

No. 627,504.

Patented June 27, 1899.

A. HUTTINGER.
CONVERTIBLE SEAT.

(Application filed Mar. 22, 1897.)

(No Model.)

2 Sheets—Sheet 1.

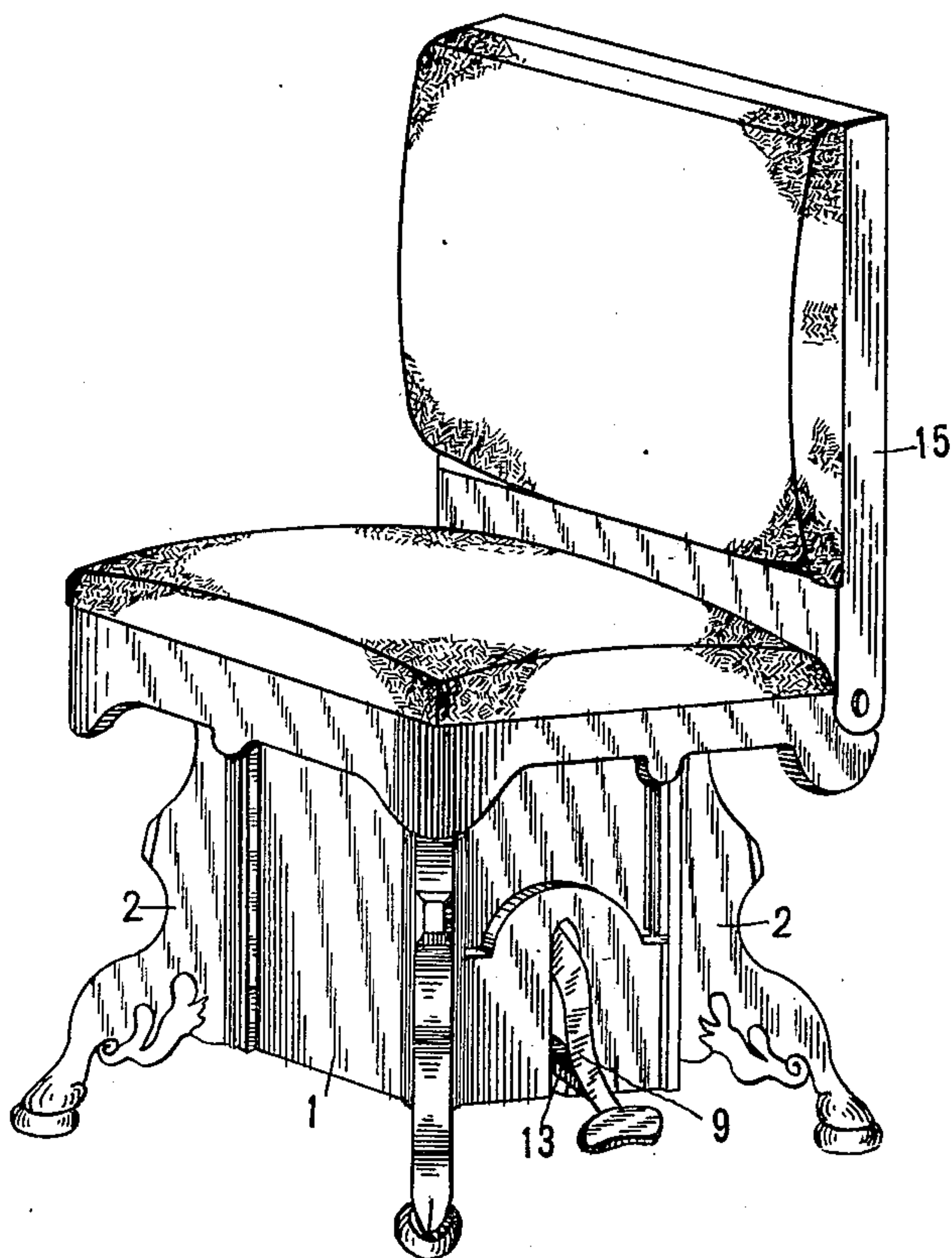


Fig. 1

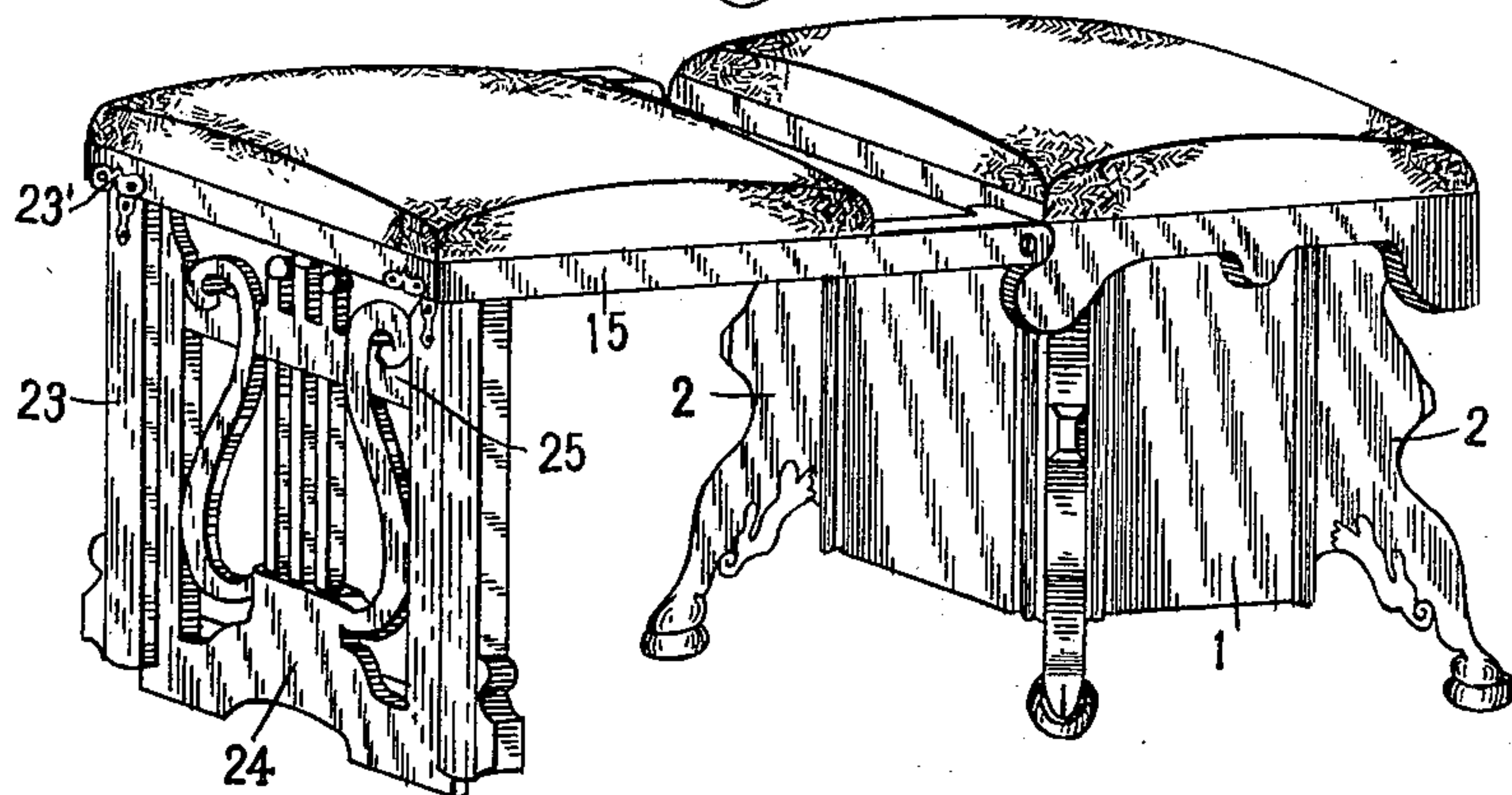


Fig. 2

WITNESSES.

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Fig. 3

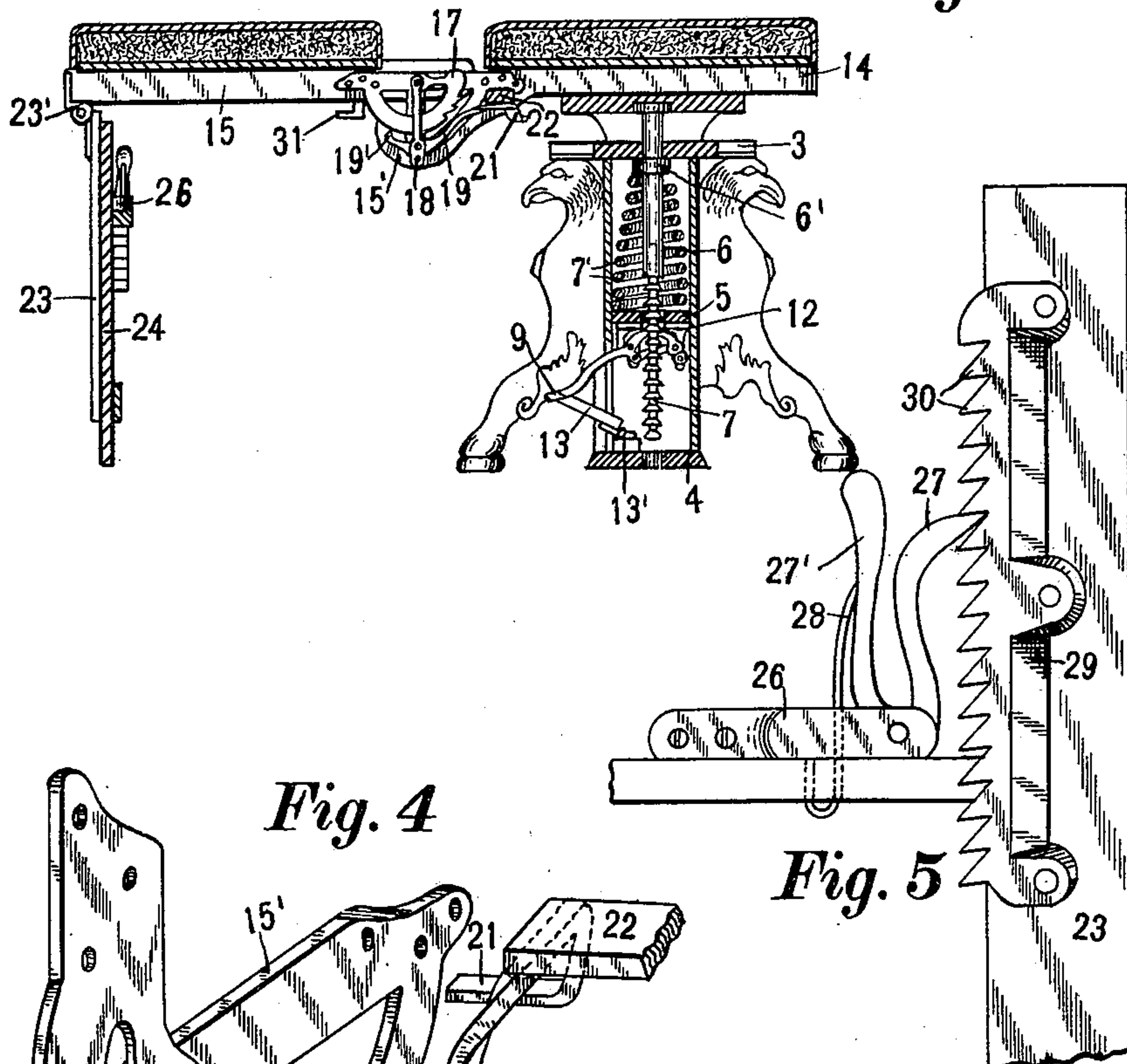


Fig. 4

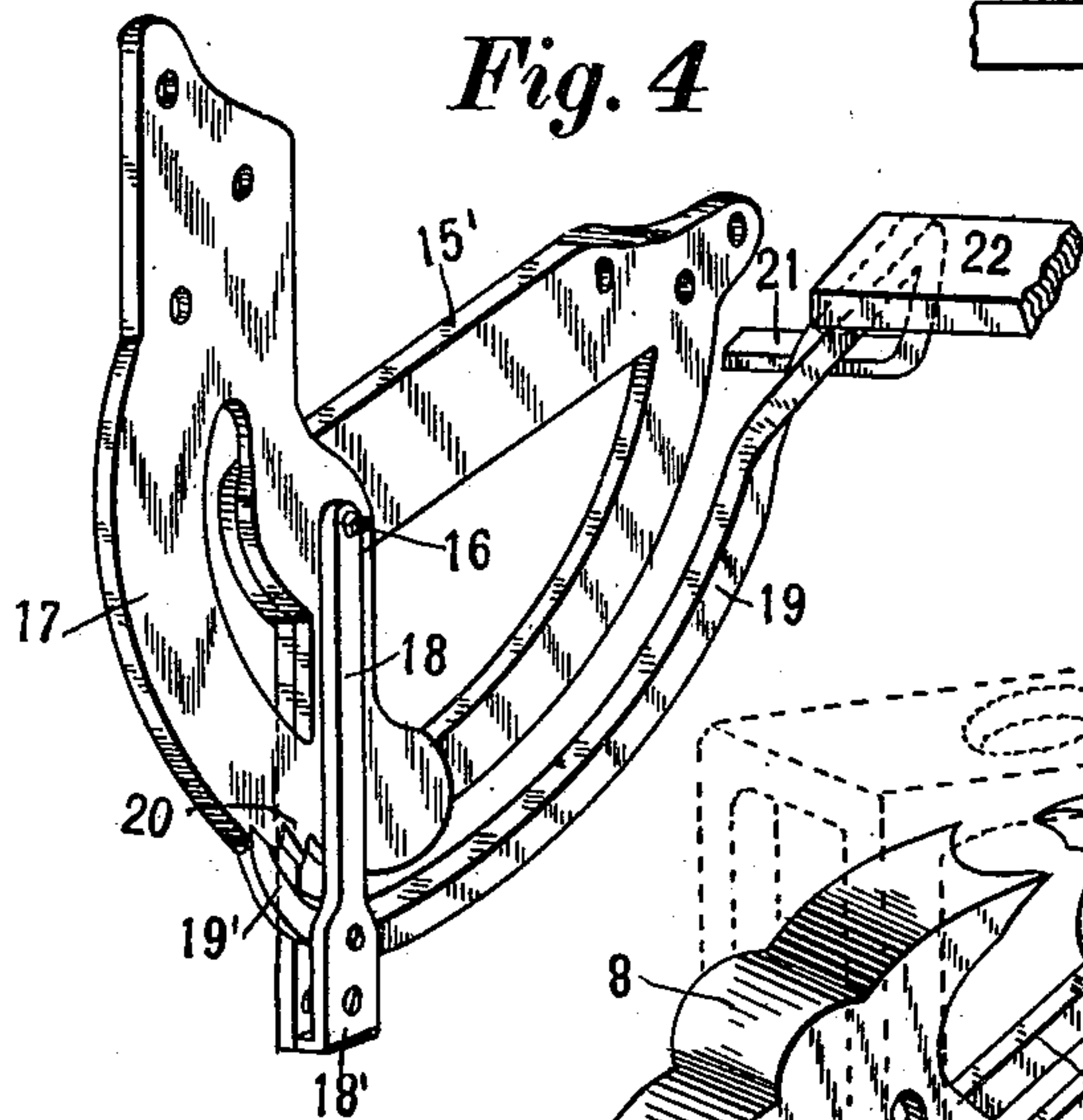


Fig. 5



Fig. 6 INVENTOR.
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UNITED STATES PATENT OFFICE.

AMBROSE HUTTINGER, OF CLEVELAND, OHIO.

CONVERTIBLE SEAT.

SPECIFICATION forming part of Letters Patent No. 627,504, dated June 27, 1899.

Application filed March 22, 1897. Serial No. 628,637. (No model.)

To all whom it may concern:

Be it known that I, AMBROSE HUTTINGER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Convertible 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, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to new and useful improvements in convertible seats; and it consists in the construction and arrangement of parts as hereinafter fully set forth, and pointed out particularly in the claims.

The object of the invention is to provide a piano-stool with a back which may be converted into a seat so that a plurality of persons may be seated at one keyboard, which object is attained by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a general perspective view of a piano-stool as made in accordance with my invention. Fig. 2 is a perspective view of the stool with the back lowered and suitably supported, thus forming an additional seat. Fig. 3 is a vertical section, on a reduced scale, through Fig. 2. Fig. 4 is a detail in perspective of the notched releasing device for the back of the stool. Fig. 5 is a detail of a device used for locking and releasing the movable portion of the back. Fig. 6 is a perspective view of a pair of dogs which are adapted to simultaneously engage and release the central pillar or shaft of the stool.

Referring to the numerals of reference, 1 designates the base of the stool, which is hollow and preferably rectangular in cross-section, said base being supported by suitable legs 2. Extending across the ends of said rectangular base is a top 3, bottom 4, and an intermediate partition 5.

Standing for a greater portion of its length within the base is a shaft 6, said shaft having a portion 7 so turned that integral angular flanges are provided for a purpose hereinafter referred to. Formed integral with said shaft 6 and extending therearound is a collar 6', said collar being located between partition 5

and the top 3. Surrounding shaft 6 between said collar 6' and partition 5 is a coiled spring 7, the tendency of which being to force said collar and partition apart.

8 indicates a dog having a depressing foot-lever 9, formed integral therewith and extending in the direction of its rear. Projecting from the under side of said dog 8 is a pair of arms 8', (one only being shown,) to the lower end of which a couple of bars 10 are pivotally connected, said bars being in turn pivoted to a dog 11. The dogs 8 and 11 are provided with apertures 12', through which bolts may be passed to pivot said dogs in a frame 12, (said frame having a central aperture therein through which shaft 6 is adapted to operate,) secured to the under side of partition 5, as clearly shown in Fig. 3.

It will be seen by reference to Fig. 6 that the dogs are provided with concave noses, and their location and operation are such that they perform the function of a pair of jaws, which by the depression of lever 9 throws them open and which are closed by the raising of said lever. To normally keep said jaws closed upon portion 7 of shaft 6, I provide a finger 13, pivoted, by means of a spring-hinge 13', to a block upon the upper face of the bottom 4, the tendency of said hinge being to raise finger 13, and as it bears upon the under side of lever 9 the jaws will be closed.

Mounted in any suitable way upon the upper end of shaft 6 is the seat-frame 14 of the stool, said frame being upholstered as desired.

Pivoted at one side of seat-frame 14 is the frame 15 of the back-support, the inner side of said back-frame being upholstered in a manner to correspond with that of the seat-frame 14.

The hinge by which the back is pivoted to the seat is of peculiar construction and is clearly illustrated in Fig. 4, in which 15' represents one of two plates which are secured to the inner sides of the seat-frame near the back thereof. The rear portion of said plate 15' is provided with a bolt 16, upon which a circular plate or segment 17 is pivoted. Depending from said bolt 16, at the inner side of said segment 17, is a bar 18, having an angled portion 18' at its lower end, said angled portion being adapted to bear against plate 15'. Pivoted between bar 18 and plate 15' below

segment 17 is a circle-bar 19, the lower end of said bar terminating in a finger 19', which is adapted to engage a series of notches 20, formed in a portion of segment 17, near one of its ends. The upper end of circle-bar 19 is turned at right angles, by which a portion 21 is provided, by the operation of which said circle-bar may be moved to raise and lower finger 19' into and out of engagement with the notches 20 of plate 17. It will be understood, as before stated, that a device corresponding to the one shown in Fig. 4 will be placed at each side of the bottom frame 14, and in order to operate both fingers 19' simultaneously to allow the back to be raised or lowered a strip 22 is provided which is rigidly secured to each of said fingers and which extends across the bottom of frame 14, as will be well understood.

As the stool is raised and lowered the back when in a horizontal position will have to be brought into alinement therewith, and the means I employ for providing an adjustable support is illustrated in Fig. 5, in which 23 represents a frame which is hinged to the upper end of back 15 by hinges 23', of suitable or ordinary construction. Mounted to slide in suitable guides (not shown) in said pivoted frame 23 is a movable support 24, which support may be constructed or ornamented in any desired manner, that being shown in the drawings representing a music-holder. Secured to the rear face of a rail 25 of said movable support is an angled plate 26, in which a dog 27, having an operating-handle 27', is pivoted. A leaf-spring 28 normally keeps the nose of dog 27 thrown outward or in the direction of the adjacent side of pivoted frame 23. Fastened to the rear face of one of the rails of frame 23 is a metal bar 29, said bar having a series of notches 30, which project into the path of the nose of dog 27 when in a normal position.

31 represents an angled finger which serves to hold the movable support 24 and pivoted frame 23 in position against the back 15, when the article serves as a single seat.

The operation of the stool is as follows: Should it be desired to lower the stool from the position shown in Fig. 1, the sides of the bottom frame 14 would be grasped, the toe placed upon the foot-piece of lever 9 and pressed to withdraw dogs 8 and 11 from portion 7 of shaft 6, when the seat and upper portion of the stool could be forced downward against the action of spring 7' to the desired elevation. It will be readily seen that the seat and shaft may be freely revolved without the annoyance of raising or lowering, as the angled flanges of portion 7 run straight around the shaft 6.

When desired to convert the stool from a single to a double seat, the projection 21 upon either side of the bottom frame 14 is raised, which movement raises the strip 22 and the curved bars 19 at either side of the stool and

disengages fingers 19' from the notches of plate 17, and thus allowing the back to be lowered into the position shown in Fig. 3, at which time the slide 24 and pivoted support 23 are released from engagement with angled finger 31 and swung down to a vertical position, and should it be found that they dropped so low as to bring the back frame 15 below a horizontal line with the seat-frame 14, said back frame may be raised vertically, together with the pivoted frame 23, and the slide frame 24 lowered so as to touch the floor, when said back frame 15 will be securely supported, as dog 27 automatically engages the notches of bar 29, said bar being mounted upon frame 23.

By reference to Fig. 4 it will be seen that several notches 20 are formed in plate 17, so that the angle of the back may be slightly varied either forward or backward from the position shown in Fig. 1.

It will thus be seen that the construction and arrangement of parts heretofore set forth produces a seat that will be cheaply manufactured and one which serves the purpose of two stools and which is at the same time capable of various degrees of elevation.

Having thus fully set forth my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a piano-stool, the combination of a hollow base, a notched shaft standing within said base having a portion thereof turned to provide integral angular flanges, a collar formed integral with said shaft, a partition within said hollow base, a coil-spring arranged to surround said shaft and to engage between said collar and said partition, a dog having a foot-lever secured thereto and a pair of arms extending therebelow, a couple of bars pivotally connected to said arms, a second dog pivoted to the opposite end of said bars, a frame arranged to pivotally support said dogs, said frame having a center aperture through which said shaft is adapted to operate, means for normally holding the jaws of said dogs into engagement with the notches in said shaft, and a seat-frame mounted upon the upper end of said shaft, substantially as described.

2. In a piano-stool, the combination of a hollow base of rectangular cross-section, said base being provided with a top 3, bottom 4 and partition 5, the shaft 6 provided with the integral angular flanges, a collar 6' located between the partition 5 and top 3, a coiled spring 7' arranged between said partition and collar adapted to force them apart, a dog 8 having a depressing foot-lever formed integral therewith, and a pair of arms 8' at its lower end, the dog 11, the bars 10 arranged to pivotally unite said dogs, a frame 12 adapted to pivotally support said dogs and having an aperture therethrough adapted to fit over said shaft, said frame arranged to be secured to the under side of said partition, the finger 13,

a spring-hinge 13' arranged to pivotally secure said finger to the bottom 4, said finger adapted to bear upon the under side of the foot-lever whereby said jaws are normally
5 held in their closed condition to engage said shaft, and a seat-frame secured to the upper end of said shaft, substantially as described.

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

AMBROSE HUTTINGER.

Witnesses:

ANTHONY G. HUTTINGER,
R. H. BRODERICK.