

UNITED STATES PATENT OFFICE.

ANTHONY SNYDER, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF HIS RIGHT TO PHILIP GREENWALD, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN OSCILLATING CHAIRS.

Specification forming part of Letters Patent No. 184,305, dated November 14, 1876; application filed May 1, 1876.

To all whom it may concern:

Be it known that I, ANTHONY SNYDER, of Springfield, State of Massachusetts, have invented an Improved Rocking-Chair, of which the following is a specification:

My invention consists in an improved rocking and easy chair, in which the seat, with its arms and back, is hinged above the bottom, so as to swing between supports, and be linked to a foot rest or platform, swinging upon an axis parallel to that of the seat and below it, so that both seat and platform shall swing together, and at the will of the occupant of the chair, through a slight movement of the body; and my improvements further relate to the construction of the mechanism for controlling the extension of the foot-platform, and for adjusting the balance of the swinging parts to the weight of the person in the chair.

In the drawings, Figure I shows one of duplicate sides of my chair; Fig. II, a plan view of the bottom; and Figs. III and IV detail views.

The seat A is hung on trunnions at *a* to the frame or legs B, so that the center of gravity of the seat when occupied will be below its supports. The platform C is hinged at *c* to the frame B by means of a rock-shaft or trunnions, and the seat A and platform C are connected by the links or flexible straps D to one side of their hinges, so that the preponderance of the seat on one side of its center is offset by the excess of weight of the platform upon the other side of its center; and to compensate for the change of balance caused by the extension or retraction of the platform, I make the point of attachment of the straps D to the platform adjustable, so that the center of gravity of the connected swinging parts may be changed at will. The foot-rest is made extensible to suit the length of legs of the one using the chair. The ends of the straps D are hinged to a transverse rod, *y*, which may be moved from one to the other of notches *h* on the bottom of platform C, and which form bearings for the rod *y*, and are long enough to require the rod to be in the proper transverse position when seated, the spring E from the lower face of the platform binding the rod *y* in place, so that to move the point of attach-

ment of straps D for the purpose before mentioned it is only necessary to pull the rod *y* against the spring E into the notch *h* corresponding to the position required. The extensible part of platform C, which is lettered H and forms the foot-rest proper, moves in ways in the fixed half, and to graduate the extent to which this piece H may be pulled out I attach to its bottom one end of a slat, *s*, extending nearly its length. This slat is slotted longitudinally, as seen in Fig. II, and a pin, *l*, from the fixed section of the platform, plays in this slot as the part H is extended, until, coming into contact with the end wall of the slot, the pin *l* prevents farther extension. At *x*, where the slat *s* is looped to the part H to be practically a part of or tongue from it, the metallic loop or strap holding the slat, by coming against the edge of the fixed section of the platform as the part H is retracted, forms a stop to prevent farther recession; and in order to, by lengthening or shortening the tongue or slat *s*, determine the extent to which the part H can be at once pulled out or pushed in, the point of attachment of the slat *s* to the part H is made adjustable, and the adjustability is accomplished as follows: The loop *x* from the part H incloses the slat *s* between a binding-spring, *g*, that bears against the slat from below, and a spur, *i*, received into one of a series of notches, *k*, upon the upper side of the slat, so that the slat held between this spring *g* and spur *i*, forming part of the loop *x*, is firmly united to the sliding part H.

To enable the slat to be thrown away from the spur *i*, so that the sliding part H may be moved over the slat until any other notch *k* comes opposite the spur *i*, I arrange a post or stem, *w*, to be socketed in the foot-rest H, and while extending slightly above the upper surface of the foot-rest, so as to be conveniently operated by the pressure of the foot, bear below it upon the slat *s*, so that a downward movement of this post *w* would clear the slat from the spur *i*. The binding-spring *g* will return the post *w* when the weight of the foot is no longer upon it and the spur *i* comes opposite a notch, *k*, of the slat.

For convenience of construction I extend a

reduced portion of the post *w* through the slot in the slat, and through the bottom strap of the loop *x*, where its projecting end can be secured by a small key from being lifted out of place, and leave shoulders to bear against the slat upon each side of its slot.

In this chair there is no jarring or creaking, and by the slightest movement of the feet or of the legs the center of gravity of the swinging parts may be changed so as to keep up a continual movement at the smallest expenditure of force, or by a cessation of movement of the limbs the chair may be made to retain any position chosen.

Now, having described my invention, what I claim is—

1. The swinging seat A and platform C, support B, and the connecting link or strap

D, when operating together in the manner and for the purpose set forth.

2. In combination with the swinging seat A and with extensible platform C, the connections D, made adjustable at their points of attachment, for the purpose described.

3. The combination of flexible straps D, rod *y*, bearings *h*, and spring E, substantially as shown.

4. The slotted slat *s*, provided with the notches *k*, in combination with pin *l*, socket and stop *x*, spring *g*, catch *i*, and plunger *w*, to form an adjustable stop for the foot-rest H, substantially as shown and described.

ANTHONY SNYDER.

Witnesses:

R. F. HYDE,

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