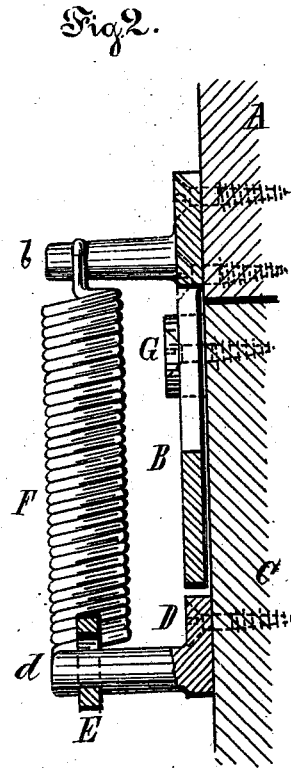
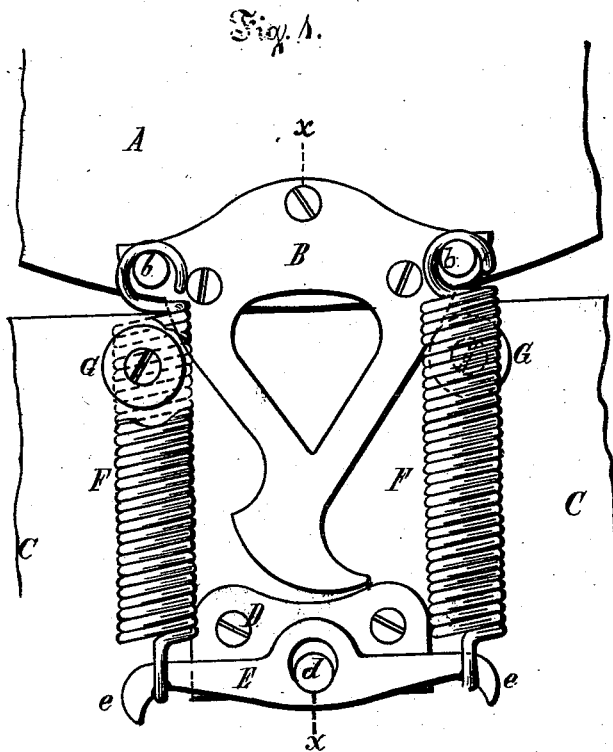


J. ZANGERLE.  
Rocking-Chair Attachment.

No. 203,979.

Patented May 21, 1878.



Witnesses:  
Jacob Richter  
Emil H. Frommann

Inventor:  
Joseph Zangerle  
by  
Wm W. Lotz  
his attorney

# UNITED STATES PATENT OFFICE.

JOSEPH ZANGERLE, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN ROCKING-CHAIR ATTACHMENTS.

Specification forming part of Letters Patent No. **203,979**, dated May 21, 1878; application filed April 18, 1878.

*To all whom it may concern:*

Be it known that I, JOSEPH ZANGERLE, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Elastic Attachment to Rocking - Chairs and Cradles, as fully described in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents an elevation of a portion of the rocker and base with my improvement attached, and Fig. 2 represents a transverse section of the same on line *x x* in Fig. 1.

The nature of my invention relates to a spring-coupling holding the rocker of a chair or cradle centrally upon its base, and so as to yield to and facilitate the rocking motion of the same; and it consists of the peculiar construction and arrangement of the said attachment, as more fully hereinafter explained.

In the drawing, A is a portion of the rocker, and B a plate formed somewhat like the sector of a circle, the portion near the arc of which being secured against the inward side of the said rocker A by a series of wood screws, so that its pendent portion has a pendulous motion between and against the inward faces of the base C, thereby holding the rockers laterally in position upon said base. *b b* are studs projecting from the corners of plate B. D is a plate, having stud *d*, and being secured against the inward face of base C, which stud *d* is formed the fulcrum for the central eye of yoke E, having curved ends *e e*. F F are two coiled springs with eye-bent ends, one of which ends is hooked in a recess over the end of one of the studs *b*, while their opposite ends are hooked over the ends of the yoke E. This yoke E, having a free oscillating motion upon the stud *d*, will counterbalance or subdivide the strain to both springs F.

G G are rubber washers or buttons secured against the inward faces of the base C by a

wood screw each, and in such a position relative to the pendulous portion of plate B that the latter will strike against one of said buttons at the end of each rocking motion, which will be arrested and limited thereby.

The above-described rocker attachment is noiseless in its motions, and, the draft on the two springs being equalized by the yoke, said springs will work to a better advantage, and will not break nor lose their elasticity so easy as in such attachments in which one spring only at the time has to resist the movement of the rocker independently; besides that, by the application of two springs thus connected, the elastic resistance is more equally divided over a greater distance of the rocker movement.

I am aware of the patent granted February 12, 1878, to J. Krapp, and hereby disclaim the devices shown therein as making any part of my invention; but

What I claim as my invention is—

1. The herein-described device for a rocker attachment of two springs, F, the draft to which being equalized by a yoke, E, substantially in the manner set forth.

2. The rocker A, having studs *b b*, the base C, having stud *d*, and yoke E, in combination with the springs F, all constructed and arranged to operate substantially as shown and specified.

3. The attachment for a rocking-chair, consisting of the rocker A, having pendent plate B, with studs *b* and springs F, the base C, having plate D, with stud *d*, the yoke E, and the rubber stops G, all constructed and arranged substantially as described and shown.

JOSEPH ZANGERLE.

Witnesses:

JOSEF RUDOLPH,  
WM. J. KNAUS.