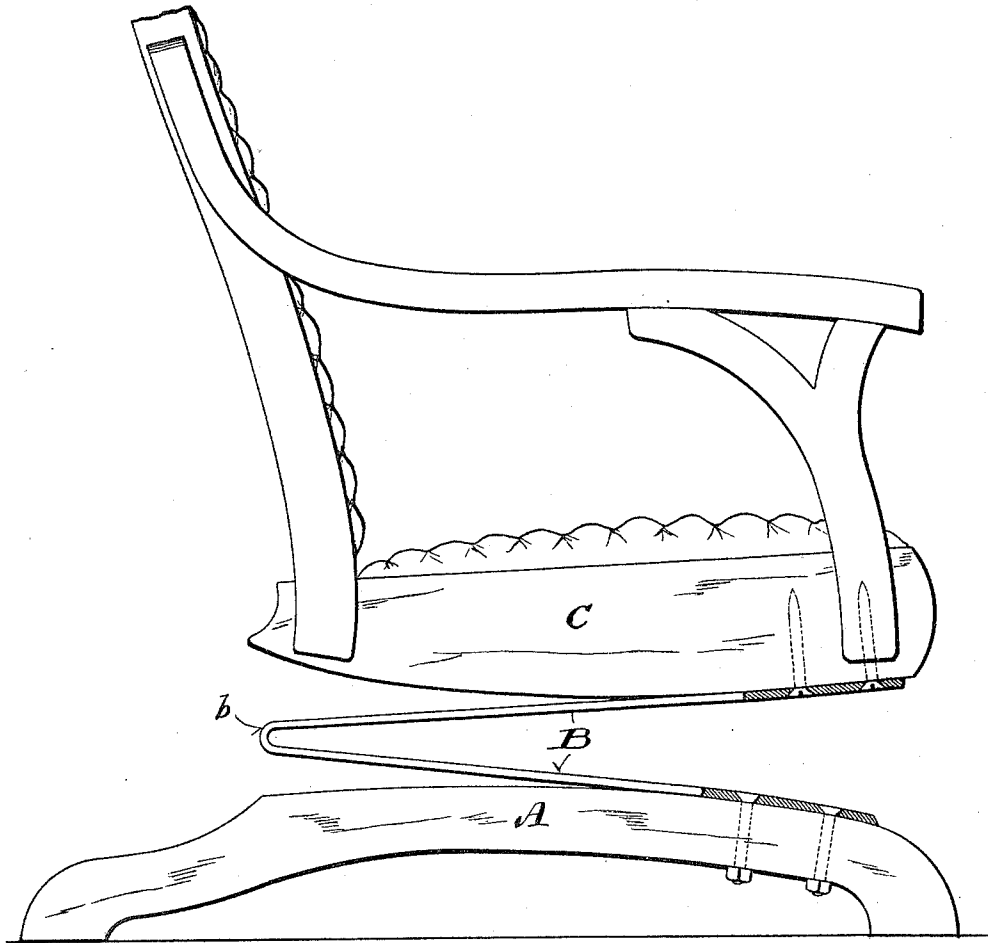


(No Model.)

M. W. NEUENS.
SPRING ROCKER.

No. 581,762.

Patented May 4, 1897.



Witnesses:
Geo. W. Young,
N. E. Oliphant

Inventor:
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UNITED STATES PATENT OFFICE.

MICHAEL W. NEUENS, OF PORT WASHINGTON, WISCONSIN, ASSIGNOR OF
ONE-HALF TO REINHARD STELLING, OF SAME PLACE.

SPRING-ROCKER.

SPECIFICATION forming part of Letters Patent No. 581,762, dated May 4, 1897.

Application filed December 30, 1896. Serial No. 617,447. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL W. NEUENS, a citizen of the United States, and a resident of Port Washington, in the county of Ozaukee and State of Wisconsin, have invented certain new and useful Improvements in Spring-Rockers; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide a simple, economical, strong, and durable spring-rocker that will have an easy noiseless action. Hence said invention consists in certain peculiarities of construction and combination of parts hereinafter set forth with reference to the accompanying drawing and subsequently claimed.

The drawing represents a side elevation of a platform rocking-chair constructed according to my invention, a spring constituting one element of the construction being shown partly in section.

Referring by letter to the drawing, A represents one of a pair of side pieces that are united in any suitable manner to form a base, the latter in the present showing being a rocking-chair platform. Each side piece of the base has the greater portion of its upper edge convex, and bolted or otherwise rigidly secured on this convex upper edge of the side piece is one end of a recurved spring-metal plate B, the other end of the plate being rigidly secured by screws or other suitable means to the convex under edge of a side piece C, that constitutes part of the chair-seat frame, the bend *b* of said plate being herein shown to the rear and normally clear of the opposite convex surfaces.

While my invention has particular reference to a platform rocking-chair, it is just as applicable to a crib, cradle, or other device that embodies a base and superstructure having opposite convex surfaces joined to the ends of an interposed recurved plate of spring metal.

In practice the convex surface of the superstructure opposed to a spring of the kind shown and described will rock upon the same, and the latter will have play on the opposing convexity of the base, the expansion and con-

traction of the spring being gradual at all times throughout its length.

The strength of the springs is sufficient to prevent their full contraction when load is put upon the superstructure, and thus said springs have the function of imparting up-and-down motion to said superstructure. It is also to be understood that as the superstructure has rearward tilt the distance between the front ends of the leaves in each spring increases in proportion as the rear bend of said spring is caused to approach the base.

The bend *b* of the spring not being sharp there is little or no liability of the metal becoming crystallized at that point, and the rocking action is easy, noiseless, and free from jar, while at the same time there is no appreciable strain on the bolts or screws employed to fasten the ends of said spring to said base and superstructure. Hence these bolts or screws do not work loose in the material with which they engage.

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

1. A base and superstructure having opposite convex surfaces, in combination with a recurved spring-metal plate having one end thereof made fast to the convex surface of the base and the other end in like connection with the convex surface of the superstructure, whereby provision is had for rock of the lower leaf of the spring upon the base in proportion to the rock of said superstructure on the upper leaf of said spring, the latter being of strength sufficient to prevent full contraction when load is put upon the aforesaid superstructure.

2. A chair-base embodying side pieces each of which is convex upon its upper edge, and a seat-frame having the under edges of its side pieces convex, in combination with recurved spring-metal plates each of which is made fast at its ends to the convex surfaces of the opposing base and seat-frame side pieces, the bends of the plates being rearward and normally clear of the opposing convex surfaces, whereby provision is had for rock of the lower leaves of the springs upon the

base in proportion to the rock of the seat-
frame upon the upper leaves of said springs,
the latter being of strength sufficient to pre-
vent full contraction when load is put upon
5 said seat-frame.

In testimony that I claim the foregoing I
have hereunto set my hand, at Port Washing-

ton, in the county of Ozaukee and State of
Wisconsin, in the presence of two witnesses.

MICHAEL W. NEUENS.

Witnesses:

ALEXANDER ZASTROW,
O. A. STELLING.