A. A. DUFF.

ADJUSTABLE PIANO BENCH.

APPLICATION FILED OCT. 9, 1908.

919,559. Patented Apr. 27, 1909.

2 SHEETS—SHEET 1.

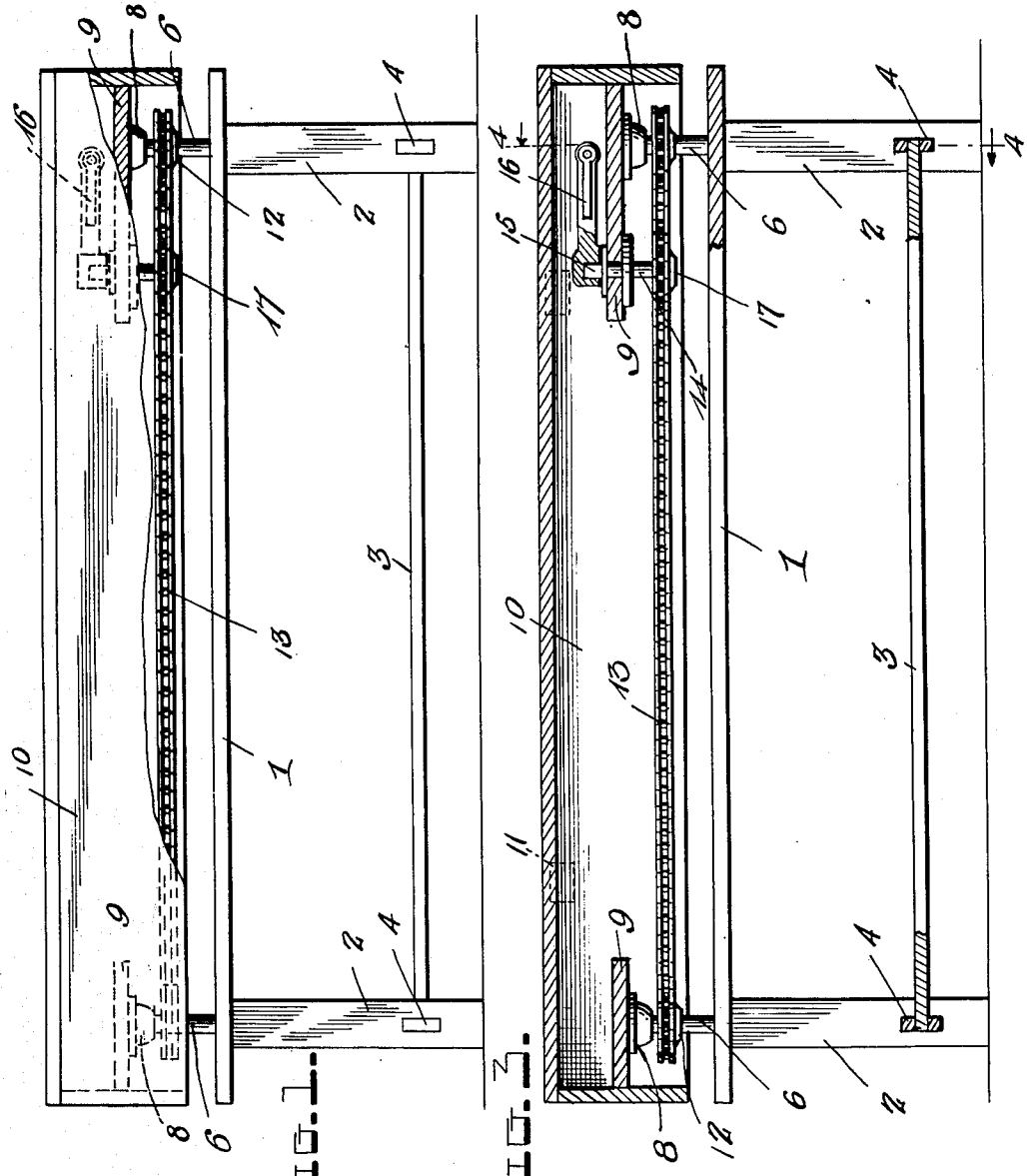


FIG. 1.

FIG. 2.

Witnesses

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2 SHEETS—SHEET 2.

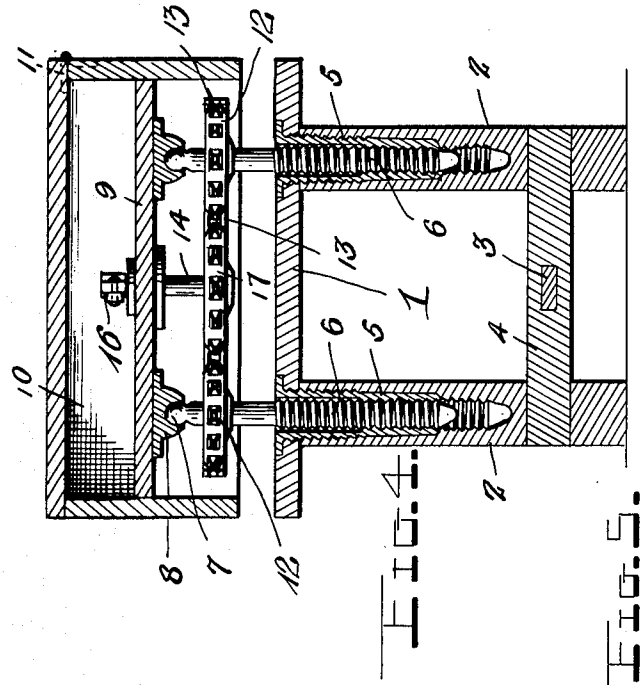


FIG. 4.

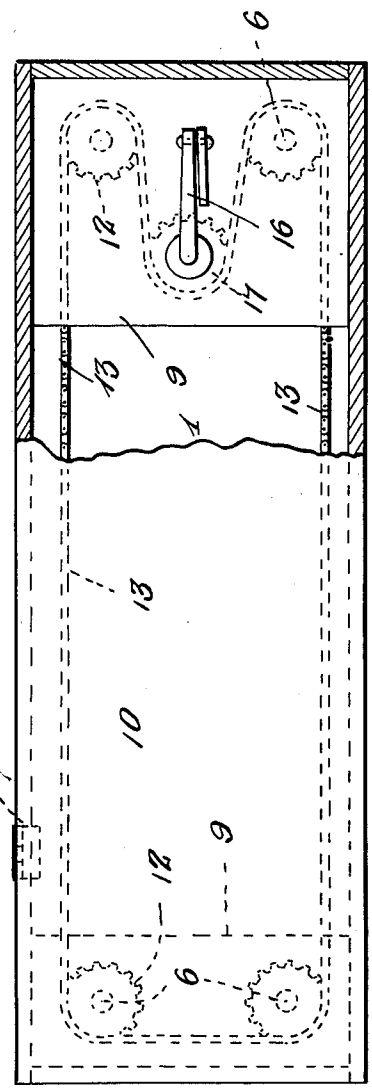


FIG. 5.

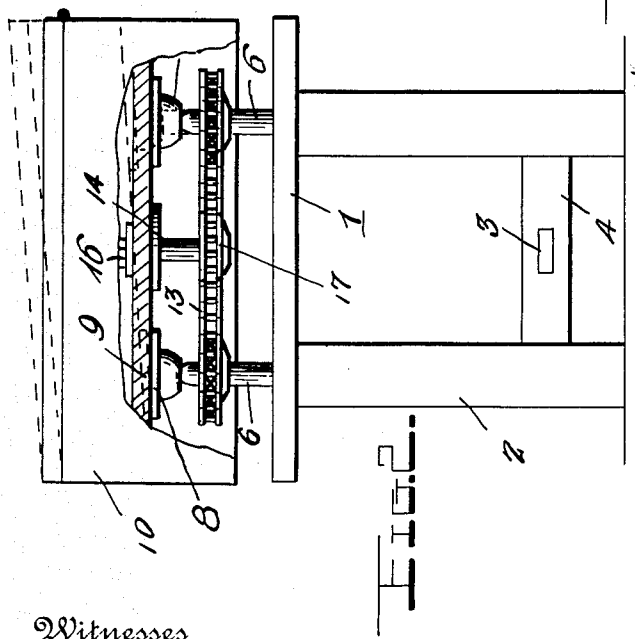


FIG. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

ALBERT A. DUFF, OF MANISTEE, MICHIGAN.

ADJUSTABLE PIANO-BENCH.

No. 919,559. Specification of Letters Patent. Patented April 27, 1909.

Application filed October 9, 1908. Serial No. 457,008.

To all whom it may concern:

Be it known that I, ALBERT A. DUFF, a citizen of the United States, residing at Manistee, in the county of Manistee and State of Michigan, have invented certain new and useful Improvements in Adjustable Piano-Benches; and I do 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.

My invention relates to piano benches, and particularly to that type known as duet benches.

The object of the invention is to provide an invention of this character which will be adjustable vertically and angularly so that the height of the bench may be regulated readily to accommodate different players.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side elevation, Fig. 2 is an end elevation showing in dotted lines the tilted or angular adjustment of the bench, Fig. 3 is a longitudinal section, Fig. 4 is a transverse section on the line 4—4 of Fig. 3, and Fig. 5 is a top plan view with parts broken away.

Referring more especially to the drawings, 1 represents the base board which is supported upon the four legs 2, extending downwardly from either corner thereof and being braced by the longitudinal strut or rung 3, which engages the transverse struts or rungs 4. The legs 2 have seated in their upper ends the threaded sockets 5, which pass through the base board 1 so as to protect the latter and be open to receive the adjusting screws 6. Each adjusting screw passes upwardly from its socket connection and its head 7 is formed spherical to engage the socket 8, carried upon the partition member 9, and form therewith a ball and socket joint so that the partition member and its associated parts may be freely adjustable. Surrounding the partition member 9 is a box or casing 10, of the same area as the base board 1. This casing 10 is provided with a hinged cover 11, so as to close the same and cover the gearing to be hereinafter described.

Each screw 6 is provided adjacent its upper spherical head 7 with a pinion or sprocket wheel 12 which is engaged by the single operating chain 13, traveling entirely around the casing so as to engage all of the sprocket wheels upon the screws. In order to drive the chain and thereby operate the screws in either direction I journal in the partition member 9 a stub shaft 14 having a squared upper end 15, to receive the wrench 16, and having at its lower end a sprocket wheel 17 for engagement with the chain, as shown. By turning the crank 16 it will be readily seen that the screws 6 may be adjusted in their metallic sockets 5, so as to raise or lower the casing 10 and its seat or cover 11. The partition member may be cut away, as shown in Fig. 5, so as to lighten the structure throughout, and it may be disposed so far below the seat 11 that the handle 16 can be permanently secured to the stub shaft 14. These features are, however, immaterial and need not be considered as an important part of the invention. To adjust the device in angular relation, as shown in dotted lines in Fig. 2 the screws are entirely removed from the other sockets, and the forward ones started before the rearward ones by holding the rear ones out of engagement with their sockets until the angular condition of the seat appears to be correct.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined in the appended claims.

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

1. In a device of the class described a table, threaded sleeves carried by the table, a casing, bridge pieces carried in the casing, adjustable screws revolubly mounted within sockets carried upon said bridge pieces and adapted to engage the sleeves in the table, an operating device carried by one of the bridge pieces within the casing for adjusting all of said screws within the sockets simultaneously and a hinged seat on the casing whereby said operating device may be covered.

2. In a device of the class described a table, threaded sleeves carried by the table, a

casing, bridge pieces mounted in the casing, screws carried in sockets on the bridge pieces, and adapted to engage the sleeves in the table, sprockets on said screws, a chain for engaging all of said sprockets, a shaft journaled in one of the bridge pieces, a pinion mounted on said shaft and adapted to engage said chain so as to turn all of said screws within the sockets simultaneously, a folding lever secured on the shaft within the casing for operating said shaft and a hinged seat on the casing to cover said lever.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALBERT A. DUFF.

Witnesses:
CHARLES N. BELCHER,
LILLIAN F. WHITE.