(No Model.)

C. KADE.

ROCKING CHAIR ATTACHMENT.

No. 451,490. Patented May 5, 1891.

Fig. 1.

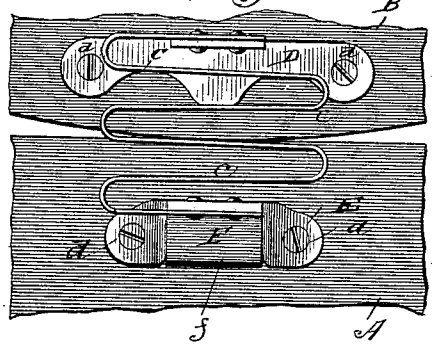


Fig. 2.

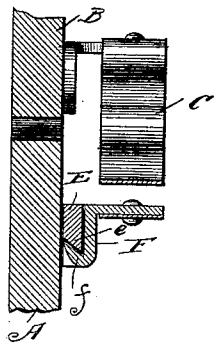


Fig. 3.

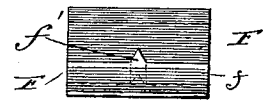


Fig. 4.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES KADE, OF CHICAGO, ILLINOIS.

ROCKING-CHAIR ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 451,490, dated May 5, 1891.

Application filed August 20, 1889. Serial No. 321,377. (No model.)

To all whom it may concern:

Be it known that I, CHARLES KADE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Rocking-Chair Attachments, of which the following is a specification.

My invention relates to spring attachments whereby to connect the base and rocking parts of platform rocking-chairs together.

My invention consists in an attachment comprising a flat leaf-spring having one or more bends or turns lying one above the other and in the same vertical plane, a bracket secured to one end of the spring and adapted to be secured to one part of the chair, and a bracket member secured rigidly to the other end of the spring, and consisting, essentially, of an angle-plate having one edge thereof upturned at an angle to the body of the flange to provide a hooking edge and a second member comprising a plate having its ends apertured for the passage of screws, whereby to secure it to the chair and its middle portion, between its ends, beveled outwardly to engage the edge of the other member.

In the drawings, Figure 1 is a side elevation of the attachment applied to the base and rocker with the parts in position for use. Fig. 2 is a section through the last turn of the spring and through the members of the detachable bracket. Figs. 3 and 4 show the engaging members of the detachable bracket separately.

In the drawings, A represents the base, and B the rocker, of the platform rocking-chair.

C represents the spring proper, which consists of a number of return-bends *c*, the bends being formed flatwise of the strip, which may be of band-steel. I prefer to form the entire spring from a single strip of this band-steel, the bends following curved lines in order to prevent fracture of the metal and to impart a high degree of resiliency. To one of the ends of these springs is rigidly secured a bracket, the vertical member whereof is marked D, having flanges apertured for the passage of the securing-screws *d*. The horizontal member may be riveted to the last turn of the spring, as shown in Fig. 1. The other end of the spring will be detachably connected with the chair by means of a bracket consisting of two members E and F. The member E is a casting having flat ends provided with screw-apertures to secure it to the chair, and its middle portion has its lower edge cut away on a re-entrant angle to provide an overhanging lip *e*. The other member of the bracket (marked F) is an angle-bar having the margin of one of its flanges upturned on an angle corresponding to that of the overhanging lip *e*, and thus is provided a hooking edge *f*, which is adapted to engage the lip *e* when the spring is distended for the purpose of connecting the parts, and in use the resiliency of the spring will insure the retention of the hooking edge *f* beneath the lip, and thus the parts will be locked together.

In order to prevent the shifting of the hooking edge lengthwise of the lip, I provide in this overhanging lip a notch or seat *e'*, and on the hooking edge *f* I provide an upwardly-projecting spur or triangularly-pointed lug *f'*, which is adapted to enter the seat *e'*, thereby centering the parts and preventing their longitudinal movement with relation to each other.

For purpose of ready attachment and detachment the spring may be flexed slightly beyond its normal movement when in use on a chair, and when released the resiliency of the spring will draw the hooking edge firmly to its seat on the under surface of the lip. This form of attachment is capable, therefore, of complete application to a chair-frame and for ready detachment when the chair is to be shipped or taken apart for any purpose. Of course the separable part of the bracket might be applied to the rocker instead of the base-rail, and both ends of the spring might be fitted with this separable bracket.

An advantage of the present construction is that the parts may be readily separated, their engagement being such that they are not wedged together in use, so as to become difficult to separate. The bearing of the parts is extended in the line of the rocking strain, and thereby the brackets are held against movement on each other, while the spring only is flexed. By this construction all the

advantages of a rigid attachment of the ends of the spring are secured, while at the same time the feature of detachability is secured.

I claim—

1. A rocking-chair attachment comprising a spring formed from a flat strip of resilient metal having a plurality of bends lying in the same vertical plane, in combination with attaching-brackets to which the ends of the spring are rigidly secured, one of said brackets consisting of two parts or members, one adapted to be secured to one of the parts of the chair and provided with an overhanging lip and the other rigidly secured to the spring and provided with a hooking edge adapted to engage said lip, substantially as described.

2. A rocking-chair attachment comprising a spring formed from a flat strip of resilient metal and having a plurality of bends lying in the same vertical plane, said spring having one of its ends rigidly secured with a bracket, whereby to connect it to one of the parts of the chair, and a two-part bracket, one member whereof is secured with the other part of the chair and provided with an overhanging lip and the other member whereof consists of an angle-plate, one flange of which is rigidly secured with the spring and the other flange having a hooking edge adapted to engage the lip, substantially as described.

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