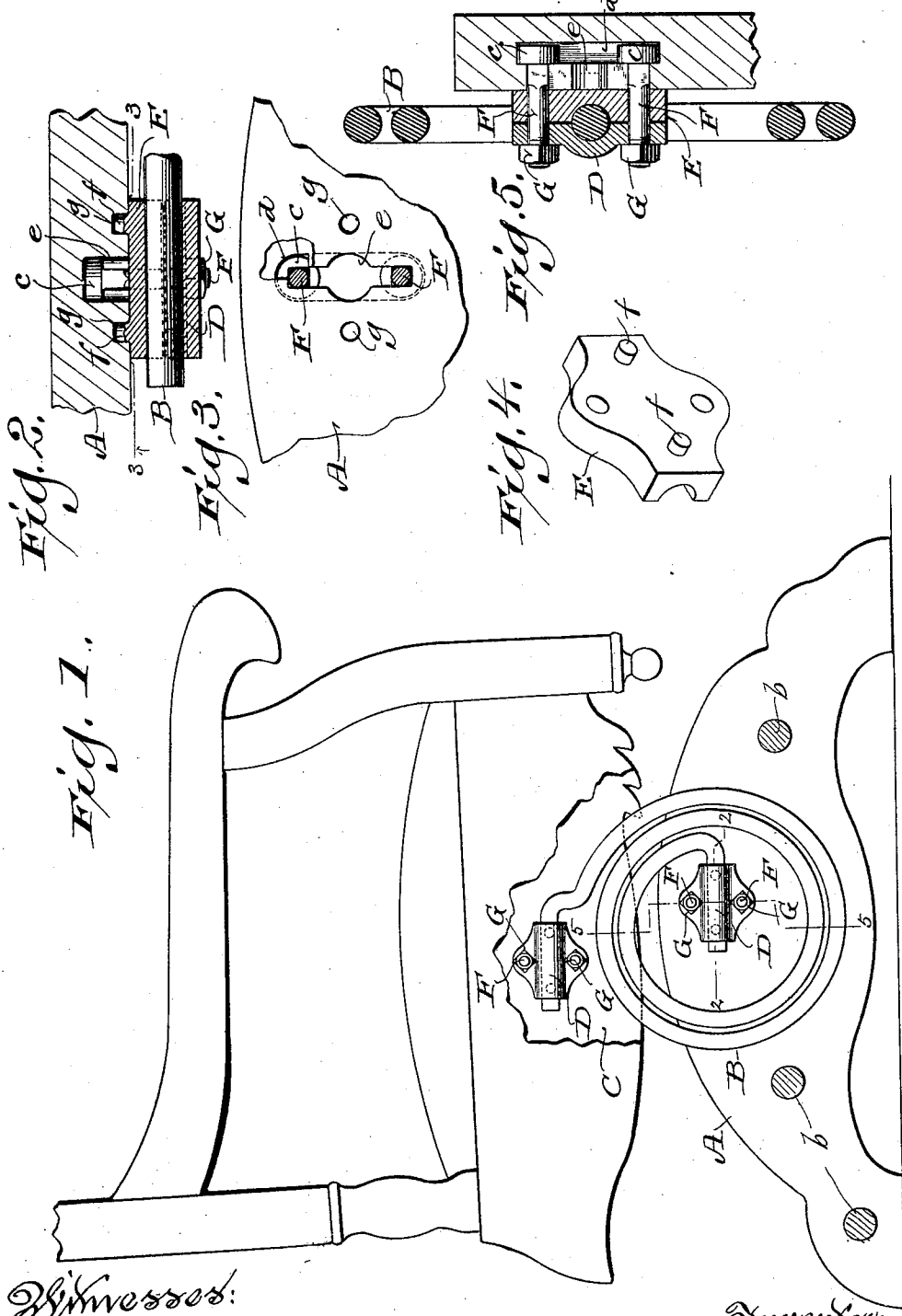


(No Model.)

A. WHITE.
SPRING ROCKER.

No. 574,594.

Patented Jan. 5, 1897.



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

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UNITED STATES PATENT OFFICE.

ARTHUR WHITE, OF PLYMOUTH, WISCONSIN, ASSIGNOR OF ONE-HALF TO
ADOLPH W. SCHRAM, OF SAME PLACE.

SPRING-ROCKER.

SPECIFICATION forming part of Letters Patent No. 574,594, dated January 5, 1897.

Application filed July 16, 1896. Serial No. 599,376. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR WHITE, a citizen of the United States, and a resident of Plymouth, in the county of Sheboygan 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, durable, and noiseless easy-action spring-rocker embodying a suitable base, convolute springs connected at their inner ends to the base, and a superstructure in union with the outer ends of the springs, said invention consisting in certain peculiarities of construction and combination of parts hereinafter specified with reference to the accompanying drawings, and subsequently claimed, especial reference being had to the means for connecting the springs with said base and superstructure.

In the drawings, Figure 1 represents a chair embodying my improvements, the base of the same being in section and the rocking superstructure in side elevation partly broken away; Fig. 2, a detail sectional view on the plane indicated by line 2 2 in Fig. 1; Fig. 3, a partly-sectional view on the plane indicated by line 3 3 in Fig. 2; Fig. 4, a perspective view of a plate embodied in one of the spring-clamps constituting a feature of my improved rocker, and Fig. 5 a sectional view on the plane indicated by line 5 5 of Fig. 1.

Referring by letter to the drawings, A represents one of a pair of parallel standards, and *b* the rounds of a chair-base. In practice the inner end of a convolute spring B is rigidly connected to the inner vertical side of each base-standard, and the outer end of each spring is likewise connected to the inner vertical side of a side bar C of a seat-frame, constituting part of the superstructure of the chair.

While my improvements have particular reference to chairs, they are just as applicable to cradles, cribs, or any other device embodying a base and superstructure in union with convolute springs to constitute a spring-rocker. Therefore the terms "base" and "superstructure" are employed in a generic sense.

It is necessary that the union of the springs with the base and superstructure be as strong and unyielding as possible, and it is desirable that none of the parts in the joints appear from the outside of the chair or other device embodying said improvements. Therefore the especial feature of the invention is the means and manner of connecting said springs with said base and superstructure.

Each connection for an end of spring B with the base or superstructure embodies a pair of parallel metal plates D E, having their opposing faces recessed to engage an end of the spring, and each end of each spring is preferably horizontal, as herein shown, the contact area of all the plate recesses being similar. Each pair of plates are held together on the spring by means of bolts F engaging suitable openings in said plates, and nuts G run on the inner ends of the bolts, the bolt-heads *c* being let into a superrotated recess *d* of the adjacent base-standard or side bar of the superstructure, as the case may be, through a suitable aperture *e* open on the inside of said base-standard, or superstructure side bar, whereby said bolt-heads are entirely concealed from view and the outer finish of the chair or other structure is unimpaired. Each pair of plates and the bolts and nuts cooperative therewith constitute a clamp, and the outer plate of each clamp is provided with lugs *f*, that engage corresponding seats *g* in the adjacent base-standard or superstructure side bar according to the location of said clamp, and these lugs are arranged to prevent torsional strain of the plates on the bolts; otherwise the latter are liable to work loose in the woodwork of the structure.

The clamp-plates are of considerable length in order that the ends of the springs may have a proportional amount of frictional contact with their seats, so as to strengthen the union of said springs with the base and superstructure.

It is preferable in a chair to have the greatest length of each lower or base clamp extend forward from a vertical line central of the spring, and also to have the greatest length of the upper or superstructure clamp extend rearward from said line, whereby when a chair is occupied there will be a tendency of the spring to contract and induce initial

toward the rear, because of the leverage obtained in this direction, owing to the peculiar disposition of said clamps.

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

1. The combination of a base and superstructure provided with recesses, bolts having their heads concealed in said recesses, a pair of parallel plates held against torsional strain on each set of bolts and having their opposing faces recessed, nuts run on the bolts against a plate in each pair, and convolute springs having each end thereof engaging the recesses in a pair of said plates.

2. The combination of a base and superstructure each provided with supermounted recesses in communication with apertures open

on the inside of the parts aforesaid, bolts having their heads let in the recesses through the apertures, a pair of parallel plates on each set of bolts and the outer plate in each pair provided with lugs engaging seats in the adjacent base or superstructure, nuts run on the bolts against the adjacent plate, and convolute springs having each end thereof engaging recesses in the opposing faces of a pair of plates.

In testimony that I claim the foregoing I have hereunto set my hand, at Sheboygan, in the county of Sheboygan and State of Wisconsin, in the presence of two witnesses.

ARTHUR WHITE.

Witnesses:

J. H. NICKEL,
O. H. ARNDT.