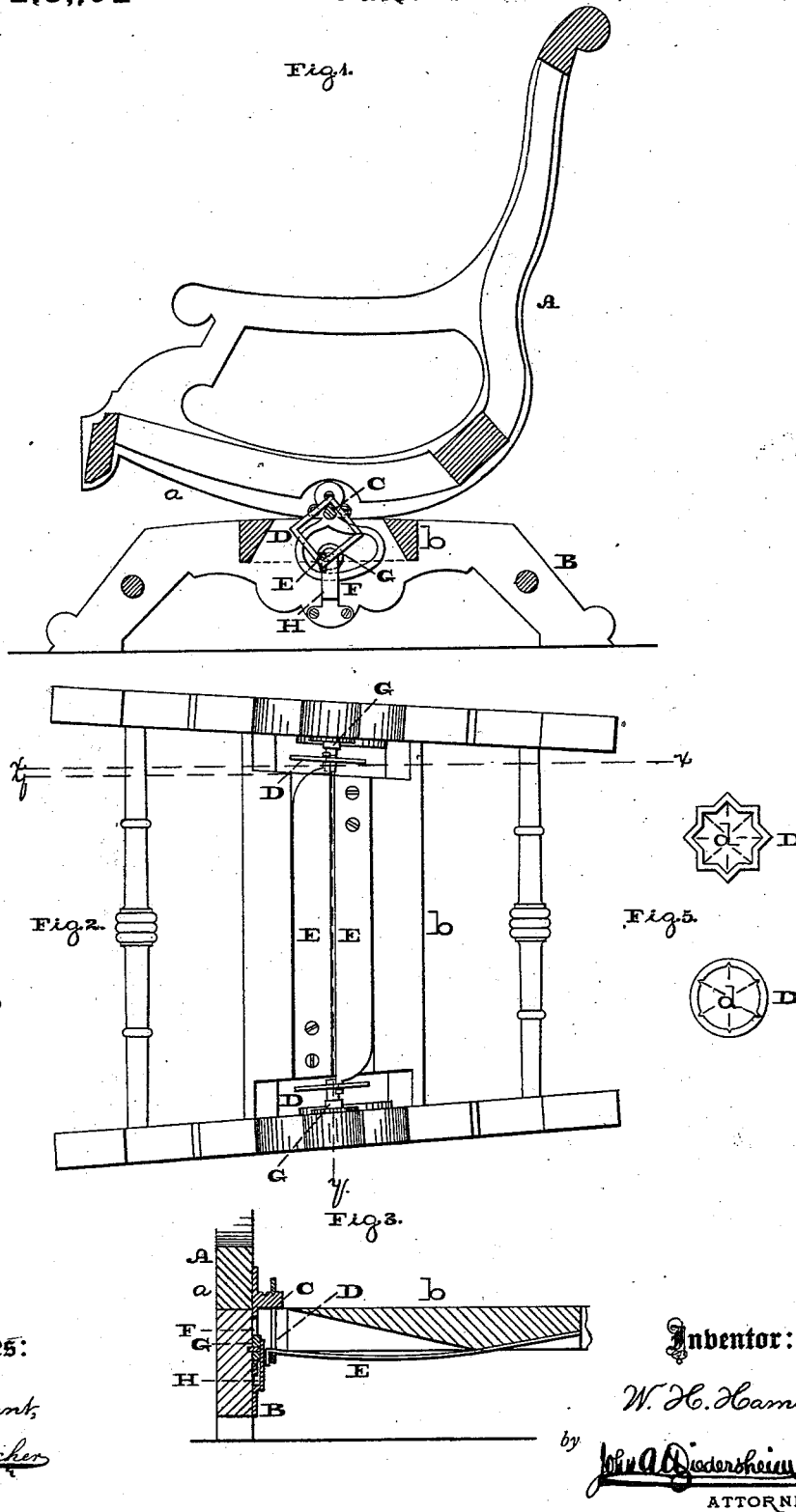


W. H. HAMAN.  
Rocking-Chair.

No. 213,192

Patented Mar. 11, 1879.



Witnesses:

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## IMPROVEMENT IN ROCKING-CHAIRS.

Specification forming part of Letters Patent No. **213,192**, dated March 11, 1879; application filed December 26, 1878.

*To all whom it may concern:*

Be it known that I, WILLIAM H. HAMAN, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Rocking-Chairs, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a vertical section in line *x x*, Fig. 2, of the rocking-chair embodying my invention. Fig. 2 is a bottom view thereof. Fig. 3 is a transverse section of a portion in line *y y*, Fig. 2. Figs. 4 and 5 are views of various forms of connecting-links.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in connecting the rocking portion of the chair to springs on the base by means of links which are formed with several notches, faces, or points on their inner sides, whereby, as one set of faces is worn, the links may be shifted, in order to present fresh places of attachment.

It also consists of the combination of parts to form an improvement in rocking-chairs.

Referring to the drawings, A represents the chair, and B the base, on which the same is caused to rock. From each rocker *a* there projects inwardly and horizontally a pin, C, from which is suspended a link, D, to whose lower end is attached a transversely-extending spring, E, thus employing two springs, E, one end of each of which is connected to the piece *b*, and the other end has a hook or eye for attachment to the respective links D, and said piece *b* is channeled or grooved to permit vertical play of the springs.

Depending from the rockers *a* are stirrups F, firmly connected thereto, and into the space or open portion of said stirrups there project elastic rollers G, mounted on brackets H, secured to the base B.

The operation is as follows: When the chair is rocked the rockers *a* move on the base A, and as they pass the center they elevate the pins C, and consequently the links D, whereby the springs are brought into service, the action whereof counterbalances the chair and renders its motion easy and gentle, the comfort and convenience whereof will be readily appreciated by the occupant of the chair.

It will be seen that as the springs are arranged transversely, and connected at opposite inner ends to the piece *b* of the base, and attached at their outer ends to the respective links D, I employ long springs, and obtain full power of one spring for each side of the chair. The channeled or grooved piece *b* of the base also covers, and in a measure conceals, the said springs E.

The links D are readily applied to and removed from the pins C and springs, and the bearing-faces, notches, or points *d* on their inner sides are numerous, whereby, as said faces or points wear away, the links may be shifted, and new or fresh faces or points of connection may be presented and employed.

When the chair is rocked to a great extent or full sweep, the stirrups, swinging to the front and rear, are brought alternately at opposite ends into contact with the rollers G, which, serving as stops, limit the rocking motions and prevent overturning of the chair.

As the rollers are elastic and the stirrups come in contact with them the limit of the rocking motions of the chair is not abrupt, and strain on the parts is prevented; but the rollers may be inelastic, and pins or arms employed in lieu thereof.

In transporting or carrying the chair, should the rocking portion be materially separated from the base, the stirrups and rollers limit such separation, and thus provide an additional connection for the chair and base.

I am aware that it is not new to connect the rockers to the base by means of springs and connecting-links, and to limit the movement of the rockers by means of stirrups and pins; wherefore I disclaim such features.

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

1. The chair A and base B, with pins C and springs E, in combination with the removable and shiftable links D, formed with the several notches or bearings *d* on their inner sides, substantially as and for the purpose set forth.

2. The chair A, provided with pins C, the base B, provided with the channeled or grooved piece *b*, and the connecting-links D, in combination with the two transverse springs E, which are secured at opposite ends to said

piece *b*, and play in the channels or grooves thereof, and have their outer ends attached to the links D, substantially as and for the purpose set forth.

3. The chair A, provided with the pins C and stirrups F, and the base B, provided with the springs E and rollers G, in combination with the shifting connecting-links formed

with the series of notches *d* on their inner faces, all constructed, arranged, and operating as described, and forming an improvement in rocking-chairs.

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