H. G. E. WOLFF.
Tilting-Chairs.

No. 197,195. Patented Nov. 13, 1877.

Fig. 1.

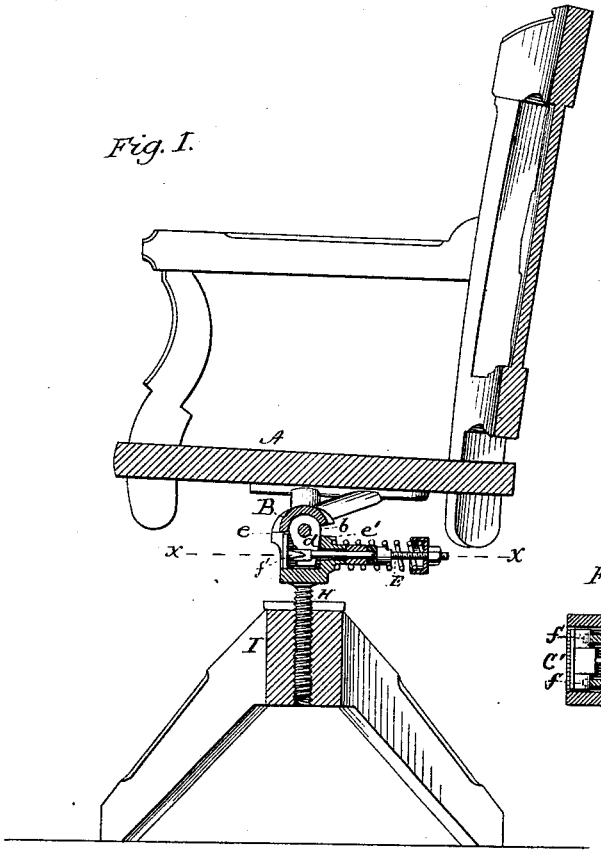


Fig. 3.

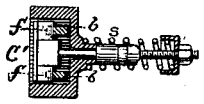
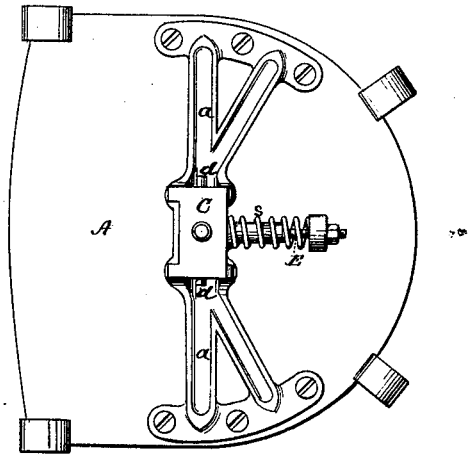


Fig. 2.



WITNESSES
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HERMAN G. E. WOLFF, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN TILTING CHAIRS.

Specification forming part of Letters Patent No. **197,195**, dated November 13, 1877; application filed May 12, 1877.

To all whom it may concern:

Be it known that I, HERMAN G. E. WOLFF, of Milwaukee, Wisconsin, have invented certain new and useful Improvements in Chairs, of which the following is a clear, full, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a vertical section of a chair with my improvements attached. Fig. 2 is a horizontal section, showing the bottom of the chair. Fig. 3 is a detail section through *x x* of Fig. 1.

My invention relates to revolving chairs which are designed to tilt back on a spring; and it consists in the combination of devices, hereinafter explained and claimed.

In the drawings, A represents the seat of a chair, having secured to the under side the metal frame *a a*, having its central plate B curved and provided with the lugs *b*, fitting inside of the casing C, and secured thereto by means of the pivot-bolt *d*, passing through the lugs and the ends of the casing. The ends of the casing are rounded to fit in the curve B and receive the pivot-bolt *d*, and the sides are provided with the shoulders *e e'*, to stop and hold the curved plate B as the chair is rocked backward or forward.

Extending out horizontally from the rear of the casing C is the rod E, provided with a spiral spring, *s*, bearing against the casing C, and a screw-nut to hold the spring in place and adjust its tension. The rod E passes through the casing, and is rigidly attached to the sliding front plate *c'*, which has a common movement with the rod, as hereinafter explained.

On the interior of the plate *c'*, I construct, at each end of the plate, a beveled or knife-blade projection, *f'*, against which press the lower ends of the lugs *b* as the body of the chair is rocked backward, thus forcing forward the rod E, whereby the spiral spring *s* is compressed, and an easy, pleasant movement is given to the chair, until the rear portion of the curved plate B rests steadily upon the shoulder *e'* of the casing C, which is firmly attached to the screw-rod H, which passes down into the leg-frame I, in the usual manner of chairs of this class.

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

In a revolving chair, the frame *a a*, provided with the curved plate B and lugs *b*, in combination with the casing C, provided with the shoulders *e e'*, rod E, provided with the sliding plate *c'*, having the beveled or knife-blade projections *f' f'*, and the spiral spring *s*, all combined to operate substantially as and for the purpose set forth.

HERMAN G. E. WOLFF.

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