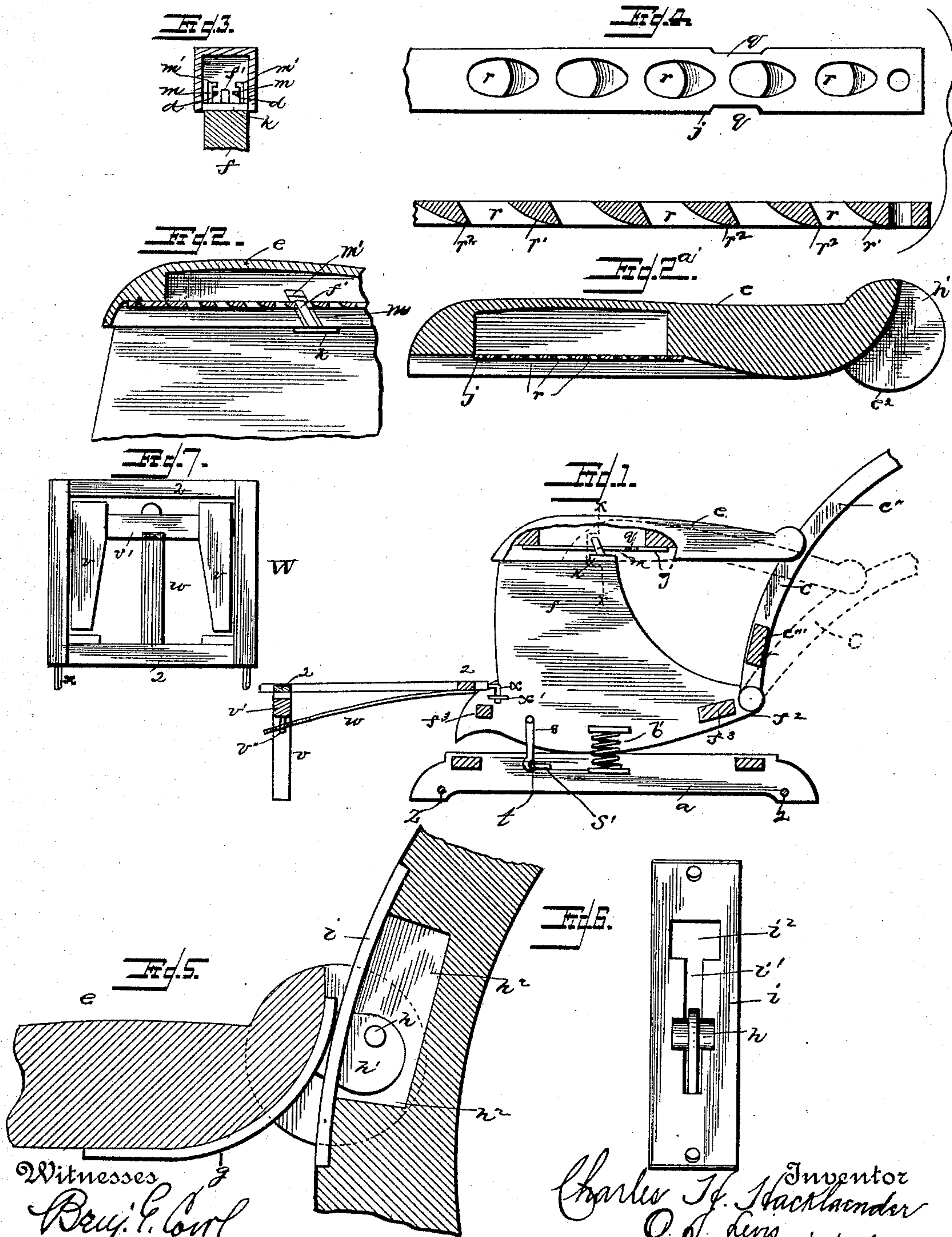


(No Model.)

C. H. HACKLAENDER.
RECLINING CHAIR.

No. 485,273.

Patented Nov. 1, 1892.



Witnesses
Benj. E. Cool
W. S. Boyd,

Charles F. Hackländer Inventor
O. S. Lewis principal attorney
By Asso. Attorney
Chas. J. Stockman

UNITED STATES PATENT OFFICE.

CHARLES HENRY HACKLAENDER, OF ALLEGHENY, PENNSYLVANIA.

RECLINING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 485,273, dated November 1, 1892.

Application filed August 20, 1890. Serial No. 362,555. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HENRY HACKLAENDER, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Adjustable 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention has relation to reclining chairs; and it consists in certain peculiarities in the construction, arrangement, and combination of the several parts thereof, substantially as hereinafter described, and particularly pointed out in the subjoined claims.

In the accompanying drawings, illustrating the invention, Figure 1 is a longitudinal sectional view of my improved chair, showing the foot-rest in position thereon and in dotted lines the back adjusted to a position adapting the device for reclining purposes. Fig. 2 is an enlarged view of a portion of the standard and a portion of the chair-arm and locking devices, the latter being shown in section. Fig. 2^a is a longitudinal section of one of the arms of the chair. Fig. 3 is a section through $x x$ of Fig. 1. Fig. 4 is a bottom plan and a longitudinal section of one of the plates forming a portion of the locking devices for the adjustable back. Fig. 5 is an enlarged view, partly in section, of a portion of the chair, showing the means for removably securing the arms to the chair-back. Fig. 6 is a rear view of the plate and an arm, also showing the manner of securing the arms to the chair-back; and Fig. 7 is a detached plan view of the foot-rest folded.

The same letters and numerals of reference are used to designate the same parts in the several figures.

a designates the base-piece, f the standards, c the back, and e the arms, of my improved chair.

The base-piece a may be of any suitable construction, and on it rest the standards f , (of which there are two, located one at each side of the chair and forming the sides thereof,) the lower ends of which are curved to form

rockers f^2 , and the tops of which are provided with plates k , having projections f' and m , (the latter having inwardly-extending heads m' ;) for the purposes hereinafter specified. The standards f are connected by cross-pieces f^3 , as shown in Fig. 1, and with the base-piece by the usual springs b' .

The back c consists of the vertical standards c'' and transverse connecting-pieces c''' , and has a pivotal engagement at its lower extremity with the rear extremity of the rockers f^2 , and intermediate of its length is engaged with the rear extremities of the arms e .

The arms e are recessed a portion of their length and formed with horizontal flanges e^2 , which engage the sides of the vertical standards c'' . Stretching across the recessed portion of each arm is a plate j , which is formed with openings r , designed to receive the projections f' , which serve to hold the back in its adjusted position and to permit adjustment of said back. It is desirable to so engage the plates with the projections f' that they cannot be disengaged by simply raising the arms vertically, as if such is the case they are liable to be disengaged and the back tilted at an undesirable time. I therefore preferably incline said projections f' forward and make the openings r larger than said projections and with inclined forward walls r^2 , corresponding to the inclination of said projections, so that in order to disengage the plates from the projection it will be necessary to first move the arms and back forward a slight distance, so as to permit the forward wall of the opening within which the projection f' is located to clear the forward side of said projection when the arm is being raised, the rear walls r' of said openings being curved downward and outward to facilitate such adjustment. The standards c'' , also, are formed with recesses h^2 , contiguous to the rear ends of the arms e , and covering said recesses are plates i , which are formed with elongated slots i' , enlarged at their upper ends, as shown at i^2 . The rear ends of the arms e are provided with curved plates g , which have at their upper ends projections h' , formed with laterally-projecting pins h . These projections h' and pins h are adapted to be received by the recesses of the standards c'' , respectively, entering the same through the portions

i' and i'' of the slots in the plates and then dropping down so that the pins h will be in contact with the inner sides of the plates opposite the portions i' of the slots. By this means a substantial pivotal engagement of the back is made with the arm, so that the angle of inclination of the former can be changed at pleasure, when the pins f' are disengaged from the plates j , and at the same time the arms may be quickly and easily disengaged from the back and removed from the chair, which is advantageous in storage and transportation.

The headed projections m , above referred to, are designed to assist in the guiding of the movement of the arms e , the heads of said projections being located above the plate j , reaching said position through the recesses q in the sides of said plates and serving to limit the upward movement of the arms and the sides of the projections being in contact with the side edge of said plate and preventing lateral movement thereof.

s designates a projection depending from the inner side of each standard f and having a hook-shaped lower end designed to engage the transverse rod t , which is longitudinally adjustable within slots s' in the base-piece. When this rod t is engaged with the projections s , the upper portion of the chair will be locked to the base-piece and rocking thereof prevented.

W designates a frame, which consists of two side bars and end connecting-bars 2. At the rear end of this frame are hooks x , which engage eyes or other suitable devices x' , secured to the forward end of the chair proper, by which means said frame is removably secured to said chair and when engaged therewith forms a foot-rest. Pivoted at their upper ends to the forward end of said frame are legs or supports v , connected by a transverse bar v' , and engaging a projection v'' on the under side of said bar v' is the forward end of a flat spring w , which is suitably secured at its rear end to the rear connecting-bar 2. These legs and their connecting-bar are designed to fold within the frame W when the foot-rest is not in use, and the spring-bar by pressing upward against the rear end of the bar v' serves to hold said legs rigidly in vertical position when they are in use and also by upward pressure on the said transverse bar to hold the legs against displacement when they are folded within the frame W .

The operation of the device is as follows: Assuming that the back is in the position shown in full lines in Fig. 1 and it is desired to use the device as a couch or for reclining

purposes, the operator moves the arms and back forward a slight distance and then raises the arms e until the plates therein are out of engagement with the projections f' , which will permit the back c to turn on its pivots, and when said back is at the desired angle of inclination the plates are again engaged with said projections f' , and the back thereby held in its adjusted position. The bar or rod t is then engaged with the hooked projections s , which prevents rocking of the chair and the foot-rest engaged with the forward part of the chair, as described.

When the foot-rest is not in use, it is disengaged from the chair, its legs are folded within it, and it is supported by projections z at opposite sides of the base-piece a , so that it will be entirely out of the way and at the same time accessible when its use is desired.

Having now described my invention, what I believe to be new, and desire to secure by Letters Patent and what I therefore claim, is—

1. The combination, in a reclining-chair, of the standards and the pivoted back with projections f' and m , extending upward from said standards, said projections m being located on either side of said projections f' and having inwardly-extending heads, arms pivotally attached to said back and having recesses, and plates stretching across said recesses and formed with series of openings to engage the projections f' and with lateral recesses to permit them to pass beneath the heads of said projections m , all substantially as shown and described.

2. In a reclining-chair, the combination, with the standards and the pivoted back, of projections f' and m , extending upward from said standards, said projections m being located on either side of said projection f' and having inwardly-extending heads, arms pivotally attached at their rear ends to the vertical standards of the back, said arms also having flanges e^2 , engaging opposite sides of the standards of the back and formed with recesses in their under sides, and plates stretching across said recesses in the arms and having series of openings to receive said projections f' and lateral openings to permit them to pass beneath the heads of said projections m , all substantially as shown and described.

In testimony that I claim the foregoing I hereunto affix my signature this 20th day of May, A. D. 1890.

CHARLES HENRY HACKLAENDER. [L. s.]

In presence of—

M. E. HARRISON,
CHARLES LARGE.