(No Model.)

R. WANGEMAN.

SCREW CLAMP FOR STOOLS.

No. 274,680. Patented Mar. 27, 1883.

Fig. 1.

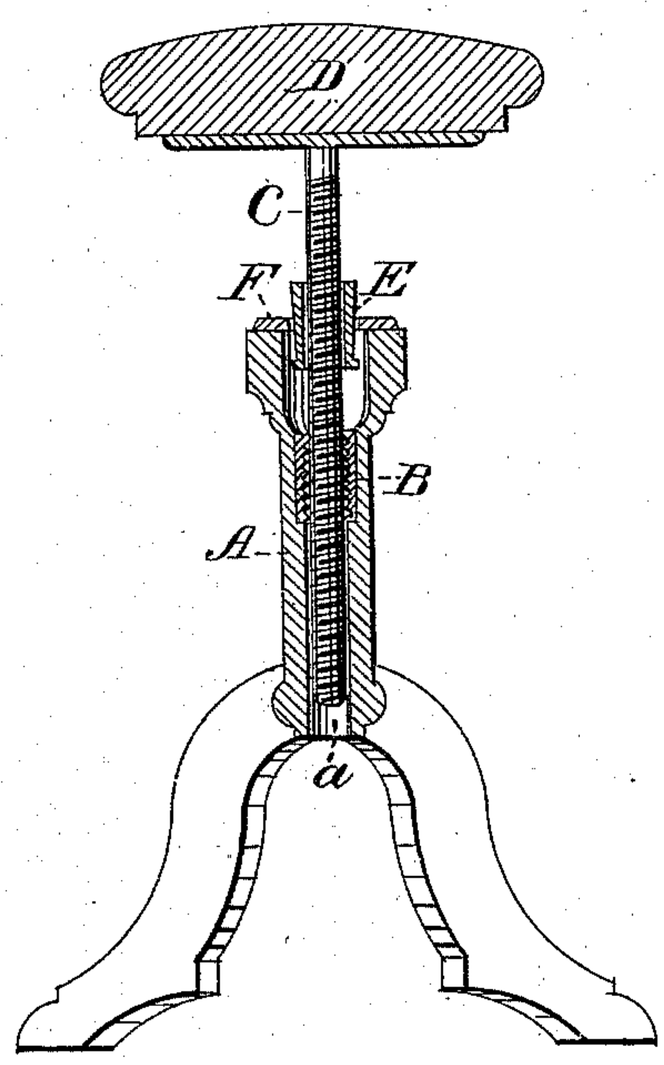


Fig. 4.

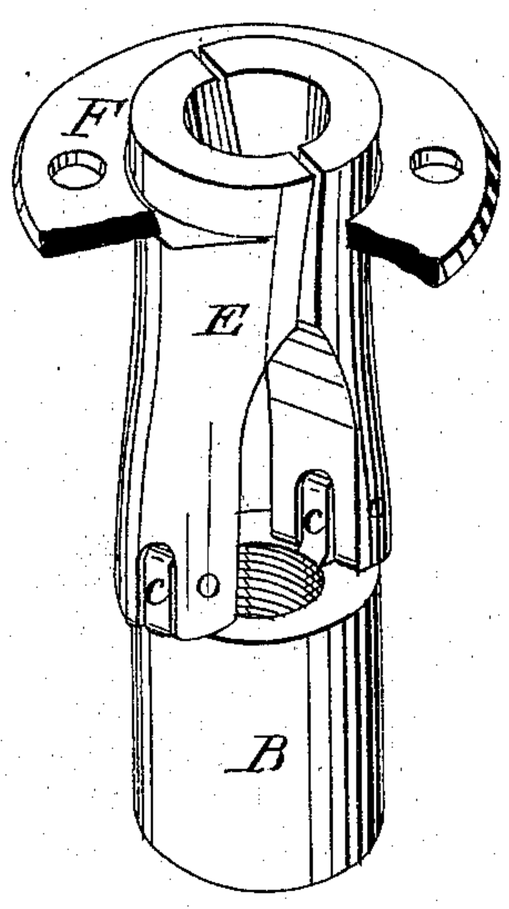


Fig. 3.

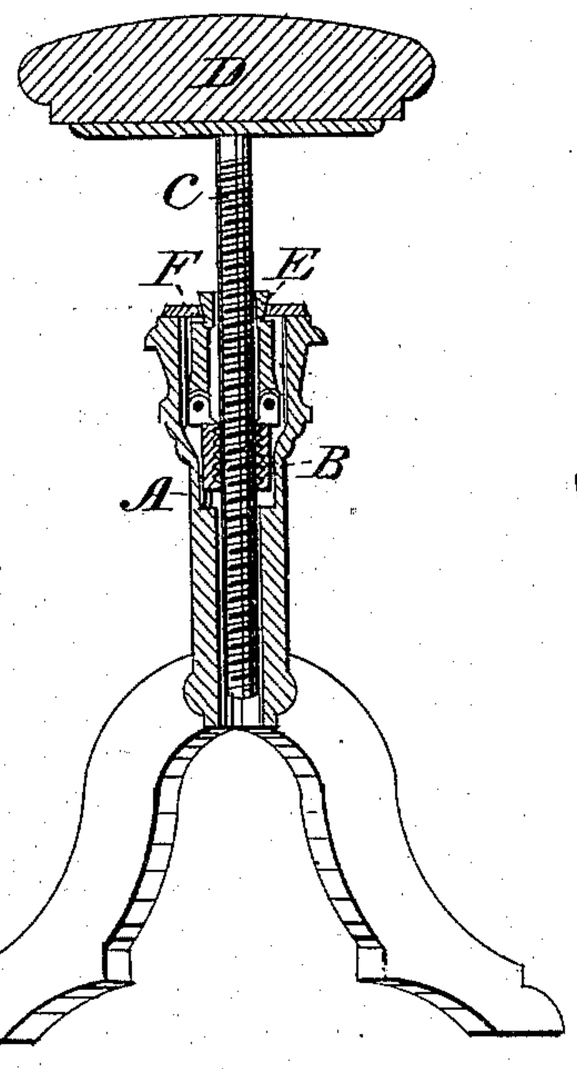
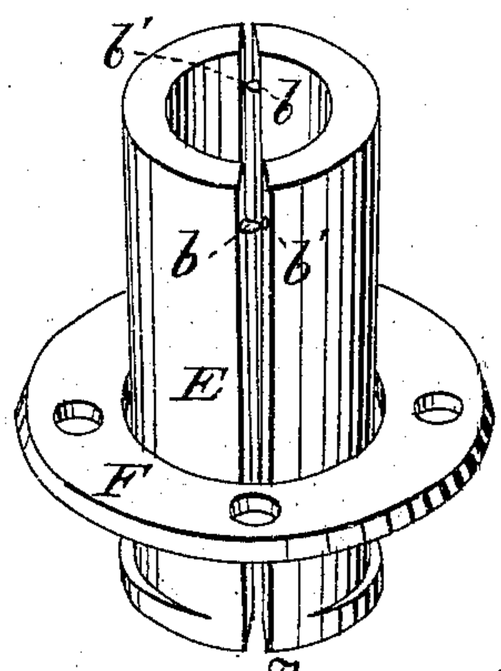


Fig. 2.



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SCREW-CLAMP FOR STOOLS.

SPECIFICATION forming part of Letters Patent No. 274,680, dated March 27, 1883.

Application filed January 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, RUDOLPH WANGEMAN, of the city and county of San Francisco, State of California, have invented an Improved Screw-Clamp for Stools; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a new and useful clamp for the screws of vertically-adjustable stools, chairs, &c., the object of which is to hold the screw tightly in its socket to prevent the side play or looseness which is always attendant upon devices of this character.

My invention consists in a wedge-sleeve encircling the screw, which, either by its own weight or by the downward pressure of the screw itself, is adapted to be depressed sufficiently in the standard to bind upon and clamp the screw so that it cannot have any side play, as will hereinafter particularly appear, reference being made to the accompanying drawings, in which—

Figure 1 is a section through a stool, showing the application of my screw-clamp. Fig. 2 is a perspective view. Fig. 3 is a section through a stool, showing a modified form of my screw-clamp. Fig. 4 is a perspective view of the modification.

Let A represent the standard of a stool, having the usual vertical socket, *a*, in which is a stationary nut, B, for the reception of the screw C, which is bolted under the seat D in the usual manner. Upon top of the standard A is screwed an annular disk or rim F, the screw C passing through it.

E represents the wedge-sleeve. This consists of two parts or halves having small pins *b* and sockets *b'* near their tops, which, engaging, serve to keep one part from slipping past the other. (See Fig. 2.) The outer surface of these parts is tapered, the thicker portion being at the top. This wedge-sleeve fits around the screw and hangs down in the socket *a* through the rim F, its upper end being too large to pass through said rim. The weight of the sleeve causes it to wedge in the rim F and thus to bind or clamp the screw C, for the purpose described. It in no wise prevents the easy operation of the screw in its vertical adjustment, for it embraces said screw loosely, except when the screw is stationary and the sleeve hangs down, wedging its top between the rim F and the screw. Thus I avoid the usual looseness of the screw without having so close-fitting a socket as to prevent its ready adjustment.

A modification of this wedge-sleeve I show in Figs. 3, 4, in which the letters indicate similar parts. In this case the lower ends of the two-part sleeve are hinged to the nut B by means of pivots through ears *c* on said nut. The nut itself, instead of being fixed in the standard, as heretofore described, hangs loosely therein, being sustained by the upper ends of the sleeve wedging in the rim F. The screw C passes down through the sleeve and nut, as before; but when the weight is placed on the seat of the stool the nut and sleeve are forced down, and the top of the latter wedges between the rim F and screw, binding upon said screw and clamping it securely.

This clamp, while applicable to stools and chairs of any description in which a screw is formed, is particularly applicable to piano-stools. These latter are used so much, and the adjustment made so frequently that in a short time the screw works a little loose and the side play becomes annoying. The clamping device I have shown remedies this difficulty by holding the screw securely to its place.

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

1. In a vertically-adjustable stool, chair, &c., the standard A, having socket *a*, with nut B, located midway between top and bottom thereof, and the adjustable screw C, in combination with the tapering sleeve E, located at the top of the standard A, embracing and clamping said screw by wedging itself between said screw and the wall of the socket *a*, substantially as and for the purpose herein described.

2. In a vertically-adjustable stool, chair, &c., the standard A, having socket *a*, nut B, located midway between top and bottom of said socket, the annular rim F, and the screw C, in combination with the tapering sleeve E, located at the top of the standard A, embracing said screw and clamping or binding it when wedged between the rim F and said screw, substantially as and for the purpose herein described.

3. In a vertically-adjustable stool, chair,

&c., the standard A, having socket *a*, the annular rim F, and the screw C, in combination with the nut B, loose in socket *a* and midway between top and bottom thereof, and the tapering sleeve E, located at the top of the standard A, hinged below to said nut and adapted to clamp or bind the screw when wedged between said screw and rim F above, substantially as and for the purpose herein described.

In witness whereof I hereunto set my hand.

RUDOLPH WANGEMAN.

Witnesses:

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J. H. BLOOD.