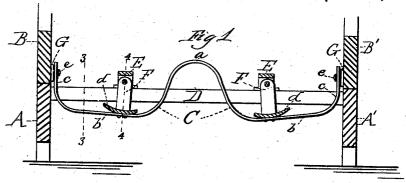
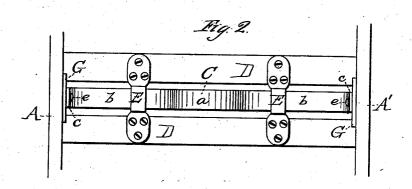
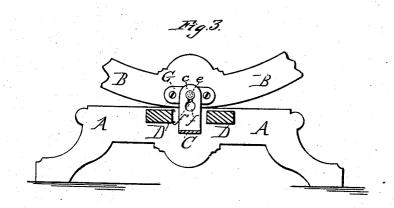
W. SENG. Rocking Chair.

No. 239,986.

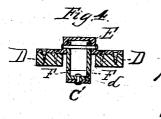
Patented April 12, 1881.







WITNESSES. F.B. Soursud F.W. Kasehagen.



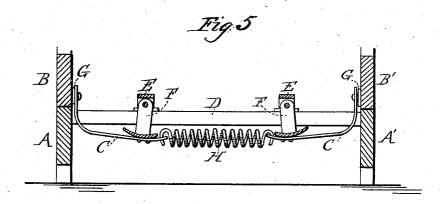
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W. SENG. Rocking Chair.

No. 239,986.

Patented April 12, 1881.



WITNESSES. F. B. Townsend J.W. Kasehagen Mendelin Seng, By Loty & Dyer. Attge.

## UNITED STATES PATENT OFFICE.

WENDELIN SENG, OF CHICAGO, ILLINOIS.

## ROCKING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 239,986, dated April 12, 1881.

Application filed December 7, 1880. (No model.)

To all whom it may concern:

Beit known that I, WENDELIN SENG, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Rocking-Chairs, of which the

following is a specification.

The object I have in view is to produce a plate-spring attachment for platform rockingchairs extending transversely across the chair, 10 which will be durable in use and efficient in operation, will not require hinging at any points to prevent breaking, will not need any stops, which are objectionable for the reason that they check the rocking movement suddenly, and, further, will be constructed so that the spring can be connected at its ends with the rockers after the fastening-plates have been secured to such rockers.

My invention therein consists in the pecu-20 liar devices and combinations of devices employed by me, all as fully hereinafter explained, and pointed out by the claims.

In the accompanying drawings, forming a part hereof, Figure 1 is a vertical cross-section of the base and the rockers of a platform rocking-chair embodying my invention; Fig. 2, a top view of the center of the rockers and the spring attachment; Fig. 3, a vertical section at right angles to Fig. 1 on line 3 3; Fig. 30 4, a cross-section of the spring attachment on line 4 4 in Fig. 1; and Fig. 5, a view, similar to Fig. 1, of a modified form of the spring.

Like letters denote corresponding parts in

all the figures.

A A' are the side rails of the base or platform, and B B' are the rockers of a platform rocking-chair, such rockers resting and rock-

ing directly upon the side rails.

C is the plate-spring extending transversely 40 across the chair, and connected at its ends to the rockers, and secured at intermediate points to the base. By my invention this plate-spring is bent upwardly at the center, as shown by a. From this curved center each side b of the 45 spring extends horizontally, or substantially so, nearly to the side rails of the base, where the ends c are turned upwardly to make connection with the rockers.

The rails A A' of the base are connected by 50 cross-bars D, placed a short distance apart, one on each side of the longitudinal center of such | It would be elongated by the rocking of the

base-rails. These cross-bars are connected by two plates, E, which are fastened by screws to such bars, and have pivoted to them the down-

wardly-hanging **U**-links F.

The links F have shoes d, which are riveted to the horizontal portions b of the plate-spring C, on each side of the bent center thereof. These swinging links form the means for connecting the plate-spring to the base, and they 60 swing outwardly when the chair is rocked and permit the spring to elongate by bending at the center. The shoes d of the swinging links extend outwardly from the center of the links more than inwardly, so that the links can be 65 swung readily by the upward movement of the ends of the springs.

To the center of the rockers B B', on their inner sides, are secured, by screws, the fastening-plates G, each of which is provided with a 70

headed stud, e, projecting therefrom. The ends c of the plate-spring have fastening eyes and slots ff', which engage with the headed studs and secure the spring removably thereto.

By having the plate-spring removably secured to the rockers the fastening-plates G can be first secured, and the spring afterward drawn up and hooked to them, which enables the parts to be much more easily applied than 80 where the spring is secured to the plates at its ends before such plates are fastened in place; and, in addition, the removable fastenings allow the chair and base to be separated for any purpose without the trouble of taking 85 out the fastening-screws.

My spring having a double action, it can be made in one piece, and can be connected directly to the rockers without the intervention of hinged plates. My double-acting spring 90 also gives an exceedingly easy motion to the chair, and can be made stiff enough, so that no stops will be required to limit the rocking movement.

As a modification of my spring, instead of 95 having a bent center capable of elongation, such center can be replaced by a spiral spring, H, Fig. 5, connecting the swinging links, or the end plates secured to such links. The spring constructed in this manner would have 100 the same action as the continuous plate-spring.

as with the construction first described.

What I claim as my invention is-

1. In a platform rocking-chair, the swing-5 ing links F, pivoted to the base on opposite sides of the center, and connected with the rockers, in combination with a spring connecting such links, said spring being elongated when the chair is rocked, substantially as de-10 scribed and shown.

2. In a platform rocking-chair, the doubleacting spring arranged transversely across the chair and connected at its ends with the rockers, in combination with swinging links F, piv-15 oted to the base on opposite sides of the center thereof, whereby the spring will be bent at |

chair, and the end plates would be deflected, | its ends and elongated at the center when the chair is rocked, substantially as described and shown.

3. In a platform rocking-chair, the combi- 20 nation, with the side rails, A A', having crossbars D, and the rockers BB', of the transverse double-acting plate-spring C, bent at its center, and fastened at its ends to the rockers, the plates E, secured to the cross-bars D, and the 25 swinging links F, pivoted to the plates E and secured to the spring on each side of its bent center, substantially as described and shown. WENDELIN SENG.

Witnesses:

OLIVER W. MARBLE, F. W. KASEHAGEN.