

No. 720,776.

PATENTED FEB. 17, 1903.

F. R. BENNETT.
MUSIC STOOL.

APPLICATION FILED JAN. 8, 1902.

NO MODEL.

Fig. 1

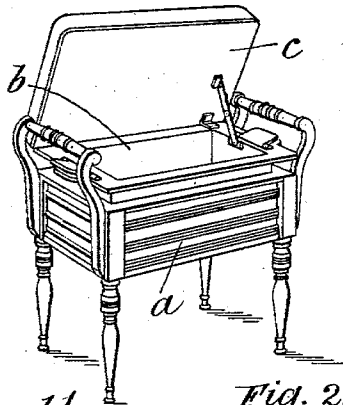


Fig. 2.

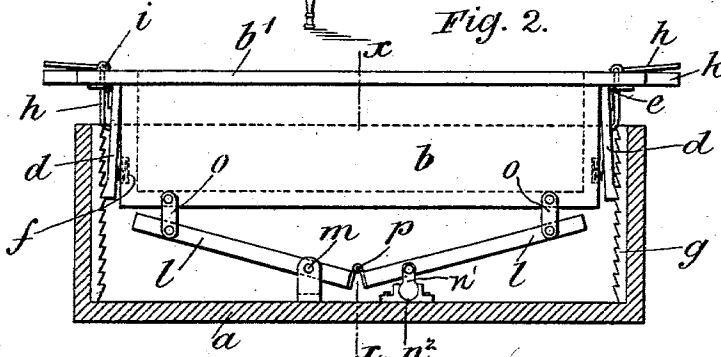


Fig. 3.

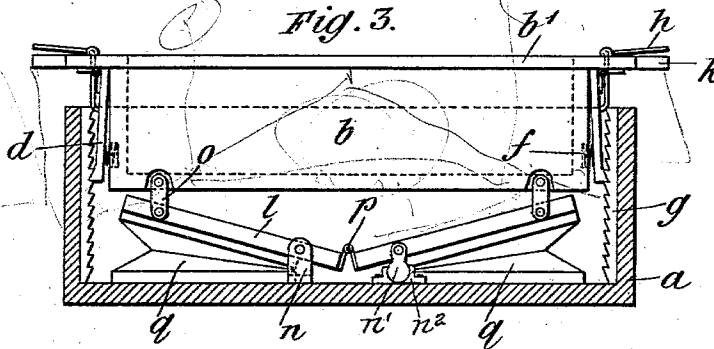


Fig. 4.

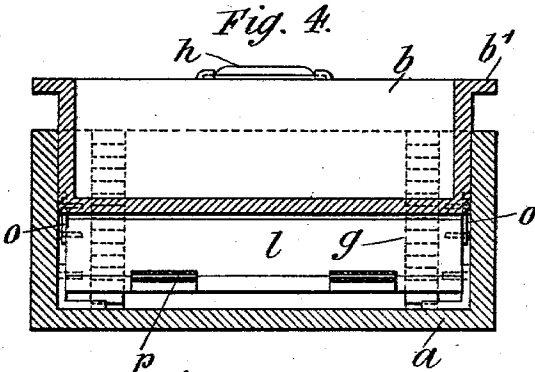
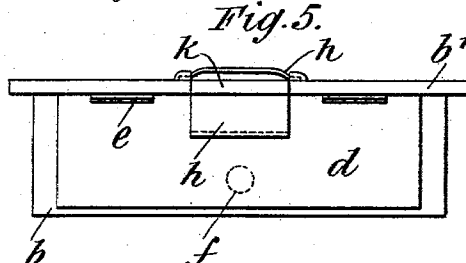


Fig. 5.



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FREDRICK RICKARDS BENNETT, OF LONDON, ENGLAND, ASSIGNOR OF ONE-HALF TO HERBERT MELCHOR GREENWOOD, OF LONDON, ENGLAND.

MUSIC-STOOL.

SPECIFICATION forming part of Letters Patent No. 720,776, dated February 17, 1903.

Application filed January 8, 1902. Serial No. 88,869. (No model.)

To all whom it may concern:

Be it known that I, FREDRICK RICKARDS BENNETT, a subject of His Majesty the King of Great Britain and Ireland, residing at 90 Chapter road, Willesden Green, London, England, have invented certain new and useful Improvements in Music-Stools Applicable to other Seats Requiring Vertical Adjustment; and I 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 principally to improvements in the construction and arrangement of what are commonly known as "adjustable box-seat music-stools," and has for its object to effect simplicity and economy of construction combined with ease and rapidity of adjustment.

The invention may be applied with advantage to other seats requiring vertical adjustment, as to driving-seats, for example.

According to my invention the music-stool comprises an outer frame mounted upon suitable legs or supports, within which is fitted, so as to be freely adjustable vertically therein, a box or inner frame, which may be used as a receptacle for music and the like and whereof the lid or top constitutes the seat proper. At each end of the adjustable box or inner frame flaps are hinged and normally pressed outward by springs, which cause catch devices provided to interlock, and thereby support the box or inner frame at the desired elevation. The release of the said catch devices for lowering the seat is effected by small levers or handles adapted to press inward the hinged flaps and conveniently arranged to be operated by the sitter. Adjustment of the seat is effected by directly raising or lowering the box or inner frame by means of handles provided thereto, slow and comparatively complicated and expensive screw adjustments being dispensed with. The grips of the releasing levers or handles are preferably arranged in close proximity to the adjusting-handles, so that they may be operated by clapping or pressing them against the latter. Adjustment of the seat may thus

be effected in an instant and with the greatest ease. Parallelism between the outer frame and the adjustable box or inner frame is at all times preserved by a compound or connected lever device comprising a pair of levers, each moving the other in unison, which connect said inner and outer frames and which lie extended in about a straight line beneath the box or inner frame when the seat is fully lowered, so that but little extra space is required for their accommodation. A gradual and noiseless fall of the box or inner frame may be insured by the provision of small bellows connected with and adapted to be operated by the compound lever device aforesaid, so as to be expanded when the seat is raised and compressed as it descends. These bellows would be provided with non-return air-inlet valves and also with air-outlet apertures, the latter so proportioned as to insure the gradual and noiseless fall of the box or inner frame when released from its supporting-catches. The said bellows are, however, not absolutely essential to my invention and may be dispensed with, if desired.

In order that my invention may be fully understood, I will now fully describe the same and the manner in which it is to be performed, having reference to the annexed drawings, in which similar letters refer to corresponding parts in all the figures, and wherein—

Figure 1 is a perspective view showing the general external appearance of an adjustable box-seat music-stool constructed in accordance with my invention. Fig. 2 shows the working parts, the outer frame being in section. Fig. 3 is a similar view to Fig. 2, but with the addition of bellows for the purpose above mentioned. Fig. 4 is a cross-section on line *xx*, Fig. 2; and Fig. 5 is an end view of the adjustable box or inner frame detached.

a is the outer frame of the seat, which may be mounted on suitable legs or other supporting devices, and *b* is the box or inner frame adjustable vertically within *a*. The lid or cover *c* of the box or inner frame, which constitutes the seat proper, is only shown in Fig. 1. At either end of the box or inner frame *b* flaps *d* are hinged at *e*, these flaps

being normally pressed outward by helical or other springs *f*, so as to cause the lower edges of said flaps, which are suitably shaped, to act as pawls to engage with the teeth of the racks *g*, carried by the outer frame *a*. The adjustable box or inner frame *b* is thus automatically supported at the height to which it has been adjusted. The release of the catch devices in order to lower the seat is effected by the cranked releasing-levers *h*, pivoted to the overhanging flange *b'* of the box or inner frame at *i*. The ends of the vertical arms of these levers bear on the flaps *d*, and their horizontal arms or hand-grips extend over the adjusting-handles *k*, by which the seat is raised and lowered and which also project from the flange *b'*. Release of the supporting catch devices may thus be conveniently effected by the sitter clasping the releasing-levers *h* and adjusting-handles *k* together, which greatly facilitates adjustment. Parallelism between the outer and inner frames *a* and *b* is at all times preserved by the following compound or connected lever device, which connects said frames together.

l l are a pair of levers of the first order, whereof the fulcrums or pivots *m* work in brackets *n'*, secured to the bottom of the outer frame *a*, near the center thereof. One of said brackets *n'* is pivoted in a support *n*. The longer arms of these levers are connected with the box or inner frame *b* on either side thereof by the links *o*, while the ends of their shorter arms are in juxtaposition and pivotally connected by the hinges *p*, so as to cause both levers to move in unison and to an equal extent.

With the arrangement above described it is obvious that the box or inner frame *b* must rise and fall equally at both ends and that parallelism between the same and the outer frame *a* will be always preserved, so that jamming of the sliding parts is impossible. It will be noted that the levers *l* take no active part in the raising and lowering of the seat and that when the latter is in its lowest position they will both lie extended in about a straight line beneath the inner frame *b*, and thus require but little extra space for their accommodation.

q q, Fig. 3, are small bellows disposed between the longer arms of the levers *l* and the outer frame *a* and connected therewith so as to be expanded and compressed as said longer arms rise and fall. Air is drawn into the said bellows through suitable non-return inlet-valves and is expelled through outlet-apertures, which are so proportioned as to insure the gradual and noiseless fall of the inner frame or box *b* when the supporting-catches thereof are released.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In a music-stool or other seat requiring vertical adjustment, the combination of an inner frame slidable vertically within an outer frame, a compound or connected lever device connecting the inner and the outer frames whereby parallelism between the same is preserved, bellows connected with and operated by said compound or connected lever device, said bellows being expanded when the seat is raised and compressed when it descends, and catch devices for supporting the seat when elevated, substantially as described and for the purpose specified.

2. In a music-stool or other seat requiring vertical adjustment, the combination of an outer frame, an inner frame adjustable vertically therein, levers fulcrumed near the bottom of the outer frame and having their longer arms connected with the said inner frame or box and their shorter arms pivotally connected together, bellows arranged between the longer arms of said levers and the outer frame, and catches for holding the inner frame or box elevated, substantially as described and for the purpose specified.

3. In a music-stool or other seat requiring vertical adjustment, the combination of an outer frame, an inner frame slidable vertically therein, a compound or connected lever device connecting the inner and the outer frames for preserving parallelism between them, flaps hinged to opposite sides of said box or inner frame and pressed outward by springs, catch devices which interlock when the flaps are pressed outward, and means conveniently arranged to be operated by the sitter for pressing in said flaps to release the catch devices, substantially as described.

4. A music-stool or other seat requiring vertical adjustment, comprising the outer frame *a*, the inner frame *b* slidable vertically therein, the levers *l* fulcrumed near the center of the bottom of the outer frame at *m*, the links *o* connecting the longer arms of said levers with the box or inner frame *b*, the hinges *p* connecting the shorter arms of said levers, the bellows *q* interposed between the longer arms of the levers and the outer frame and operated by the movement of said levers, the spring-controlled flaps *d* on the inner frame or box, the catch devices interlocked by the outward pressure of said flaps and the means for releasing said catch devices, substantially as described.

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

FREDRICK RICKARDS BENNETT

Witnesses:

S. MACKELLOW,

A. E. ALEXANDER.