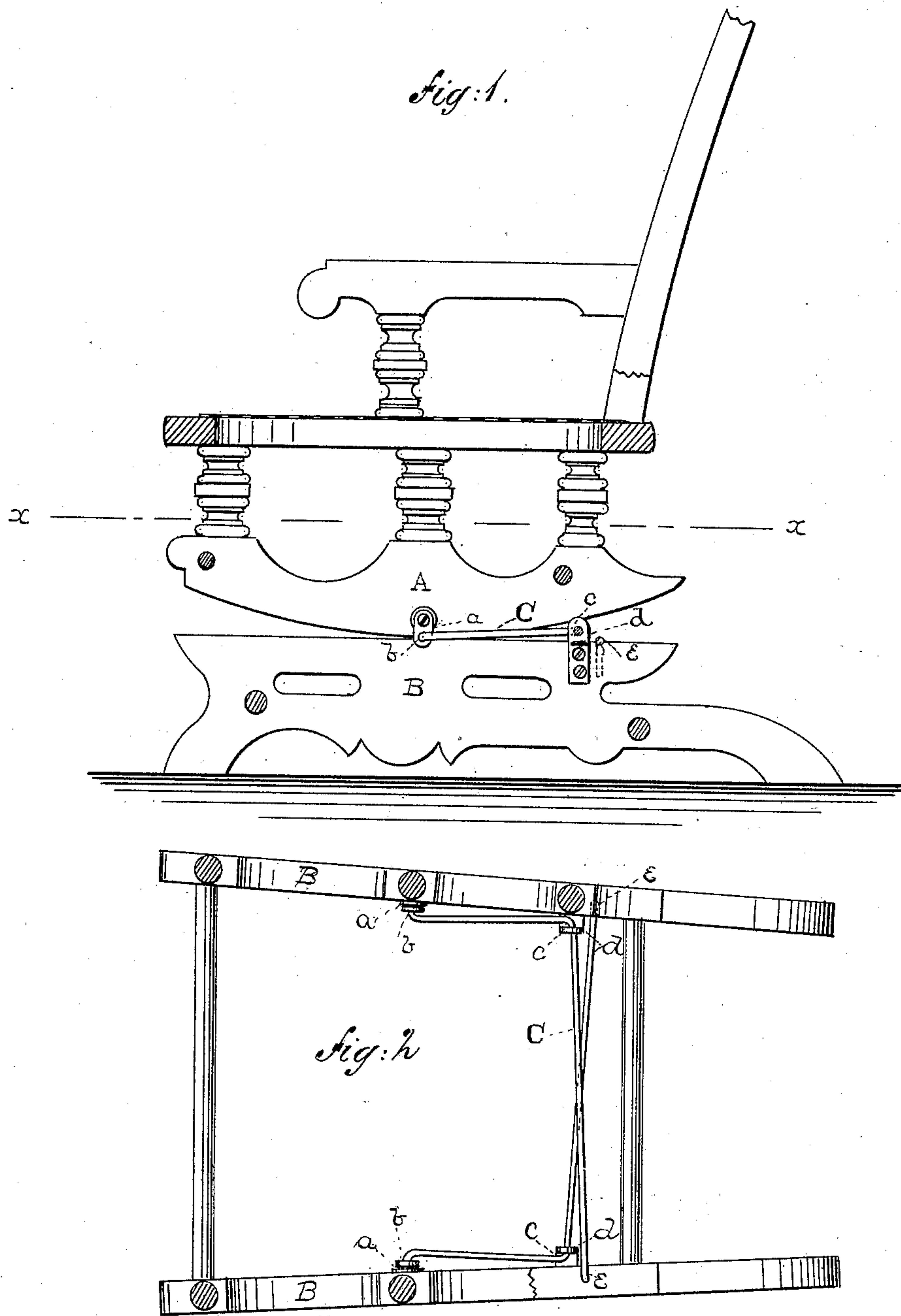


(No Model.)

L. HEYWOOD.  
BASE ROCKING CHAIR.

No. 257,221.

Patented May 2, 1882.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

LEVI HEYWOOD, OF GARDNER, MASSACHUSETTS.

## BASE ROCKING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 257,221, dated May 2, 1882.

Application filed December 8, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, LEVI HEYWOOD, of Gardner, Worcester county, and State of Massachusetts, have invented a new and Improved Base Rocking-Chair; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings.

This invention is in the nature of an improvement in base rocking-chairs; and the invention consists in a base rocking-chair provided with torsional rod-springs fixed between the rockers of the chair and its base, as hereinafter particularly shown, described, and claimed.

In the accompanying drawings, Figure 1 represents a side view of my chair, springs, and base, partly in section. Fig. 2 is a cross-section taken in the line  $x x$ , Fig. 1, showing arrangement of rod-springs.

This invention relates particularly to that class of chairs which have their rockers attached to a fixed base, whereon they rock by the action of the occupant of the chair.

Chairs of this kind have heretofore in their details been variously constructed with springs of different kinds, and also without springs of any kind.

As an improvement upon this class of chairs, to render them more durable and easier to rock, besides lessening their cost and in other respects improving them—for instance, imparting a better uniform rocking motion, which shall approach very nearly that of the ordinary rocking-chair—I construct my chair with the ordinary base-rocker, A, and base B. To each of the rockers A, on their inner surfaces, and at a point midway between their ends, are secured by means of pivotal screws links  $a$ . To these links are fixed the ends  $b$  of the torsional steel rods C. These rods extend backward from the links  $a$  a certain distance parallel with the base B up to a point,  $c$ , at which point the rods are bent at right angles, passing through brackets  $d$ , which confine the rods at these right-angled bends to the base B. From these brackets  $d$  each of the torsional rods C extends across the

width of and to opposite sides of the base B, crossing each other midway between such sides, each of their ends being firmly fixed into such opposite sides of the base, as at  $e$ , so that, as will be seen, each of the two torsional rods is secured at one of their ends to the rocker and by the other end to the side of the base opposite the same.

Now, my base rocking-chair, when constructed substantially as above, operates in this wise: When the chair is rocked backward and forward by the occupant each of the torsional rod-springs C is slightly twisted or contorted, giving them a resilient force, which force not only acts to check the too sudden or jerky rocking that would otherwise result from the use of short rockers, but it also to some extent facilitates the rocking operation of the chair by the occupant, for as the chair is moved or rocked either backward or forward these springs, by their elastic force, tend to restore them to their normal position, from which they have been disturbed by the rocking of the chair, since one end of each spring is fixed to the chair or its rocker, and the other ends are secured to the base, as before stated. As the springs are in this way slightly twisted, they are somewhat shortened, and to allow for this shortening each of the links  $a$  (to which one end of each spring is fixed) is permitted to turn on its retaining-screw  $f$ , which acts as a pivot. Besides, these links also permit a slight front and rear sliding motion of the rockers on the base.

The degree of twist or torsion of the springs may, if desired, be regulated by any simple device applied to the rods—as, for instance, a small slotted wheel and key or a ratchet and pawl—and, if found necessary, stops of any convenient kind may be employed to check the extreme motion of the chair either backward or forward.

From the foregoing it will be seen that a chair constructed substantially as above described is not only simple in its construction, but it is also light, compact, serviceable, and, as compared with other chairs of like character, it is cheaper.

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

5 The rocking portion and base of a base rocking-chair, combined with right-angled torsional springs loosely connected to the rocking portion by centrally-arranged links, and extending thence rearwardly, and rigidly con-

nected to the base on one side at their angles and on opposite sides by their extreme ends, all substantially as herein shown and described.

LEVI HEYWOOD.

Witnesses:

JOHN D. EAGELL,  
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