

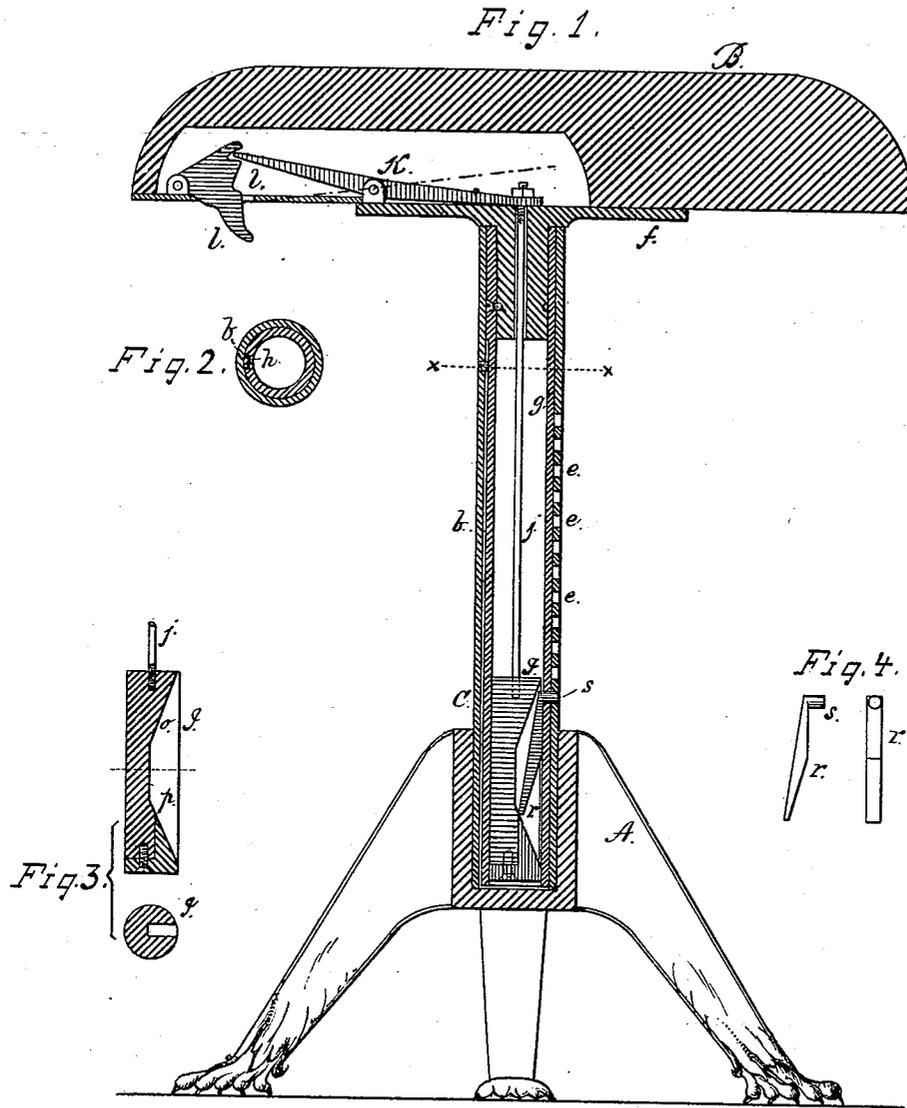
(No Model.)

S. W. SHAW.

PIANO STOOL.

No. 251,069.

Patented Dec. 20, 1881.



Witnesses:  
*W. Voit*  
*Wm. D. Clark*

Inventor:  
*Stephen W. Shaw*  
By his Attys. *Beane & Osborn*

# UNITED STATES PATENT OFFICE.

STEPHEN W. SHAW, OF SAN FRANCISCO, CALIFORNIA.

## PIANO-STOOL.

SPECIFICATION forming part of Letters Patent No. 251,069, dated December 20, 1881.

Application filed April 22, 1881. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN W. SHAW, of the city and county of San Francisco, in the State of California, have invented certain new and useful Improvements in Piano-Stools; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings.

The object of my invention is to do away with the elevating-screw heretofore used in piano-stools for raising and lowering the seat, and to substitute therefor an arrangement by which the seat can be adjusted to any desired height by simply lifting or lowering it in a direct line without rotating it.

It consists in substituting a plain socket in the pedestal for the screw-threaded socket heretofore used, and in attaching to the under side of the stool, by means of a swivel connection, a smaller tube that is just large enough to move easily in the pedestal-tube as a substitute for the screw-rod. The smaller tube is guided in the pedestal-tube by a rib and groove, and a latch-operated locking device secures it at whatever point it is adjusted to, all as hereinafter more fully described.

Referring to the accompanying drawings, Figure 1 is an elevation in vertical section of a piano-stool having my improvement applied to it. Fig. 2 is a cross-section through the lines *x x*, Fig. 1. Figs. 3 and 4 are detail views of the lock.

Let A represent the foot or pedestal of the stool, and B the seat. In the pedestal I secure a tube, C, instead of the screw-socket tube heretofore used. Inside of this tube is a longitudinal rib, *b*, on one side, and through the opposite side I make a number of holes, *e*, at short intervals apart and in a vertical row.

To the under side of the seat B, I secure a circular plate, *f*, the center of which is in the center of the seat. To the center of this plate I attach by a swivel connection one end of a tube, *g*, which is just large enough to fit and move in the tube C, and on one side of this tube I make a longitudinal groove, *h*, on its exterior corresponding with the rib *b* in the tube C, so that the inner tube will be guided and steadied in the outer tube by the groove moving on the rib when raising and lowering the seat.

Inside of the inner tube, *g*, I suspend a weight,

I, upon a rod, *j*, which passes up through the tube and through the bottom of the seat. The upper end of this rod is attached to one end of a lever, K, which extends inside of the seat to near its periphery, where its end is connected with a pivoted trigger, *l*, the finger-latch of which projects down through the seat and extends to a distance below it, so that it can be caught and operated with the finger. The lever K is pivoted at its middle, so that when the latch is drawn back by the finger the end of the lever which connects with the trigger will be depressed and its opposite end lifted so as to raise the weight I in the inner tube. The side of the weight I which faces toward the row of holes in the outer tube, C, is made with two inclined faces, *o p*, which pitch toward each other, and in the depression between these inclined faces I place a short bar, *r*, on the upper end of which is a pin, *s*, which projects through a hole in the tube *g*, and is long enough to project through one of the holes *e* of the tube C when it is thrown out. When the weight I is down the upper inclined face, *o*, forces the upper end of the bar *r* outward and projects its pin *s* through the hole in the outer tube; but when the weight is raised, by pulling up on the trigger *l* the lower inclined face, *p*, trips the lower end of the bar and throws it outward, and as the side of the bar next to the tube is enlarged at its middle its upper end will be thrown inward, so as to draw the pin in and free it from the hole in the outer tube. When the pin is thus drawn in, the stool-seat can be lifted or lowered to any point, the tube *g* sliding in the tube C. When the seat has been adjusted to the desired height the trigger is released and the weight drops, thus forcing the pin *s* outward, so that it will enter the first hole in the outer tube below where it was when the lever was released; and as these holes are quite near together, the seat will be stopped and held at about the point where it is when the trigger is released.

This device is quite simple, and it provides a strong and rigid support for the seat. The swivel-connection between the seat and its supporting-tube permits the seat to turn easily and freely in either direction, while the close fit of the tubes prevents any wobbling of the seat.

The bolt-operating device, consisting of the

weight with its oppositely-inclined faces and the bolt-carrying trip-bar, can be used for locking, bolting, and fastening in other places. For instance, it can be used as a window-sash fastener and for various other purposes.

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

1. As an improvement in piano-stools, the weighted rod and connecting-lever K and locking devices, in combination with the pivoted trigger and the seat B, having a recess in which the lever and trigger operate, substantially as described.

2. In a piano-stool, the weighted rod and connecting-lever and locking devices, in com-

bination with the pivoted trigger, the recessed seat, circular plate *f*, the vertically-sliding tube *g*, and tube C, substantially as described.

3. In a piano-stool, the rod and connecting-lever, pivoted trigger, and recessed seat, in combination with the tubes *g* and C, having grooves and guiding-slides, the weight *r*, and pin *s*, the tube C, having holes *e*, substantially as described.

In witness whereof I have hereunto set my hand and seal.

STEPHEN W. SHAW. [L. S.]

Attest:

JNO. L. BOONE,  
WM. F. CLARK.