A. G. HOFSTATTER.

PIANO STOOL.

No. 377,856.

Patented Feb. 14, 1888.



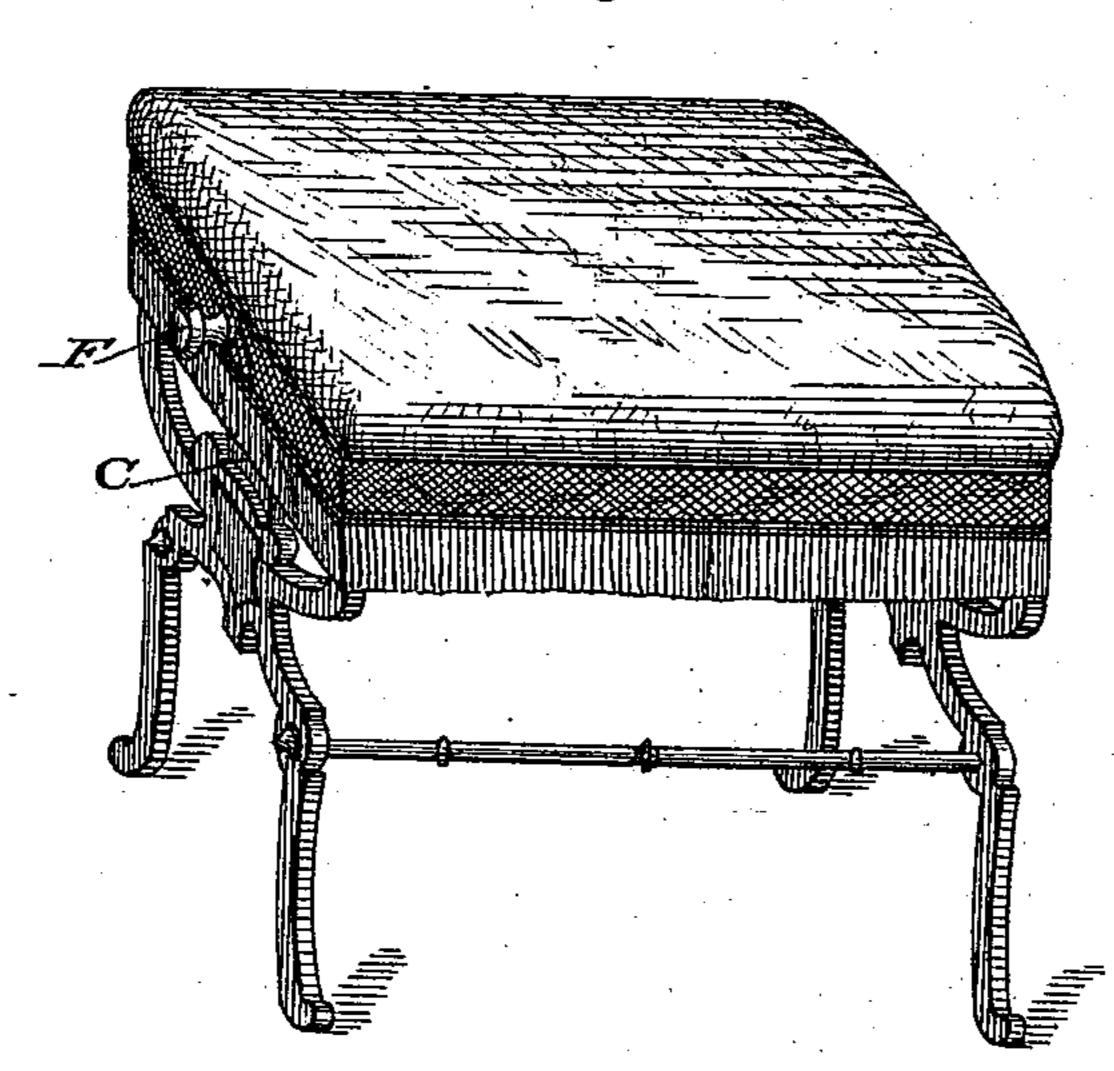


Fig.3

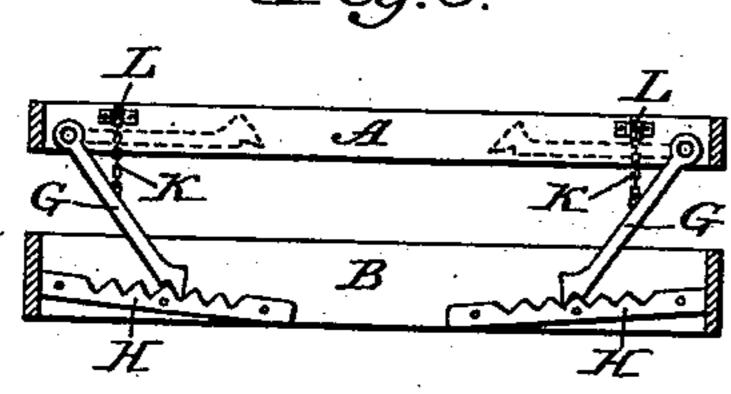


Fig.4.

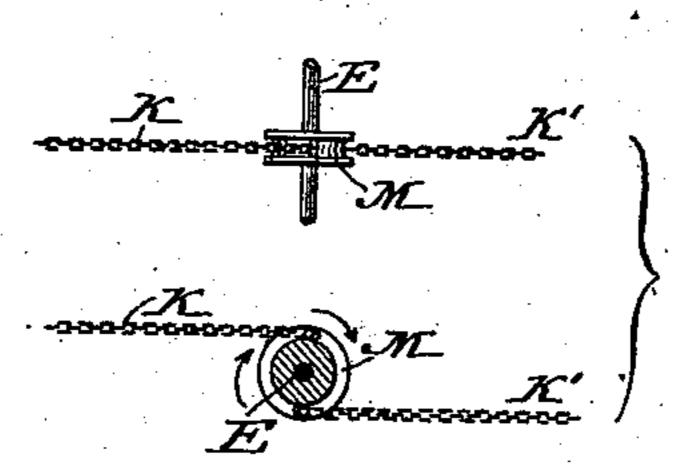
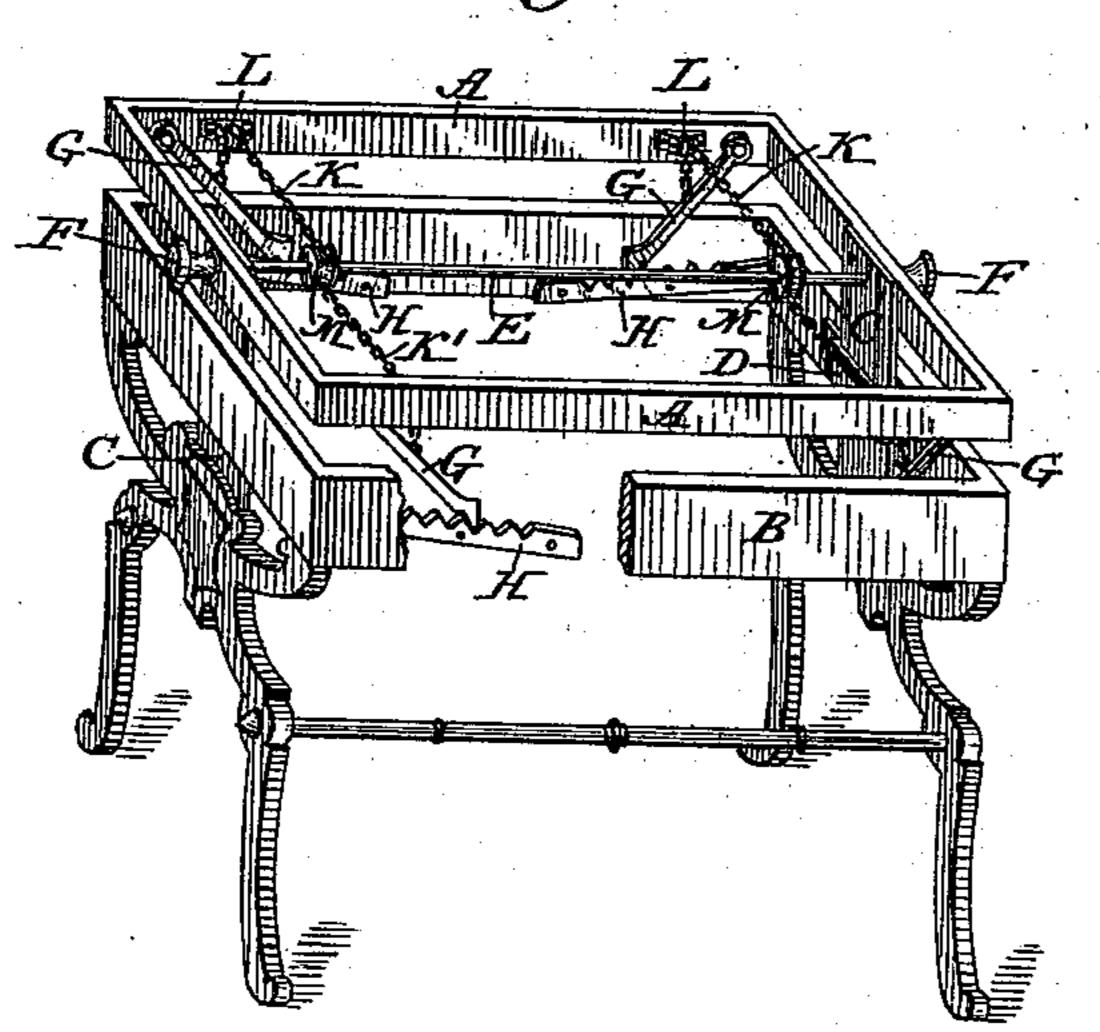


Fig. Z



Inventor.

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Attest:

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PIANO-STOOL.

SPECIFICATION forming part of Letters Patent No. 377,856, dated February 14, 1888.

Application filed October 31, 1887. Serial No. 253,855. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH G. HOFSTATTER, of the city, county, and State of New York, have invented certain new and useful Improvements in Adjustable Seats for Piano-Stools, Chairs, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is an elevation in perspective of a finished piano-stool constructed in accordance with my invention; Fig. 2, a similar view of the frame-work of the stool, partly broken away and with the upholstering all removed, illustrating its working parts; Fig. 3, a detached view of the pawls and racks upon one side of the frame, and Fig. 4 a detached top view and section of the winding-drums by which the pawl-cords are actuated.

Similar letters indicate like parts in all of

the figures.

The object of my invention is to obtain a simple, efficient, and adjustable seat which may be easily raised or lowered and automatically supported at the desired height when lifted without danger of hurting the fingers.

The seat of my improved stool is fitted upon a frame, A, which is supported above the fixed frame B of the stool in such manner as to admit of its adjustment to and from the same by means of pawls G G, pivoted to the side bars of the seat-frame near the four corners thereof. The lower free ends of the pawls drop into engagement with rack-bars H H, (see Figs. 2 and 3,) fixed, preferably, in an inclined position to the inner side bars of the fixed frame B, as shown in Fig. 3.

As the seat-frame A is lifted from the bodyframe B, the engagement of the pawls with the notches of the rack-bars will prevent the seat from dropping back and will uphold it firmly in the position to which it may have

45 been elevated.

To permit of the lowering of the seat provision is made for a disengagement of the pawls from the racks by means of a shaft, E, carried transversely through the middle of the seat-frame A, parallel with the pawl-arms GG, and mounted to rotate freely in bearings in

the end bars. A knob or handle, F, of any approved form is secured to each end of the shaft E, outside of the frame, to facilitate its rotation by hand. Two drums or pulleys, M 55 M, are secured to the shaft inside of the frame, each about in line with the middle of the length of the proximate pawls, and cords K K are secured at diametrically-opposite points on the periphery of each drum, to extend 60 thence, respectively, over suitable guide-pulleys or friction-rollers, L L, fixed to the side bars of the frame, (or through screw-eyes as an equivalent therefor,) to each of the pawl-arms G G.

The cords for the two pawls on one side of the shaft E are made fast, respectively, to the inner side of the drums MM, and those for the pawls on the opposite side are made fast to the upper side of said drums, each diametri-70 cally opposite the point of attachment of the other cord, as shown in Fig. 4. Hence when the shaft E is turned in one direction upon its axis the revolution of the drums M M by winding up the cords will operate to lift the 75 pawls G from the racks H, while a reverse movement will permit them to drop into engagement therewith.

The seat-frame A may be guided in its vertical movement to and from the body-frame B 80 by means of vertical guide-bars C C, fixed at each end of the seat-frame to work in suitable bearings, as D, provided therefor in the body-frame, as shown in Fig. 2. It is evident that guides may be provided at each corner instead 85 of in the middle, as shown; but it is preferred that the guides shall be in the same plane at the central shaft, E, as herein described.

In the use of the improved stool it is readily elevated more or less, as required, by taking 90 hold of the knobs F F and lifting the seat thereby. The pawls in such case will by their gravity automatically engage the notches of the racks, step by step, in sliding over them, so that at whatever point the upward move-95 ment of the seat may be arrested the pawls will obtain a hold and afford a support therefor. When it is desired to lower the seat, the pawls are released by a slight turn of the knobs, which will lift them clear of the notches in the 100 racks, and by holding the knobs while the seat is dropping the pawls may be held free so long

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as required or until the seat-frame is wholly | down upon the body-frame. All danger of pinching the fingers between the frames is thus avoided in the device, and the simplicity of 5 its parts renders it durable and at all times efficient.

It is evident that radial arms may be substituted as an equivalent device for the drums M M to operate the cords K K, and I contemse plate using such well-known equivalents for the revolving drums in tightening said cords KK, for the purpose of releasing the pawls.

Although my device is especially adapted for piano-stools, it is equally applicable to all 15 manner of seats requiring vertical adjustment.

> I claim as my invention— The combination, with the body-frame of an

adjustable stool, of a separate seat-frame, guides controlling the vertical movements of said frame, racks fixed to the body-frame, 20 pawls pivoted to the seat frame to engage said racks automatically, a rotating shaft mounted in the seat-frame, and cords connecting said shaft with the pawls, whereby a rotation of the shaft is made to lift the pawls, all substan- 25 tially in the manner and for the purpose herein set forth.

Intestimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ADOLPH G. HOFSTATTER.

Witnesses:

A. N. JESBERA, E. M. WATSON.