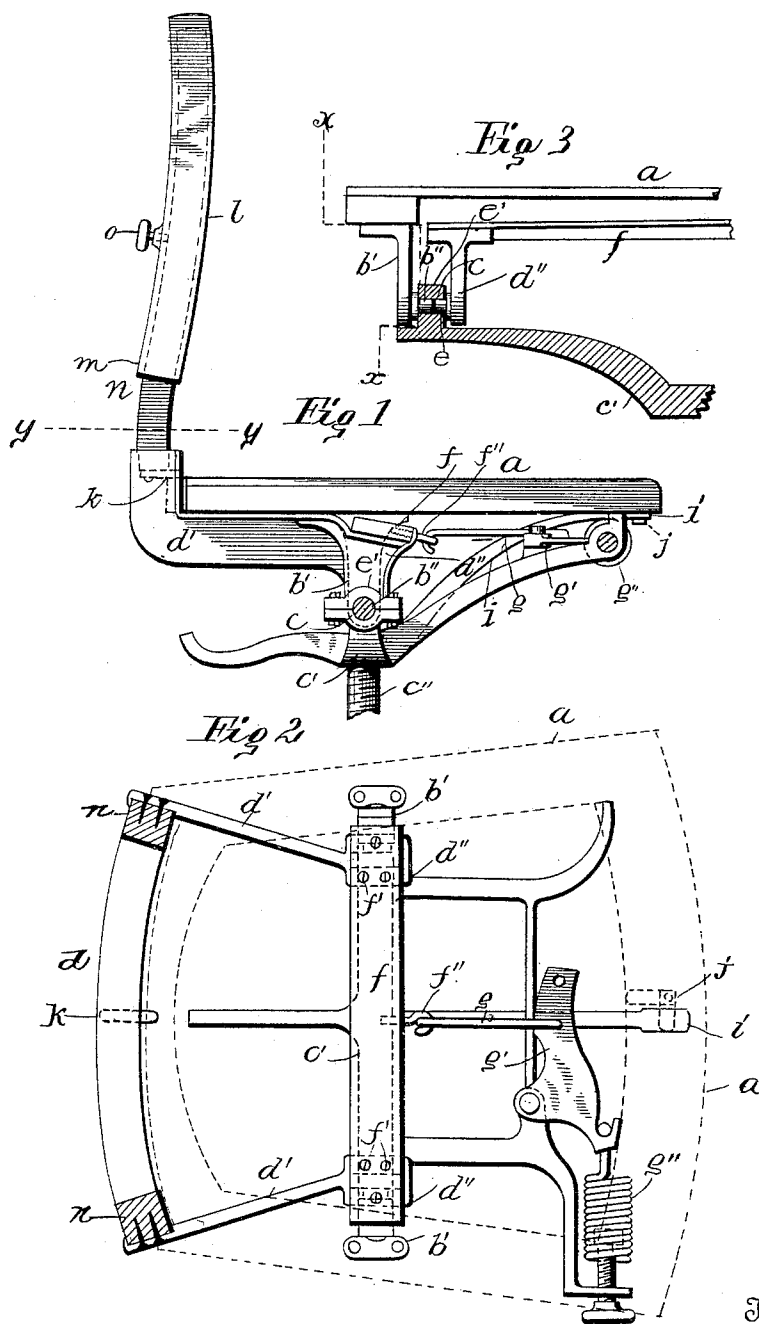


(No Model.)

C. E. DAVIS.
CHAIR.

No. 477,106.

Patented June 14, 1892.



Witness
C. C. Burdine
James T. Davis

Inventor
W. Charles E. Davis
per *Reynolds*
his Attorney

UNITED STATES PATENT OFFICE.

CHARLES E. DAVIS, OF BOSTON, MASSACHUSETTS.

CHAIR.

SPECIFICATION forming part of Letters Patent No. 477,106, dated June 14, 1892.

Application filed February 13, 1891. Renewed May 9, 1892. Serial No. 432,541. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. DAVIS, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Chairs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has special reference to improvements in tilting back and seat chairs; and my object is to provide a chair in which the seat and back can be made to tilt in unison or independently; and with this end in view my invention consists in the peculiar features and combinations of parts more fully described hereinafter, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a section of my invention on line X X, Fig. 3; Fig. 2, a section on line Y Y, Fig. 1, with the seat removed; Fig. 3, a detail view of the pivoted standards that support the seat and back.

The reference-letter *a* represents the chair-seat, which is supported on standards *b'*, which are provided with lateral pivots *b''*, rocking in sockets *c* in the outer ends of the branching arms of a frame *c'*, rotating with an ordinary screw *c''*. The seat-back *d* is rigidly fastened to divergent arms *d'*, extending forward to and cast integral with a pair of standards or arms *d''*, located between the seat-standards *b'* and having pivots *e*, which work in the same sockets *c* on the branching arms *c'* as those which support the seat-pivots *b''*, both being held in place by a removable cap *e'*, so that the seat and back have a common axis when locked together. A horizontal cross-bar *f* connects and holds solid the standards *d''*, and this bar is fastened to the top of the standards by means of screws *f'*, the bar being inclined forward, so that its front edge will be free to rise and fall with the backward-and-forward motion of the back, and the latter is made elastic or yielding by means of a screw-eye *f''*, to which is attached a link *g*, connecting the back with the usual bell-crank lever *g'*, spring *g''*, and regulating-screw *h*. The front of the seat rests upon an arm *i*, which extends forward from the frame

c', and the seat can be locked to this arm *i* by a rotary button *j* upon the under side of the seat, so that the latter will be held rigid, while the back is allowed to tilt independently.

If it should be desired to have the seat and back tilt together, it can be done by a button *k* on the back, which button locks the two parts together, so that pressure upon the back will tilt both, in which case the button *j* is first released from the arm *i*.

In order to increase or diminish the leverage upon the back, whereby the strain upon the spring will be greater or less, and whereby the back can be made to better fit the occupant of the chair, I provide a vertically-adjustable support *l*, having its opposite ends provided with sleeves or runners *m*, which embrace the uprights *n* of the back, to which they are locked by thumb-screws *o*. This construction in itself being old and well known to the art, is simply shown and described as forming a part of the general arrangement.

The preferred construction of my device having been set forth, I will now proceed to describe its operation.

When the button *k* upon the back is turned to lock the back to the seat and the button *j* is released from the arm *i*, any pressure upon the back will tilt the back and seat together, so that they will rock on their pivots *b''* and *e* in unison; but should it be desired to make the seat stationary while the back tilts, it can be done by releasing the button *k* and fastening button *j*, and in this way either mode of operation can be employed with great facility.

The advantages of my invention are that the chair can be converted into either or both of the forms before mentioned and that it can be more readily adjusted to accommodate the wants and necessities of various persons, thereby making it useful either as a music or an office chair.

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

1. The combination, in an adjustable chair, of a suitable supporting-frame, a seat pivotally supported thereon, a tiltable back mounted on a pair of arms extending under the seat and provided with standards pivoted on the frame, a cross-bar connected with an adjustable righting-spring, and locking devices at

the front and rear of the seat, as and for the purpose set forth.

2. The combination, in an adjustable chair, of a suitable supporting-frame, a normally-
5 horizontal seat supported on standards pivoted at the center of the frame, a lock at the front of the seat for locking the seat and frame together, a tiltable back mounted on
10 divergent arms extending under the seat and provided with standards pivoted common with that of the seat, and a lock for locking the back and seat together, all arranged and adapted to operate in the manner and for the
15 purpose set forth.

3. In an adjustable chair, the combination
of a non-tiltable supporting-frame, a seat and

back pivoted to tilt on the frame, said seat being mounted on pivots independent of the back and the back on arms and pivots independent of the seat, said pivots being com- 20 mon to each other, and locking devices at the front and rear of the seat, whereby the frame, seat, and back are secured to tilt together or independently, or made non-tiltable, as set forth. 25

In testimony whereof I affix my signature in presence of two witnesses.

CHAS. E. DAVIS.

Witnesses:

REUBEN CARVER,
JOHN S. KEMP.