

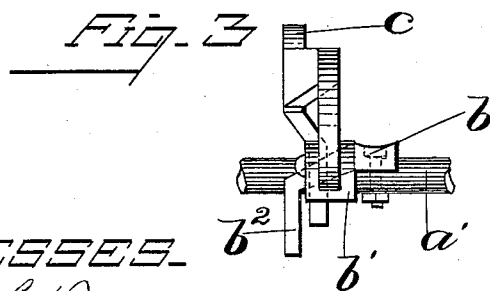
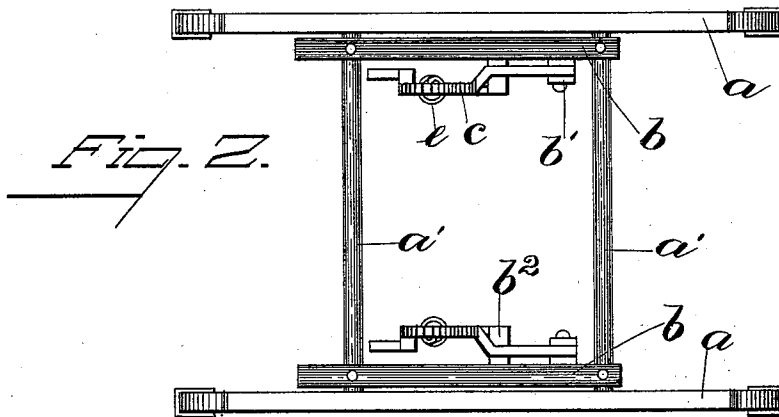
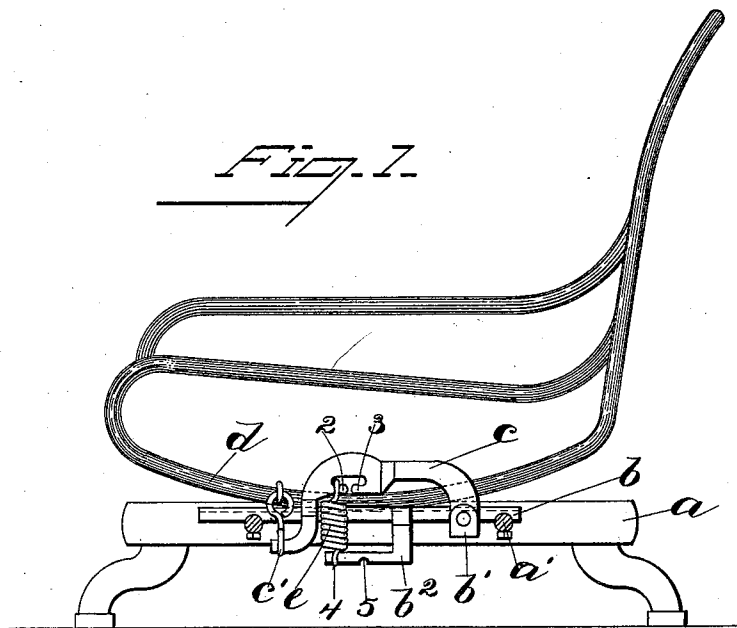
(No Model.)

2 Sheets—Sheet 1.

W. E. RYAN.
ROCKING CHAIR.

No. 540,877.

Patented June 11, 1895.



WITNESSES.
Florence H. Davis.
Charles B. Blocker.

INVENTOR.
William E. Ryan,
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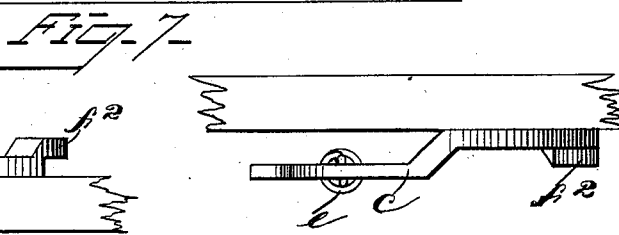
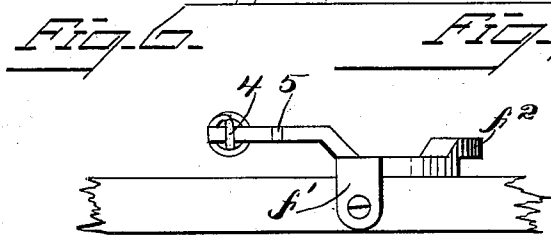
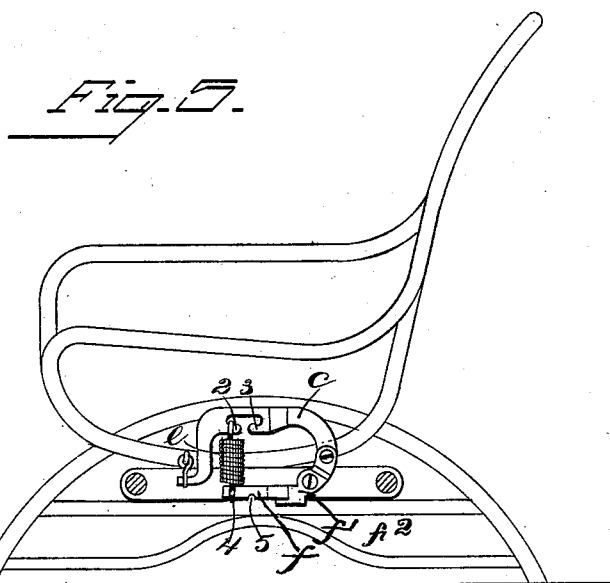
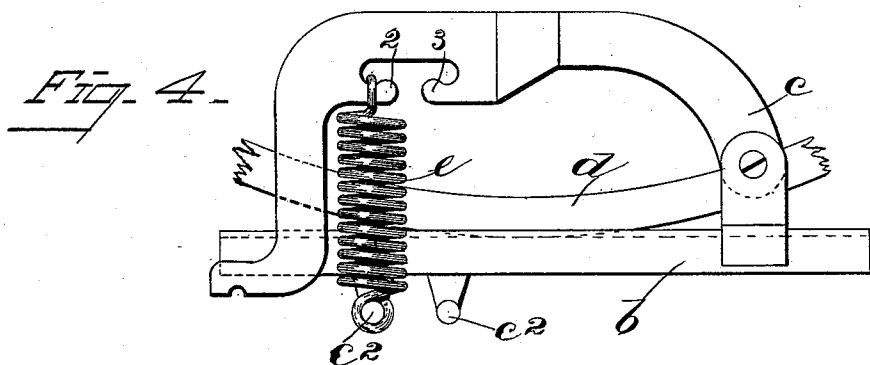
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2 Sheets—Sheet 2.

W. E. RYAN.
ROCKING CHAIR.

No. 540,877.

Patented June 11, 1895.



WITNESSES.

Florence A. Davis.
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UNITED STATES PATENT OFFICE.

WILLIAM E. RYAN, OF SOUTH FRAMINGHAM, MASSACHUSETTS.

ROCKING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 540,877, dated June 11, 1895.

Application filed January 9, 1895. Serial No. 534,357. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. RYAN, of South Framingham, county of Middlesex, and State of Massachusetts, have invented an Improvement in Rocking-Chairs, of which the following description, in connection with the accompanying drawings, is a specification, like letters and numerals on the drawings representing like parts.

This invention has for its object to provide a rocking chair with springs, and supports therefor which in addition to providing points of attachment for the springs, restrain the rocker from moving along the rocker-frame, or base supporting it.

In accordance with this invention the rocker-frame or base which supports the rocker, comprises two parallel bars, preferably grooved at their upper sides to receive the rockers, said bars resting upon suitable supports, and the spring supports, two preferably being employed, each comprise two members, the lower one being formed integral with or secured to the rocker frame, as to the rocker-supporting bar for instance, and the upper one being pivotally connected to the rocker-frame, as to the rocker-supporting bar for instance, and the forward end of the upper member is loosely connected to the rocker, so that as the rocker rocks, the upper member will be moved up and down on its pivot. The upper end of the spring is connected to the upper member, and the lower end to the lower member, and in order that said spring may be adjusted toward and from the pivot of the spring support, each member is provided with two or more points of attachment.

Figure 1 shows in vertical section a rocking-chair embodying this invention; Fig. 2, a plan view of the base provided with rocker-supporting bars and supports or connections for the springs; Fig. 3, a rear end view of the rocker-supporting bars and parts connected therewith; Fig. 4, a modified form of spring-support, to be referred to; Fig. 5, a vertical section of a rocking-chair, showing another modified form of spring-support; Figs. 6 and 7, under side and plan views of the spring-support shown in Fig. 5.

The base of the chair consists essentially of the side pieces *a*, *a*, and transverse connecting pieces *a'*, *a'*. Bolted to said cross pieces *a'*,

a', are two metallic rocker-supporting bars *b*, *b*, arranged in parallelism with and adjacent to the side pieces *a*, the heads of the bolts by means of which they are secured to the bars being countersunk in the bars. A rocker-frame is thus formed.

Each metallic rocker supporting bar *b* has cast integral with it a slotted or other ear or lug *b'*, located near its rear end, to which is pivotally connected a curved or bent arm *c*, said arm extending forward, and being loosely connected at its forward end with the rocker *d*, or it may be the chair body, by means of a link *c'*. The arm *c* has formed in or along its under side two lugs 2, 3, side by side, to provide separate points of attachment for the upper end of the spring *e*, one point, as 3, being nearer the pivotal connection of the arm than the other. This arm *c* constitutes the upper member of the spring support. A lug *b*² is also cast integral with each metallic rocker-supporting bar *b*, which projects downwardly for a short distance, then at right angles in a direction toward the front of the chair, as shown in Fig. 1. The lug *b*² is formed with two notches 4, 5, located beneath the lugs 2, 3, to provide separate points of attachment for the lower end of the spring *e*, more or less distant from the pivotal connection of the arm *c*. This lug *b*² formed integral with or attached to the rocker-frame, as to the rocker-supporting bar for instance, constitutes the lower member of the spring-support.

The upper side of each metallic rocker-supporting bar *b* is grooved to receive the rockers *d*, and in the present case the rockers are circular in cross section, and the grooves in the bars correspondingly shaped. There are material advantages gained by employing metallic rocker-supporting bars, grooved to receive the rockers, as for instance suppose these bars were made of wood they must be made of wide stock to support the rocker, and if grooved to receive a circular rocker the edges are liable to split off if the rockers should swerve ever so little, and they must also be made of considerable thickness to provide a good and efficient support for the pivotal connection of the arm *c*; and for the lug *b*² or its equivalent, and as a result a bar with these parts attached to it presents a very clumsy and otherwise unsightly appearance.

By making the bar of metal the pivotal connection of the arm c and lug b^2 may be cast integral with it, and the whole made very light, yet strong enough to support the weight, and furthermore the cost of construction is materially reduced.

By referring to Fig. 4, the upper part or member of the spring-support is the same as shown in Figs. 1 to 3, but the lower part or member is represented as two separate lugs or hooks c^2, c^3 , formed integral with the rocker-supporting bar, at points directly below the lugs 2, 3, and serving as points of attachment for the lower end of the spring.

Referring to Figs. 5 to 7, the upper part or member c of the spring-support is the same as shown in Fig. 1, and the lower part consists of a plate or bar, cast or otherwise formed with a hook f , notched at 4, 5, to receive the lower end of the spring e , an ear f' by means of which it is secured to the under side of the rocker-supporting bar, and an ear f^2 extending upwardly to which the upper part c is pivoted. This lower part is placed against the inner side of the rocker-frame or bar, and secured by a screw passing through said ear f' , and another screw passing through the plate into the side of the frame. The rocker-frame is made of wood and its rocker-supporting bars have flat tops.

These modifications come within the spirit and scope of my invention.

I claim—

1. In a rocking chair, the combination of a rocker and rocker-frame, a spring-support comprising an upper part pivotally connected at its rear end to a fixed point on the rocker-frame, and loosely connected at its front end with the rocker, a lower part on the rocker-frame, the spring e connecting the parts, the said spring-support restraining the rocker from moving along the rocker-frame, substantially as described.

2. In a rocking chair, the combination of a rocker and rocker frame, a spring-support comprising an upper part having lugs 2, 3, at a point between its ends, and pivotally con-

nected at its rear end to a fixed point on the rocker frame, and loosely connected at its front end with the rocker, and a spring d , the upper end of which is attached to one of the hooks on the upper part, and the lower end of which is attached to a fixed point on the rocker frame, directly beneath its upper end attachment, substantially as described.

3. In a rocking chair, the combination of a rocker and rocker-frame, arm c pivotally connected at its rear end to the rocker frame and loosely connected at its front end to the rocker, spring e interposed between the rocker and rocker-frame, and adjustable toward and from the pivotal connection of said arm c , substantially as described.

4. In a rocking chair, two metallic rocker-supporting bars b, b , having cast integral therewith ears b' , and spring-supporting arms c , pivoted at their rear ends to said ears and connected loosely at their front ends to the rockers of the chair, substantially as described.

5. In a rocking chair, two metallic rocker-supporting bars b, b , having cast integral therewith lugs b^2 which afford points of attachment for the lower ends of springs e , and spring-supporting arms c pivotally connected at their rear ends to said bars b, b , and loosely connected at their front ends to the rockers of the chair, and having points of attachment for the upper ends of the springs e , substantially as described.

6. In a rocking chair, two metallic rocker-supporting bars b, b , grooved at the upper sides, and having cast integral therewith ears b' , and lugs b^2 , spring-supporting arms c , pivoted to the ears, and springs e connecting said arms with the lugs b^2 , substantially as described.

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

WILLIAM E. RYAN.

Witnesses:

B. J. NOYES,
FLORENCE H. DAVIS.