F. J. CHIPPS.

SEAT.

APPLICATION FILED MAR. 28, 1914.

1,146,236. Patented July 13, 1915.

Fig. 1.

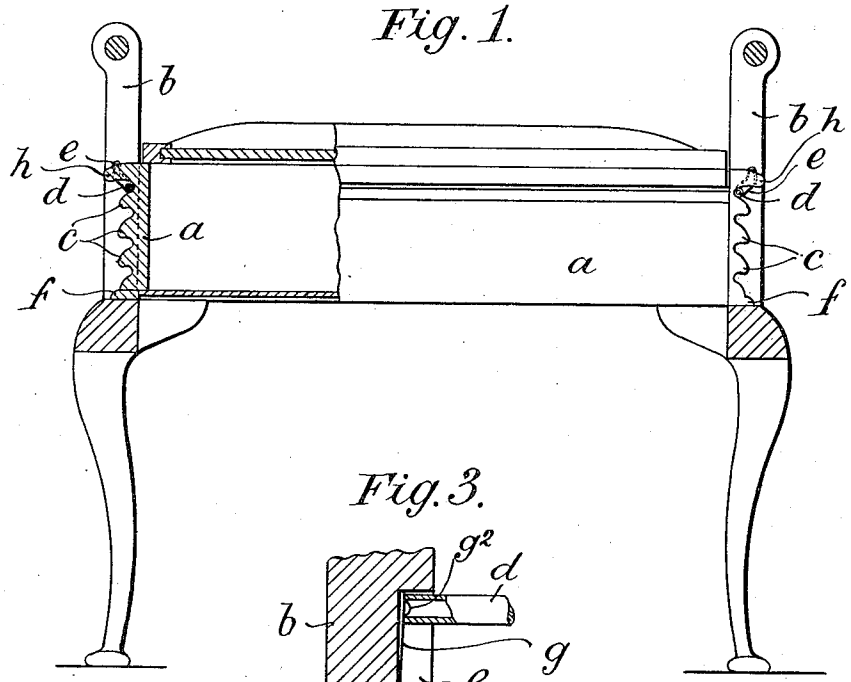


Fig. 3.

Fig. 5.

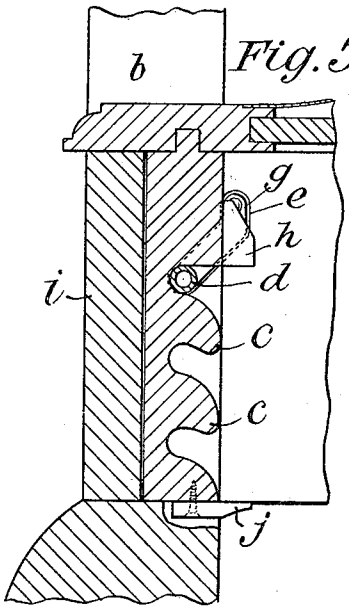


Fig. 4.

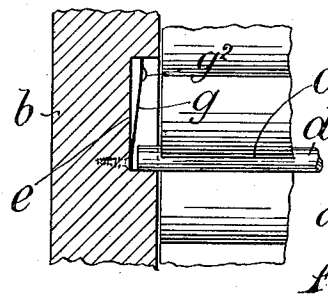
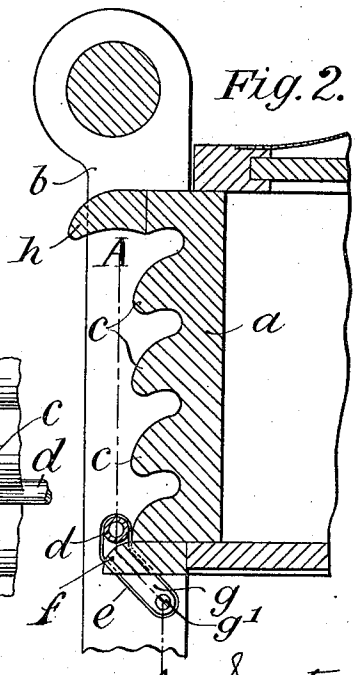


Fig. 2.



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To all whom it may concern:

Be it known that I, FREDERICK JAMES CHIPPS, cabinet-maker, residing at 15 Remington Terrace, High Wycombe, in the county of Buckingham, England, have invented certain new and useful Improvements in Seats; 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 to seats of the kind which are adapted to be adjusted to different heights, as required, such as piano and like seats and has for its object to provide an improved seat of this kind which can be easily and quickly raised or lowered as desired, and which will be of simple and neat construction.

The invention comprises a seat portion slidably mounted in the supporting framing, said seat portion being provided at opposite sides or ends with rack-like projections or teeth with which co-act movable supporting bars or rods adapted normally to rest beneath said teeth but which will ride thereover to allow the seat to be raised, means being provided to hold the said bars or rods out of the path of the projections to permit the seat to be lowered.

The accompanying drawings illustrate a piano seat or stool made in accordance with the invention in which:—

Figure 1 is a sectional elevation; Fig. 2 an enlarged part view of Fig. 1, with the parts in different position; Fig. 3, is a section on line A—A of Fig. 2; and, Fig. 4, is a similar view with the parts in different position. Fig. 5 shows a modification.

As shown the invention comprises a seat portion *a* slidably mounted between pairs of vertical members *b* . . . of the supporting frame (one of each pair only, is shown) and said seat portion *a* at each end is provided with a series of superposed horizontal projections or ribs *c c* . . . in the form of a rack, and a bar or rod *d* is loosely mounted in angular slots *e* formed in the opposing faces of each pair of members *b* so as to allow of the seat being raised and retained in the raised position by one of the said ribs or projections at each end bearing on said bars. The arrangement is such that when it is desired to lower the seat after it has been raised, the seat is first raised to its fullest extent, as shown in Fig. 2, whereby a projection or the like *f* on the lower part of the seat portion below the projection *c* travels the supporting rods or bars *d* upwardly in their respective angular slots, into a position out of the path of the rack-like projections of the seat, in which position the said bars are retained by means of light spring arms *g* or the like (see particularly Fig. 3,) and thus the seat is free to be lowered. When nearly at the end of the downward movement a projection *h* at the upper end of the seat portion serves to disengage the said rods *d* from the spring or other retaining means whereby they fall by gravity, the angular disposition of the slots *e* directing the rods into operative position above the uppermost of the rack-like projections, as shown in Fig. 1, ready for use when the seat is to be again raised.

The spring arms *g* for retaining the rods *d* in operative position are secured on the inner walls of the slots by a screw or the like g^1 and are bent outwardly (see Fig. 4,) the free ends being preferably formed with a convex or embossed part g^2 to coact with the ends of the rods *d* which are made hollow or correspondingly recessed for the purpose.

Fig. 4. shows in part face view the normal position of the rods or bars when the seat is lowered to its fullest extent or when supporting the seat in more or less raised position.

By the invention an extremely simple and efficient adjustable seat is obtained and as the supporting bars are normally under one of the rack-like ribs or the upper projection of the seat they are practically hidden from view and thus the appearance is not rendered unsightly. The rack-like ribs or projections may be conveniently formed from the material from which the ends of the seat portions are made, as shown, or they may be made separately and attached in any desired way.

Fig. 5. shows a modification. In this form the rack-like teeth *c* are formed upon the inner face of the end walls of the framing of the movable seat *a* which end walls are adapted to slide vertically between horizontal frame members *i* connecting the posts *b*. In other respects this construction is similar to that already described with the exception that the stops on the lower part

of the movable seat portion are in the form of separate pieces *j* screwed thereon, whereby said pieces before being finally tightened in the position shown may be turned so as not to project beyond the rack-like teeth to facilitate assemblage of the parts during construction.

What I claim and desire to secure by Letters Patent is:—

1. In a seat, the combination, with a supporting frame provided with pairs of guide slots inclined laterally in opposite directions, of a seat portion slidable vertically in the frame and provided with ratchet toothed racks on its sides, and bars slidable in the guide slots and engaging with the rack teeth.

2. In a seat, the combination, with a supporting frame provided with pairs of guide slots inclined laterally in opposite directions, of a seat portion slidable vertically in the frame and provided with ratchet toothed racks on its sides, bars slidable in the guide slots and engaging with the rack teeth, and spring catches for retaining the bars out of engagement with the rack teeth and in the upper end portions of the guide slots.

3. In a seat, the combination, with a supporting frame provided with pairs of guide slots inclined laterally in opposite directions, of a seat portion slidable vertically in the frame and provided with ratchet toothed racks on its sides, bars slidable in the guide slots and engaging with the rack teeth, and spring catches for retaining the bars out of engagement with the rack teeth and in the upper end portions of the guide slots, said seat portion having also projections below the ends of the racks for placing the said bars into engagement with the spring catches, and having projections above the ends of the racks for disengaging the bars from the said spring catches.

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

FREDERICK JAMES CHIPPS.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."