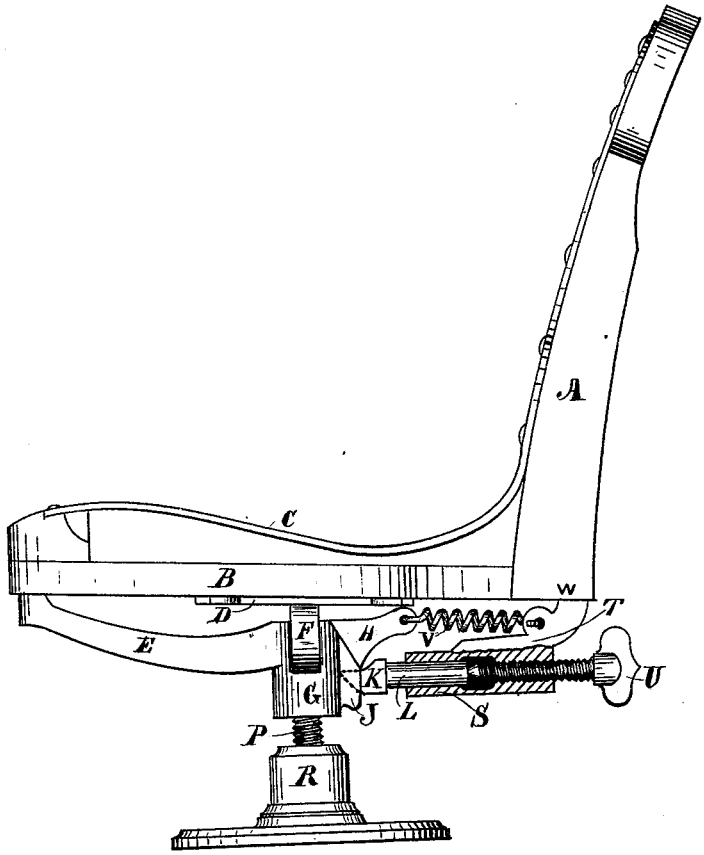
C. B. HITCHCOCK.
Tilting-Chair.

No. 204,573. Patented June 4, 1878.



Witnesses;
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UNITED STATES PATENT OFFICE.

CHARLES B. HITCHCOCK, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN TILTING CHAIRS.

Specification forming part of Letters Patent No. **204,573**, dated June 4, 1878; application filed March 2, 1878.

To all whom it may concern:

Be it known that I, CHARLES B. HITCHCOCK, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Adjustable Tilting Chairs, which is fully set forth and described in the following specification and illustrated in the accompanying drawing.

My invention relates to an adjustable device for regulating the tension of a spring in tilting chairs, whereby the resistance of the spring can be increased or diminished, and the chair adapted to the different weights of persons occupying it.

The object of my invention is to provide a means of adjustment of a spring used in a tilting chair, whereby the tension of the spring can be readily increased or diminished when required.

My invention consists in the new construction, arrangement, and combination of elements, which will be hereinafter fully set forth and claimed.

In the drawing, my invention is represented in a single side elevation of a tilting chair.

A, B, and C represent any ordinary chair, which is attached to a bracket casting by hinges F, and then mounted on a screw or swivel-stand, R, in the ordinary manner.

The bracket casting is constructed with a nut or swivel-hub, G, the side brackets to connect with the hinge D, the front bracket E, the rear bracket H, and the recessed lug J, in the manner shown.

S represents a cylinder, in which operates a sliding bolt, L, and a thumb-screw, U. The upper part of the cylinder S is provided with an arm, T, which extends backward and upward, forming a rear support for the chair at W. This arm T is provided with a hole to receive one end of a coil-spring, V, and the other end of said spring is attached to the bracket H.

The fulcrum-bolt L has a wedge-shaped end, K, that forms a fulcrum, and is supported and held in a recess formed in the lug J, all of said devices being constructed and arranged in the manner substantially as shown.

It will be seen from the foregoing that, when the chair is tilted back on its hinges F, the spring V produces a resistance which may have to be adjusted. Said resistance can be increased by operating the screw U, so as to force the cylinder S backward on the bolt L. Said bolt, having its fulcrum end K in the recess formed in the lug J, cannot be moved from its position; consequently the cylinder S and arm T are forced back, and at the same time the spring V is stretched, giving it a greater power of resistance to act against the chair.

The above-described operation, when reversed, reduces the power of resistance of the spring. Thus the spring can be regulated to suit the weight of any person.

I am aware that a spring hooked into an ear attached to the cross-bars of a seat, and into a lever having its inner end resting in a socket, also formed in the cross-bars, are old, and therefore make no broad claim to such features.

What I claim is—

1. The cylinder S, having a screw, U, a bolt, L, and an arm, T, in combination with the spring V and bracket H, in the manner and for the purpose substantially as shown and described.

2. In combination, the bracket H, the spring V, the arm T, the cylinder S, the screw U, the bolt L, and the recessed lug J, all constructed and arranged to operate in the manner and for the purpose substantially as shown and described.

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

CHARLES B. HITCHCOCK.

Witnesses:

E. O. FRINK,

S. C. FRINK.