No. 862,791. PATENTED AUG. 6, 1907.

H. BAWDEN, W. HOSKIN & J. B. MERRITT.

ELEVATING MEANS.

APPLICATION FILED AUG. 25, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

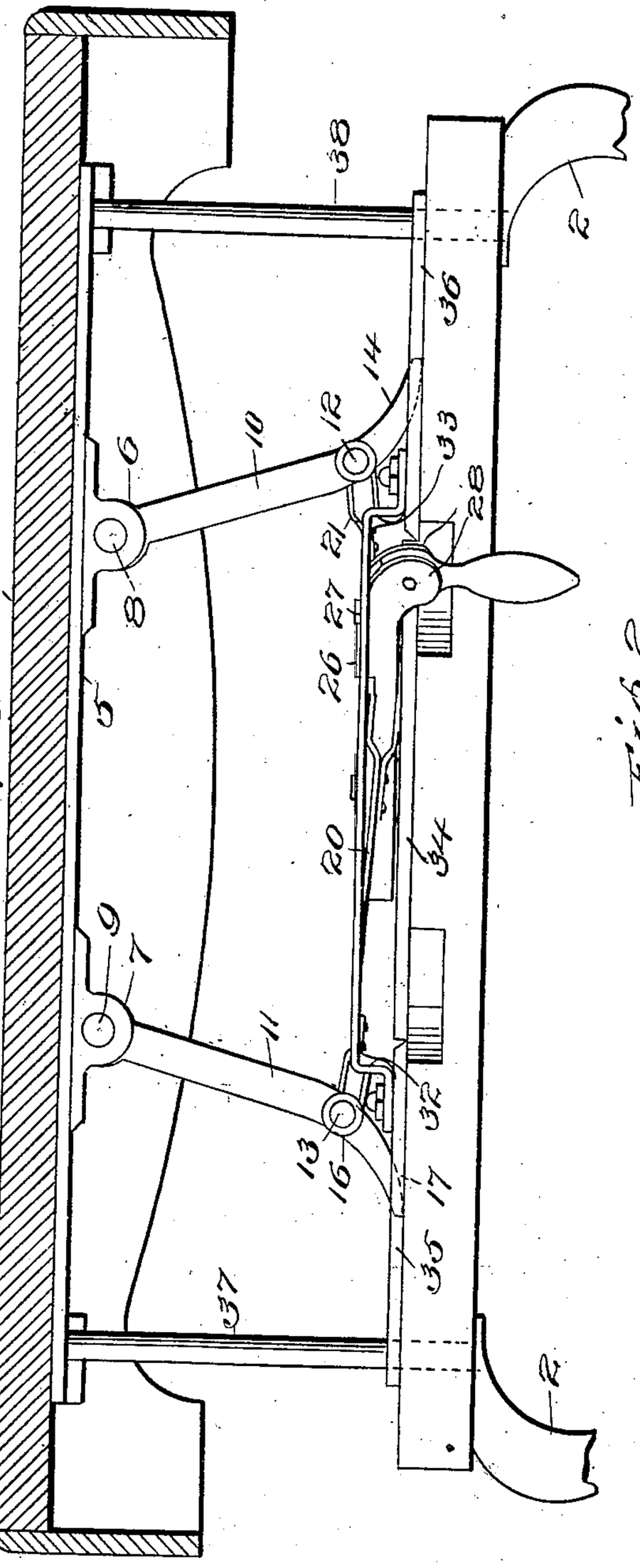

Fig. 2.

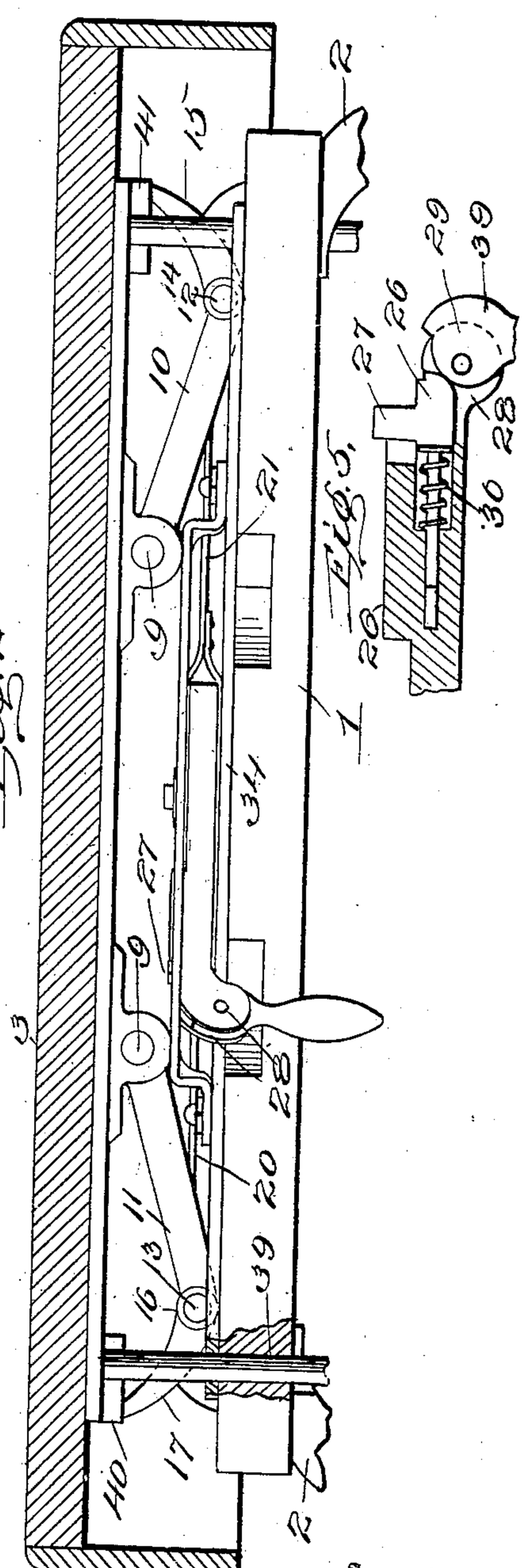

Fig. 3.

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2 SHEETS—SHEET 2.

Fig. 3.

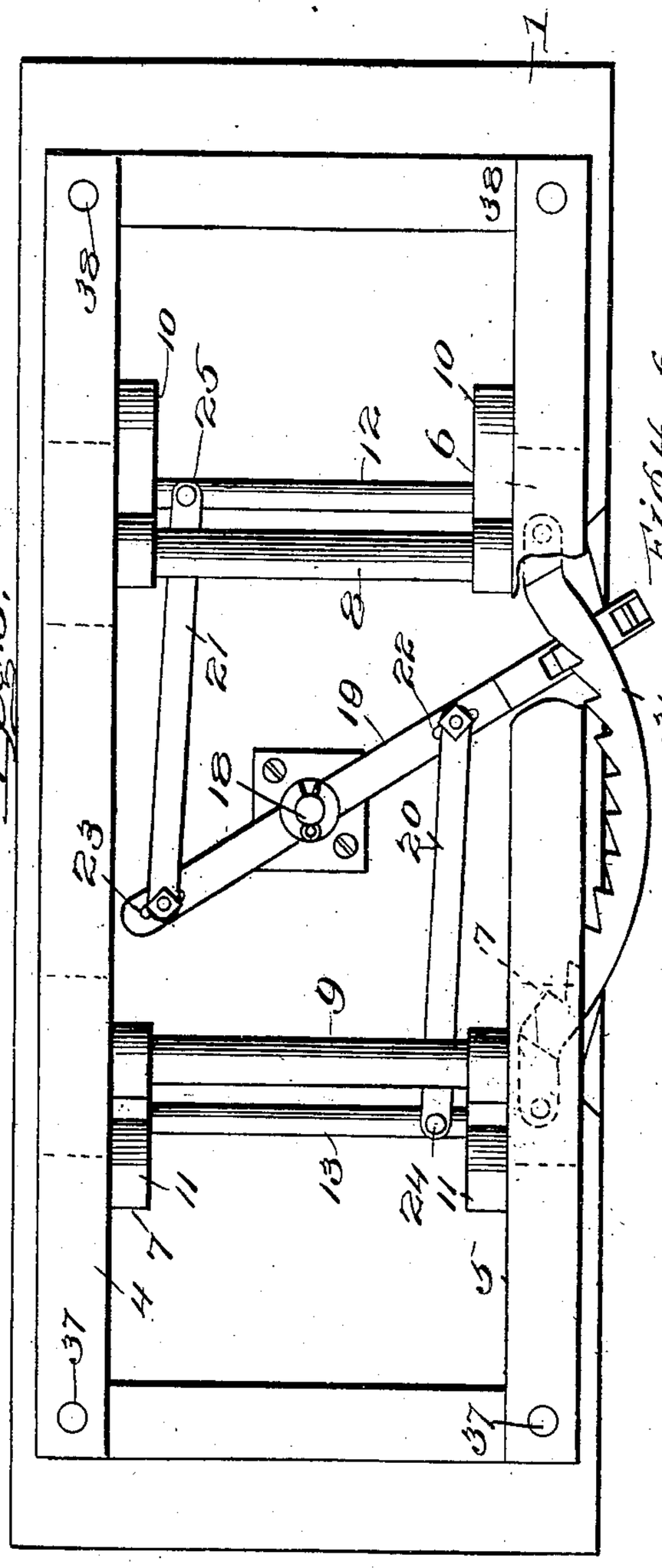
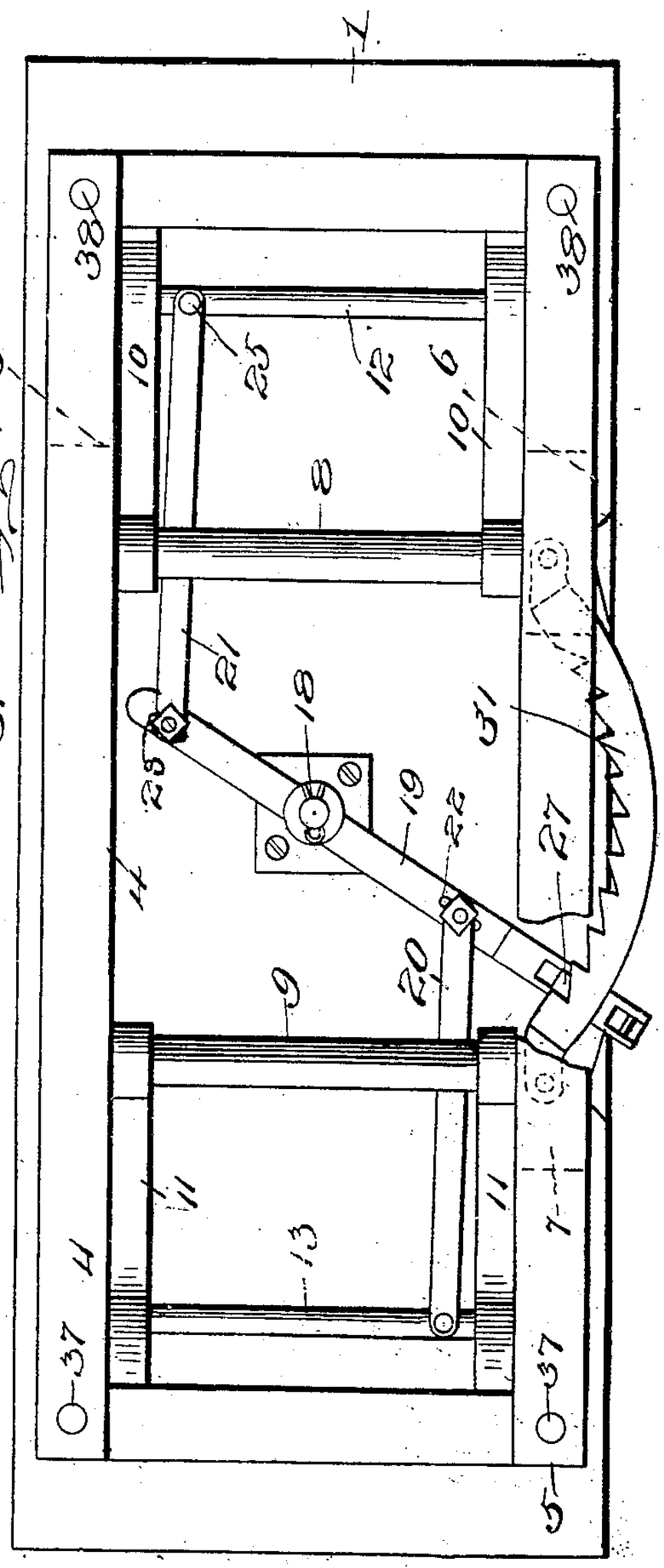


Fig. 4.



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ELEVATING MEANS.

No. 862,791. Specification of Letters Patent. Patented Aug. 6, 1907.

Application filed August 25, 1906. Serial No. 332,023.

To all whom it may concern:

Be it known that we, HERBERT BAWDEN, WILLIAM HOSKIN, and JOSEPH B. MERRITT, citizens of the United States, residing at Central City, in the county of Gilpin and State of Colorado, have invented certain new and useful Improvements in Elevating Means; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to elevating means, and more particularly to elevating means adapted to raise and lower and support the seat of a piano stool, foot stool, table or the like.

The object in view is the production of a piano stool, table or the like that may have the upper surface thereof raised and lowered at will and sustained in any of its adjusted positions.

With these and other objects in view, the invention comprises certain novel constructions, combinations and arrangements of parts, as will be hereinafter fully described and claimed:—

In the drawings:—Figure 1 is a side elevation of a stool embodying the features of my invention, certain parts being broken away to better disclose the operating mechanism, the adjustable part being shown in its farthest adjusted position. Fig. 2 is a side elevation of a stool embodying the features of my invention with certain parts broken away to better disclose the operating mechanism, the adjustable portion of the stool being shown in its lowered position. Fig. 3 is a top plan view of Fig. 1 with the top removed to better disclose the operating mechanism. Fig. 4 is a top plan view of Fig. 2 with the top removed to better show the operating mechanism. Fig. 5 is an enlarged detail view partly in section of the catch mechanism that holds the operating mechanism in its adjusted positions.

This invention may be used on foot stools and tables, but is more particularly adapted to piano stools.

In the preferred embodiment of my invention we provide a stool having a body portion 1 with the usual supporting legs 2 of any desired construction.

Mounted above the body portion 1 is an adjustable seat 3 which may be made of any desirable or convenient material.

Secured to the under side of the seat 3 are metal reinforcing strips 4 and 5 that are adapted to accommodate journal bearings 6—6 and 7—7. Mounted between these journal bearings 6—6 and 7—7 are journals 8 and 9, which have rigidly secured thereto elevating levers 10—10 and 11—11. The levers 10—10 are rigidly secured together at their outer ends by a cross bar 12 while the levers 11 are secured together by cross bars 13. The levers 10—10 are curved at 14 so as to give a rounded surface 15 that is adapted to bear against the body portion 1 of the stool and be supported thereby. The levers 11—11 are also bent in like manner at 16 so as to form a bearing surface 17 which also bears upon the body portion 1.

Pivotally secured at 18 is a lever 19 that has pivotally secured thereto connecting links 20 and 21. Slots 22 and 23 are formed in the lever 19 for accommodating the securing means of links 20 and 21 and allows the same to be adjusted so as to give an equal throw to the connecting links when the lever 19 is operated. The link 20 is pivotally secured to the connecting bar 13 at 24, and the lever 21 is pivotally secured to the connecting bar 12 at 25.

The lever 19 has an enlarged portion formed on one end thereof, in which is mounted a latch mechanism. This latch mechanism, as will be clearly seen in Fig. 5, has a spring-pressed bolt or latch 26 with an engaging lug 27 formed thereon. The enlarged portion is bifurcated at the ends, as at 28, and has secured between the bifurcations thereof a cam 29, which is adapted to force the bolt 26 against the spring 30, and disengage the lug 27 from the rack 31. The rack 31 is formed on an arc with the pivot 18 as a center, so as to accommodate the catch or lug 27 in its movement. It is bent at 32 and 33 so as to have the tooth portion spaced above the main body portion 1 of the stool in order to accommodate the end of the lever 19. By placing the lever 19 between the body portion 1 and rack 31, the lever is held in its correct vertical position at all times, without any auxiliary means for holding the same in position. A bearing plate 34 is secured to the body portion 1 below the rack 31 upon which the lever 19 slides when being adjusted.

Secured to the body portion 1 are metallic strips 35 and 36, through which reciprocate rods 37—37 and 38—38, as will be clearly seen in Fig. 2. The rods 37—37 and 38—38 are secured to the metallic strips 4 and 5 and are adapted to reciprocate in the apertures 39 formed in the body 1, and the strips 35—35 and 36—36.

In operation, when it is desired to raise the seat 3 from the position shown in Fig. 2 to the position shown in Fig. 1, or any intermediate position, the handle 39 of the latch mechanism formed on the end of lever 19, is operated to disengage the latch from the rack 31, and then the lever 19 is swung on its pivot 18, carrying in its movement, the links 20 and 21, and thus drawing the lower ends of the levers 10—10 and 11—11 toward each other, which, in turn, forces the seat 3 upward, the same being guided in its movement by the rods 37—37, and 38—38. When it is desired to lower the seat 3, the catch of the latch mechanism is disengaged from the rack 31, and the lever 19 is revolved until the seat has been lowered to the desired height and then the lug or catch 27 is permitted to engage the rack 31. In case the seat is desired to be lowered

into its lowermost position, as shown in Fig. 2, the lever 19 is rotated until the levers 10—10 and 11—11 have their ends resting against reinforcing strips 40 and 41 extending transversely across the lower face of the seat 3. By this mechanism, an adjustable stool or seat is made that is readily and quickly adjusted to any height and the same having but few parts and no complicated mechanism whatever. By this construction guide rods and a simple system of elevating levers are provided which are not liable to easily get out of order or broken, but permit ease and quick adjustment of the seat to any height desired.

We have described this invention as relating more particularly to piano stools, but we wish it understood that it may be applied with equal advantage to foot stools, tables and the like, all within the spirit of this invention.

What we claim is:—

1. In a device of the class described, the combination of a base, a vertically movable member mounted upon the base, elevating means for the movable member, a lever actuating the elevating means, a rack, a latch carried by the lever and engaging the rack, and a handle upon the lever provided with a cam adapted to control the latch.

2. In a device of the class described, the combination of a base, a vertically movable member mounted upon the base, elevating means for the movable member, a lever actuating the elevating means, a rack, a sliding bolt carried by the lever and provided with means for engaging the rack, and a handle upon the lever provided with a cam controlling the sliding bolt.

3. In a device of the class described, a base, a vertically movable member mounted upon the base, reversely inclined arms pivoted to the movable member and bearing upon the base, a lever adapted to actuate the arms, a rack, a sliding bolt carried by the lever and provided with means for engaging the rack, and a handle upon the lever provided with a cam adapted to control the latch.

4. In a device of the class described, a base, a vertically movable member mounted upon the base, reversely inclined arms pivoted to the movable member intermediate its ends, and bearing upon the base adjacent its ends, a lever fulcrumed upon the base, links connecting the lever and arms, a rack mounted upon the base adjacent the lever, a latch carried by the lever and engaging the rack, and a handle upon the lever provided with a cam adapted to control the latch.

In testimony whereof we affix our signatures in presence of two witnesses.

HERBERT BAWDEN.
WILLIAM HOSKIN.
JOSEPH B. MERRITT.

Witnesses:
RICHARD TREVITHICK,
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