(No Model.) 2 Sheets—Sheet 1.

A. W. EICHELBERGER.

CHAIR.

No. 281,038. Patented July 10, 1883.

Fig. 2.

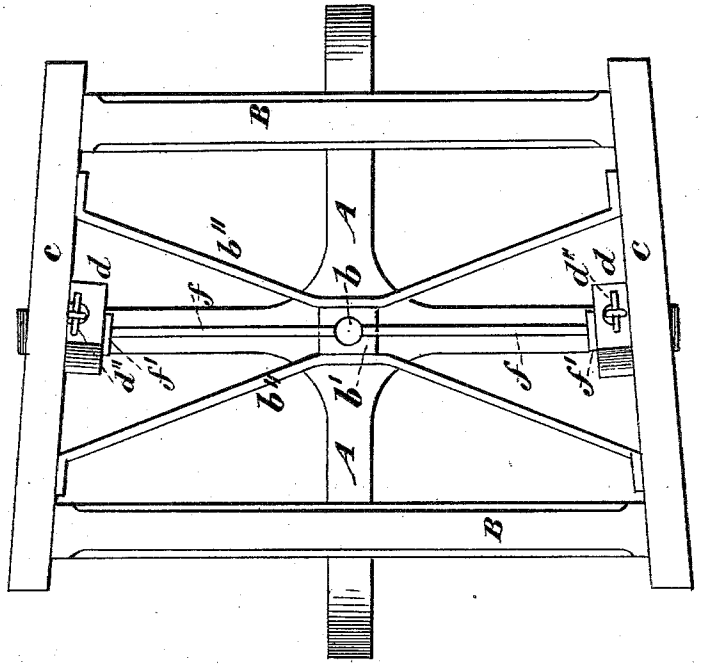
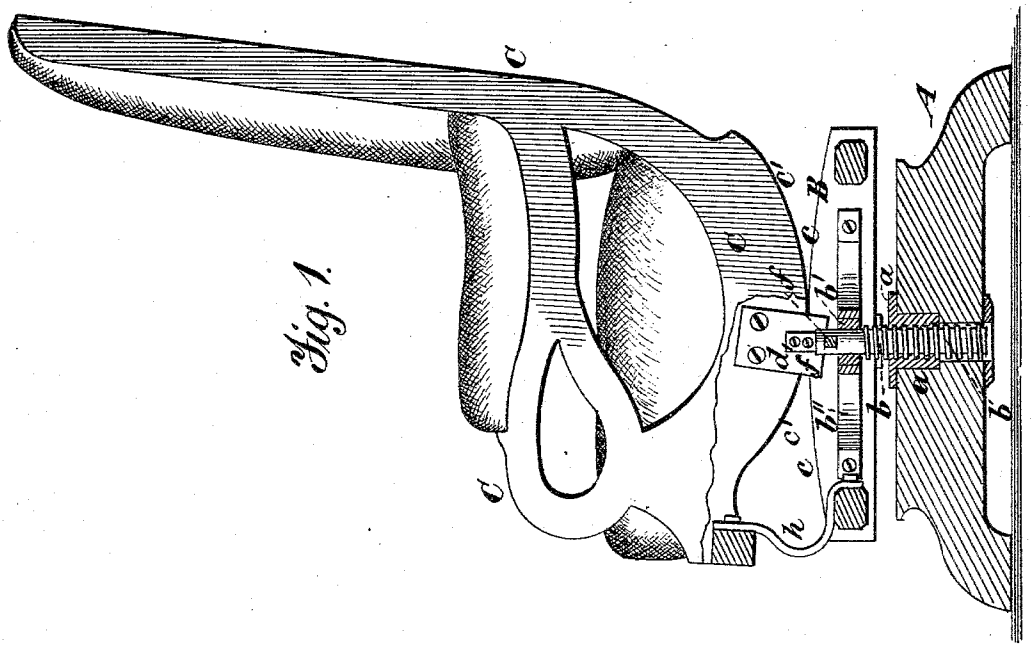


Fig. 1.



Witnesses.
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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

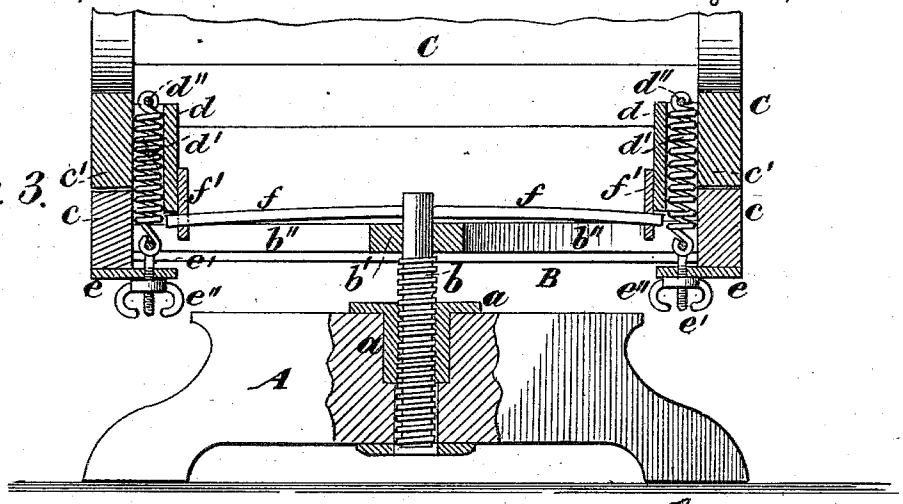


Fig. 4.

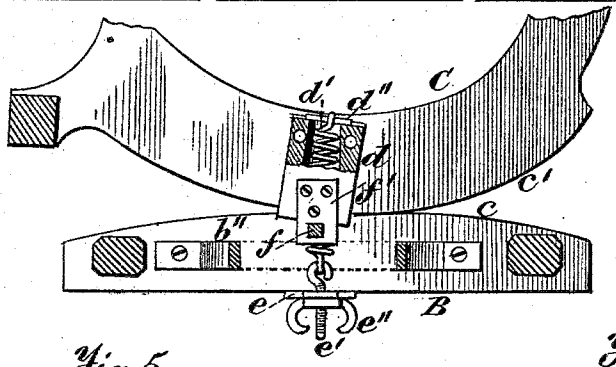


Fig. 5.

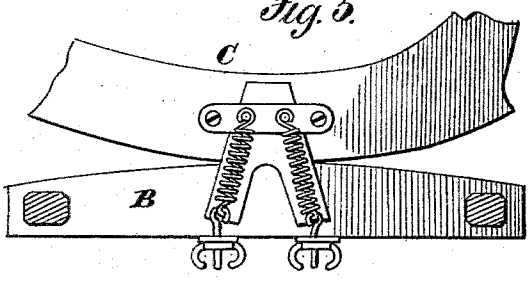


Fig. 6.

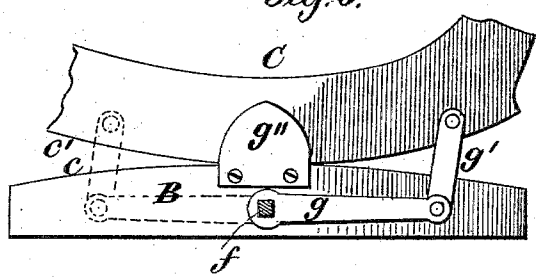
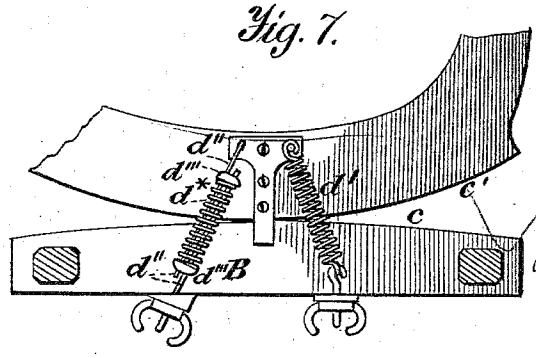


Fig. 7.



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UNITED STATES PATENT OFFICE.

ABDIEL W. EICHELBERGER, OF HANOVER, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO J. WIRT FORNEY, OF SAME PLACE.

CHAIR.

SPECIFICATION forming part of Letters Patent No. 281,038, dated July 10, 1883.

Application filed March 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, ABDIEL W. EICHELBERGER, a citizen of the United States, residing at Hanover, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Chairs, of which the following is a specification.

My invention is designed to produce a chair capable, first, of vertical elevation and depression; secondly, of a rotary or revolving motion; and, thirdly, of a rocking movement while at any stage of elevation or revolution.

The invention is adapted for office or house use, as a parlor-car chair, or for any other purpose to which a chair of this class is applicable.

In the accompanying drawings, Figure 1 is a vertical section of my improved chair. Fig. 2 is a plan view of the elevating-platform and rocker-base. Figs. 3 and 4 are views of detached parts of the invention; and Figs. 5, 6, and 7 show modifications, as hereinafter described.

Similar letters of reference indicate similar parts in the respective figures.

A is the support for the entire chair. B is the elevating-platform and rocker-base. C is the superstructure or chair proper.

The support or tripod A is centrally perforated and provided with a threaded nut, *a*, inserted vertically therein.

The elevating-platform B has a screw, *b*, which enters the nut *a*, said screw being secured centrally of the platform B by means of a collar, *b'*, within which the upper end of the screw *b* rests. The collar *b'* is maintained in position by means of braces *b''*, secured to the collar and to the sides of the platform B, as shown. The sides *c* of the platform B are longitudinally curved, to constitute convex seats for the rockers of the chair proper. On the inner side of each of the rockers *c* of the chair is secured a box, *d*, within which is placed a spiral spring, *d'*, the upper end of the spring projecting through the top of the box, and being formed into a loop, through which passes a pin, *d''*. The lower end of the spring *d'* is also formed into a loop, the loop connecting with a screw-eyebolt, *e'*. At the under part of each of the sides *c* of the platform B is a perforated plate, *e*, through which the screw-eyebolt *e'* is passed, a thumb-nut, *e''*, being placed upon the end of the screw, whereby the tension of the spring *d'* may be adjusted and the rocking-chair held to the elevating-platform or rocker-base with the desired degree of force. The upper end of the screw *b* projects through the top of the collar *b'*, and a torsion-spring, *f*, shown as consisting of a steel bar square in cross-section, is passed through the top of the screw and across the platform B. The respective ends of the bar are held in metallic plates *f'*, secured to the inner sides of the boxes *d*.

The action of the chair is apparent. The chair proper and the platform or rocker-base B may be elevated or depressed upon the screw *b* as a center, and the chair proper rocked upon the platform B at any stage of its elevation or point in its revolution. It will be seen that the chair may not only be rocked back from a perpendicular line, but forward—an advantage which is important where a person is sitting at a desk and wishes to lean forward over the desk.

I do not restrict myself to the above-described arrangement of spiral springs for connecting the rocking-chair to its platform or base, nor to the described adjustment of torsional spring.

In Fig. 5 is shown a double-spiral-spring attachment for holding the rocking-chair to the elevating-platform.

In Fig. 6 the spiral-spring device is discarded and a double torsional attachment used. At each end of the steel bar or torsional spring *f* is secured an arm, *g*, connected by means of a link, *g'*, to a rocker of the chair proper. This attachment serves the same double purpose as is effected by the employment of the double-spring construction shown in Fig. 5. A guard-plate, *g''*, may be secured to the inner part of each of the sides of the elevating-platform B, to aid in maintaining the proper relations between the rocker of the chair and its platform or support.

In Fig. 7 is shown a modified form of double spiral spring. When the rocker is thrown back, the spring *d** is compressed by means of the two rods *d''*, running through the buttons

d'''. When the rocking-chair is thrown forward, the spring d' is expanded. The action of the two springs keeps the rocking-chair constantly in position and prevents it from going forward or backward beyond the proper limits.

If desired, a rubber or other elastic spring or springs, h, may connect the forward part of the rocking-chair with the front of the elevating-platform, whereby to more effectually prevent any undue backward movement. Such provision, however, I deem unnecessary.

I am aware that heretofore spiral or tensile springs have been used to connect rockers to their stands, and to afford a rocking or backward and forward movement, and also that such tensile springs have been made adjustable. I therefore disclaim the invention generally of adjustable tensile springs for this use; and I do not claim herein the combination of torsional and tensile springs; but such combination may form the subject-matter of a subsequent application.

I claim as my invention—

The combination, in a chair, of a support or tripod having a central screw-nut, a rocker-base, a central screw rigid therewith, and a torsion-spring passed through the top of said screw, the ends of the spring being secured in plates attached to the respective inner sides of the chair proper, substantially as set forth.

In testimony whereof I hereto sign my name in the presence of two witnesses.

ABDIEL W. EICHELBERGER.

Witnesses:

C. W. FORNEY,

L. F. MELSHEIMER.