

A. H. ORDWAY.
Springs for Rocking-Chairs.

No. 138,757.

Patented May 13, 1873.

Fig. 1.

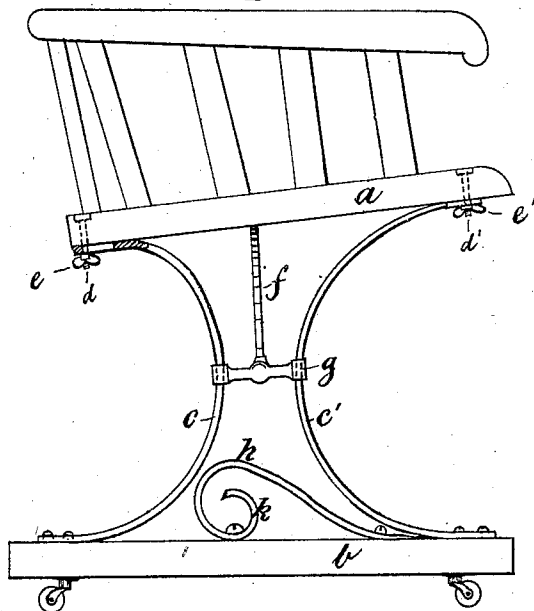


Fig. 3.

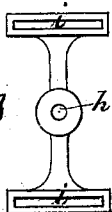
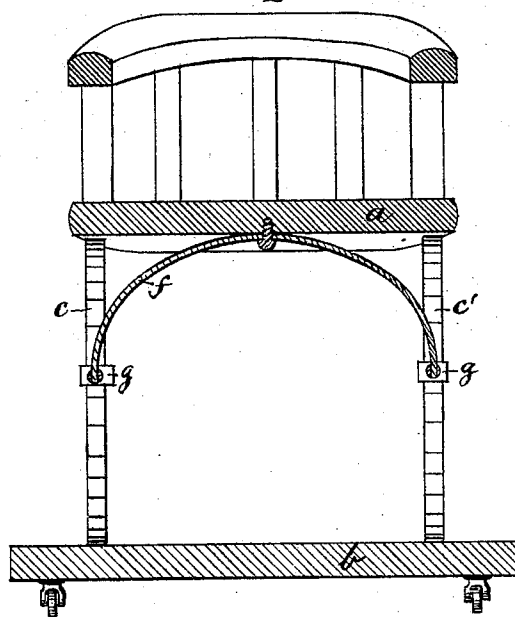


Fig. 2.



Witnesses:

John R. Heard.
Horace W. Sproat.

Inventor:

Albert H. Ordway.
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UNITED STATES PATENT OFFICE.

ALBERT H. ORDWAY, OF HAVERHILL, MASSACHUSETTS.

IMPROVEMENT IN SPRINGS FOR ROCKING-CHAIRS.

Specification forming part of Letters Patent No. **138,757**, dated May 13, 1873; application filed March 25, 1873.

To all whom it may concern:

Be it known that I, ALBERT H. ORDWAY, of Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Springs for Rocking-Chairs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawing which forms part of this specification.

My invention relates to improvements on the patent granted to me July 9, 1872, for cradles, chairs, &c., consisting in providing the upper ends of the springs with slot-holes and thumb-screws, or their equivalents, by which the strength of the springs can be easily regulated according to the weight of the person occupying the chair; also in an arched connection between the braces for the springs and the under side of the seat, whereby the chair is prevented from rocking sidewise; also to an improved brace for the springs, constructed so that the springs do not touch each other, but are kept apart in separate holes in the said brace, for the purpose of obtaining greater strength of the springs than could be obtained if the springs were brought in close contact with each other; and, lastly, to brakes or stoppers attached to the lower frame, for the purpose of preventing the lower parts of the rear springs from bending too much when the chair is rocked backward.

On the drawing, Figure 1 is a side elevation. Fig. 2 is a longitudinal section; and Fig. 3 is an enlarged plan of the brace.

Similar letters refer to similar parts wherever they occur on the drawing.

a is the seat of the chair, cradle, &c., and *b* is the lower frame in the usual manner. The curved springs *c c'* are secured to the frame *b* by means of suitable screws, as shown, in the ordinary way. The upper ends of the springs *c c'* are each provided with a slot-hole, through which projects a bolt, *d d'*. Said bolts are held firmly in the seat *a* and cut with a screw-thread in their lower ends, and, furthermore, provided with thumb-nuts *e e'*, or their equiv-

alents, as shown, by which the springs *c c'* can be adjusted and secured firmly in place after being adjusted. This arrangement obviates the necessity of making different sizes of the springs for heavy and light persons, as the springs can now be made strong or weak simply by moving them out or in on the bolts *d d'*, as shown. Another advantage of the use of the slotted upper ends of the springs *c c'* is that the chair can be tipped more or less, as may be desired, simply by lengthening the rear springs and shortening the front ones, or vice versa. The arched connection *f* is shown in Figs. 1 and 2. The same consists of a suitable metal rod, bent or cast to an arched shape, as shown, the middle of the said connection *f* is secured by means of screws or otherwise to the under side of the seat *a*, and the ends are attached to each of the braces *g g*, by which arrangement the chair, cradle, &c., is prevented from swinging sidewise. The brace *g* is shown enlarged in Fig. 3. The said brace is provided in the middle with a hole, *h*, for the end of the connection *f* to be attached thereto. In each end of the brace *g* is a slotted hole, *i i*, as shown, for the springs *c c'* to be inserted through the said perforations.

The object of having two separate holes for the respective springs *c* and *c'* is to shorten the leverage of said springs, and in this way increase the strength and durability of them, and I need not now use as strong springs as when they did meet in the middle, as formerly done.

The brake or stopper *k* is attached in a suitable manner to the lower frame *b*, as shown, in such a manner that the lower part of each of the springs *c c'* will come in contact with each stopper *k k*, and in this way prevent the chair from going too far backward, when the person occupying the chair is leaning back too heavily. The brake *k* may be made solid, rigid, or elastic, as may be desired.

What I wish to secure by Letters Patent and claim is—

1. In combination, with the seat *a* of a chair, cradle, &c., and the frame *b*, the springs *c c'*

having slot-holes in their upper ends, of the screw-bolts *d d'*, and thumb-bolts *e e'*, or their equivalents, as and for the purpose set forth.

2. The combination of the springs *e e'*, arched brace *f*, and the braces *g g* having each two openings, *i i*, in a manner set forth.

3. In combination with the frame *b*, seat *a*, springs *e e'*, of the brake or stopper *k*, as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of February, 1873.

ALBERT H. ORDWAY.

Witnesses:

ALBAN ANDRÉN,
JOHN R. HEARD.