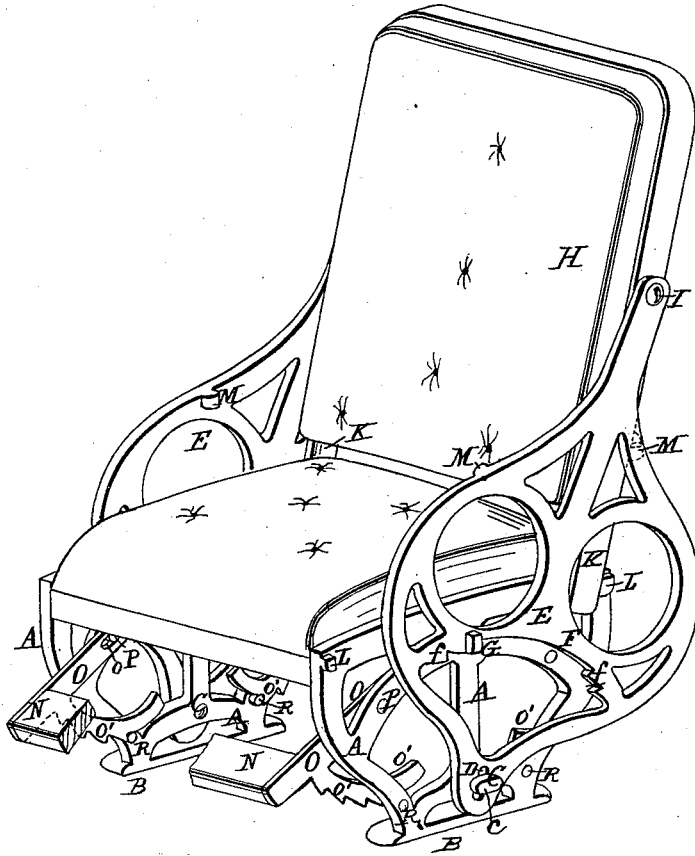


H. VOTH & C. J. HYATT.

Adjustable and Reversible Chair.

No. 163,953.

Patented June 1, 1875.



ATTEST:

*Robert Burns.*  
*Henry Tanner.*

INVENTORS:

*Henry Voth*  
*Charles J. Hyatt*  
*By Knight & Co.*

# UNITED STATES PATENT OFFICE.

HENRY VOTH, OF MOBERLY, AND CHARLES J. HYATT, OF ST. LOUIS, MO.

## IMPROVEMENT IN ADJUSTABLE AND REVERSIBLE CHAIRS.

Specification forming part of Letters Patent No. **163,953**, dated June 1, 1875; application filed September 29, 1874.

*To all whom it may concern:*

Be it known that we, HENRY VOTH, of Moberly, Randolph county, State of Missouri, and CHARLES J. HYATT, of St. Louis, St. Louis county, State of Missouri, have invented a certain Improvement in Reversible and Adjustable Seats or Chairs, of which the following is a specification:

This improvement relates to that class of car seats or chairs in which the backs are made both reversible and adjustable.

In our improvement a rigid arm or bar extends downward from each side of the back, so as to engage against lugs on the sides of the seat-frame, to hold the lower part of the back against the pressure of the sitter. The back, at its mid-height, is pivoted to side frames, which constitute the arms or elbows. These frames are slotted at the lower end to receive pivot-studs, and have ratchets engaging on studs projecting from the sides of the seat-frame or base, so as to hold the arm-frames in the required position to sustain the back at the desired inclination. Studs on the inner side of the arm-frames prevent the lower end of the back from tilting up. The foot-rest is pivoted to the sides of the seat-frame, so as to admit of being raised or lowered, and is sustained at any desired height by ratchet-arms, which engage on studs on the inner sides of said frame or base. The pivot-bearings are in slots, to allow the necessary movement to engage or disengage the ratchets with or from the studs.

The accompanying drawing is a perspective view of our invention.

A is the chair base or frame, attached to the floor B. C C are studs, having oblong heads *c*, and projecting from the outer sides of the base A near to the floor. These studs occupy slots D D in the arm-frames E E, and form the pivots on which the said arm-frames turn as the back is reversed or changed in inclination. Each frame E has a curved bar, F, with ratchets *f f*, engaging on a stud, G, so as to hold the frame E at any desired inclination. The slot D allows the frame E to

be raised to clear the ratchets *f f* from the stud G. The upper end of each frame E is pivoted to the back H at I, (about the mid-height of the back,) so as to allow to the back sufficient oscillatory movement to adjust it to its various inclinations. K K are arms or bars extending downward from each side of the back, these arms resting against studs L when the back is in any of its positions for use, and supporting the bottom of the back from backward or descending movement. The lower end of the back is prevented from tilting up forward by lugs M on the inner sides of the arm-frames.

The foot-rests have a foot-bar, N, secured to the two frames O O, each of which is slotted at *o* to receive a pivot-stud, P, projecting from the inner side of the base A. *o'* is a ratchet-arm, constituting the lower part of each frame O, the said ratchet engaging on a stud, R, so as to hold the bar of the foot-rest at any height. The slot *o* allows the foot-rest sufficient movement on its pivot to disengage the rack *o'* from the stud R.

We claim herein as new and of our invention—

1. The arm-frame F, having slotted pivot-connection C D and racks *f f*, engaging stud G, in combination with the back, pivoted to the frames, and having downwardly-extending arms K, engaging studs L of the seat-frame A, all constructed and combined substantially as set forth.

2. The foot-rest having slotted pivot-connection *o* P with the base-frame A and ratchet-racks *o'*, engaging on studs R, all constructed and combined substantially as shown and described.

In testimony of which invention we have hereunto set our hands at St. Louis, Missouri, this 8th day of September, 1874.

HENRY VOTH.  
CHARLES J. HYATT.

Witnesses:

SAML. KNIGHT,  
CHAS. SCHLOTTMANN.