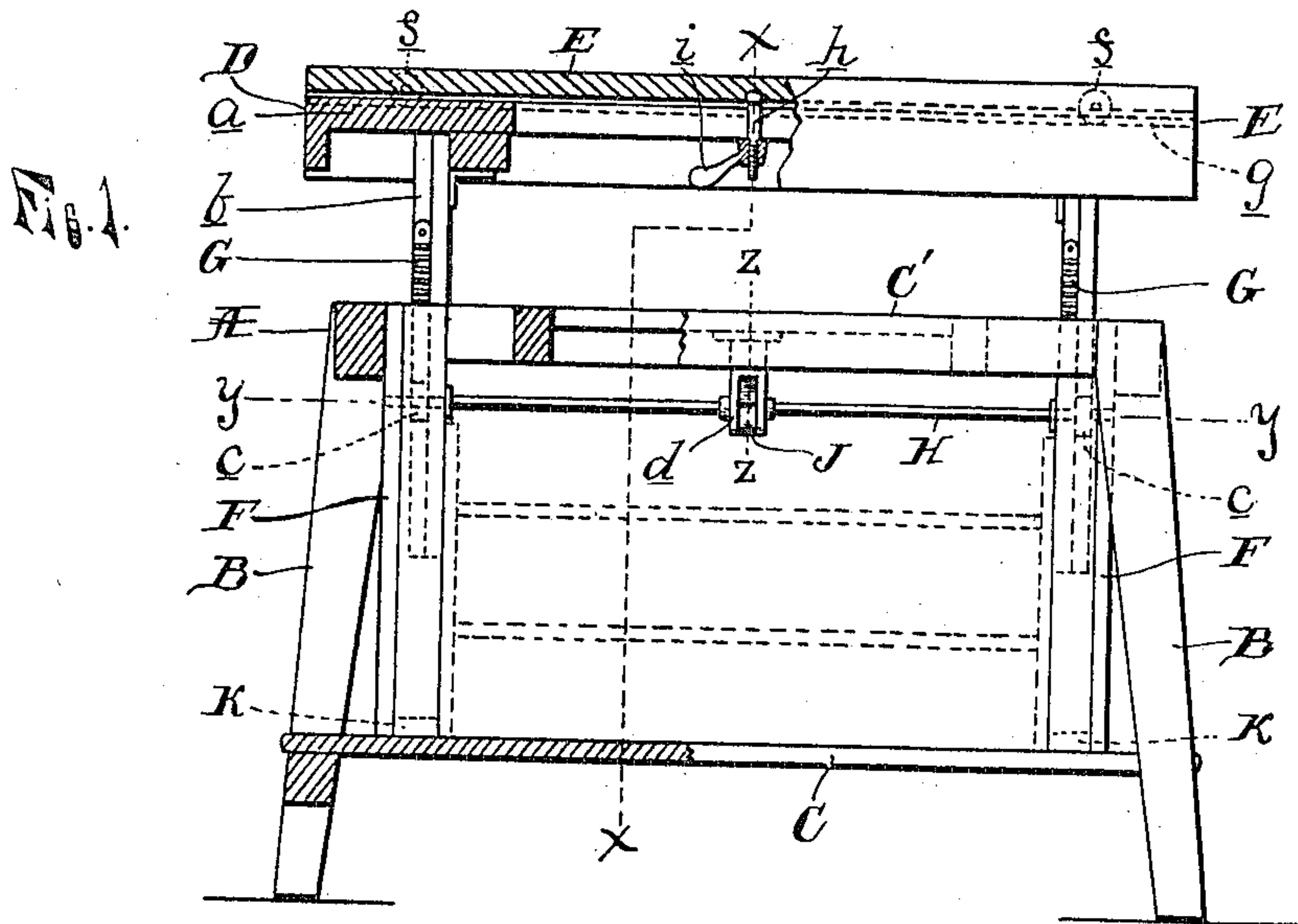


No. 831,574.

PATENTED SEPT. 25, 1906.

M. F. STANLEY.
PIANO BENCH.

APPLICATION FILED DEC. 4, 1905.



WITNESSES:
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UNITED STATES PATENT OFFICE.

MERRITT F. STANLEY, OF NORTHVILLE, MICHIGAN.

PIANO-BENCH.

No. 831,574.

Specification of Letters Patent.

Patented Sept. 25, 1906.

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To all whom it may concern:

Be it known that I, MERRITT F. STANLEY, a citizen of the United States of America, residing at Northville, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Piano-Benches, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has particular reference to that class of piano stools or benches which are provided with means for raising and lowering them; and the invention consists in the improved means for raising and lowering the bench and in the provision made for shifting the seat laterally, all as more fully hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is an elevation, partly in section. Fig. 2 is a cross-section substantially in the plane xx of Fig. 1. Fig. 3 is a horizontal section substantially on line yy , Fig. 1. Fig. 4 is a vertical section on line zz , Fig. 1.

In the drawings, A is the frame of the bench, embodying four corner-posts B, which form the legs of the bench; a shelf C, mounted in the lower part of the frame, and a horizontal top member C'.

D is a vertically-adjustable seat-frame comprising the seat-supporting bed-plate a and the vertical guide-posts b , depending from its under side, and E is the seat proper supported upon the seat-frame. The frame A is provided adjacent to its ends with vertical guide-bearings F, into which the guide-posts b engage and are vertically guided therein.

G represents rack-bars carried by the guide-posts b , and H is a transverse shaft journaled at its ends in the vertical guides F and carrying pinions c , engaging with the rack-bars G.

I is a ratchet-wheel mounted upon the shaft H midway between the ends thereof. It is inclosed within a housing d , which is secured to the top member C' of the bench-frame and forms additional bearings for the shaft H.

Within the housing d is pivotally secured a dog J, which is held normally in engagement with the ratchet-wheel by a spring e . It projects rearwardly and terminates in a convenient handle for manual operation.

Upon the seat-frame is supported the shifting seat E, which is preferably of the same length as the member a of the seat-frame and projects down over the front and rear edges

of the bed-plate of the seat-frame. This shifting seat carries upon its under side small track-wheels f , which are adapted to travel upon longitudinal guide-rails or guide-grooves g on the bed-plate, and thereby adapt the seat to be shifted laterally. To permit the seat to be held stationary, a clamping-bolt h is secured to the under side of the seat and projecting through a slot in the bed-plate bears upon its lower end a clamping-nut i , adapted for manual operation.

Being constructed and arranged as shown and described it will be readily understood how the seat can be adjusted higher or lower or be shifted laterally, if desired.

The practical advantage is that the adjustments provided are very simple to manipulate even by a child without danger to the hands or fingers or of having the dress caught in the moving parts, the gear-wheels c being inclosed within recesses in the guides F and the ratchet-wheel and dog being inclosed by the housing.

Another advantage of my construction is that it affords ample room within the frame for storing away music, and I intend to provide in this space additional shelving, as indicated by dotted lines, for instance. By this additional shelving the open space in the guides F below the guide-posts b would be inclosed, and thus form an air-check to prevent the seat from dropping too suddenly when the dog is released. Other means, however, may be provided for this purpose, and I also place a rubber pad K at the bottom to form a buffer.

Having thus fully described my invention, what I claim is—

1. In a piano-bench, the combination of a bench-frame provided at opposite ends with vertical guide-bearings, a seat-frame having vertical guide-posts extending downwardly therefrom into the guide-bearings and provided with rack-bars, a shaft horizontally journaled in the bench-frame and carrying pinions engaging with the rack-bars, a ratchet on the shaft, a housing secured to the bench-frame and inclosing the ratchet and a manually-operative dog pivotally secured in the housing.

2. In a piano-bench, the combination of a bench-frame having corner-posts forming the legs of the frame, a shelf extending between the corner-posts in the lower part of the frame, vertical guide-bearings in the opposite ends of the frame and extending to the

top of the bench, a seat-frame having vertical guide-posts extending downwardly therefrom into the guide-bearings, a horizontal shaft journaled in the bench-frame, a rack-
5 and-pinion engagement between said shaft and the vertical guide-posts of the seat-frame, a ratchet-wheel on the shaft, a housing secured to the bench-frame and inclosing the ratchet-wheel and a manually-operated dog

pivoted within the housing and extending to rearwardly of the bench-frame.

In testimony whereof I affix my signature in presence of two witnesses.

MERRITT F. STANLEY.

Witnesses:

OTTO F. BARTHEL,
THOS. G. LONGSTAFF.