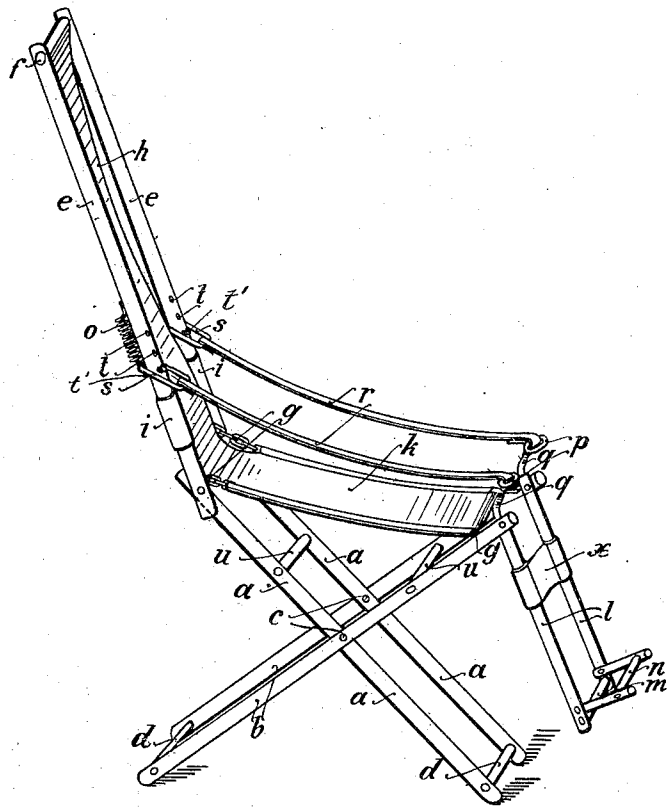
No. 709,688. Patented Sept. 23, 1902.

F. VOGEL.

ADJUSTABLE FOLDING CHAIR.

(Application filed Apr. 2, 1901.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

FRITZ VOGEL, OF DUSSELDORF, GERMANY.

ADJUSTABLE FOLDING CHAIR.

SPECIFICATION forming part of Letters Patent No. 709,688, dated September 23, 1902.

Application filed April 2, 1901. Serial No. 54,025. (No model.)

To all whom it may concern:

Be it known that I, FRITZ VOGEL, a subject of the King of Prussia, Emperor of Germany, residing at Humboldtstrasse 93, Dusseldorf, in the Kingdom of Prussia and Empire of Germany, have invented a certain new and useful Adjustable Folding Chair, of which the following is a full, clear, and exact description.

My invention relates to improvements in adjustable folding chairs in which the back of the chair is capable of inclining back at any desired angle, while the entire chair can be folded up when not in use.

The objects of my improvements are, first, to make the relative positions of the parts very easily adjustable; second, to prevent any objectionable pressure of the hard parts of the chair upon the body of the person sitting or reclining in it, and, third, to prevent any cramped position of the body when sitting or reclining or when lying back, as in a hammock, or upon the side. I attain these objects by the means illustrated in the accompanying drawing, which is a perspective view of the chair when opened for use.

The base or legs of the chair consist of two members hinged together at *c c* in customary manner and each formed of two parallel bars *a a* and *b b*, connected by cross-stays *d* and *u*. The sides *e e* of the back are hinged at bottom to the upper ends of the legs *a a* and connected at top by a cross-stay *f*. The hinged legs are braced in position for use by stays *g*, consisting of cords, chains, or rods, and jointed at their ends to the upper ends of the legs *a a* and *b b*, respectively.

The flexible webbing *h* of the back and *k* of the seat may be made in one or two parts, as preferred, and fixed at their extremities to the back and seat frame in customary manner. The upper stay-bars *u u* of the legs are located, as shown, at a sufficient distance below the level of the seat to prevent danger of the web *k* thereof sagging into contact with the said stay-bars.

The side bars *l l*, forming the leg-rest and on which the foot-rest *m n* is mounted, are jointed to the upper ends of the legs *b b* and are formed with rigid upward extensions *q q*, to which the forward ends of the arm-rests *r* are connected. These arm-rests consist of flexible bands or straps connected at their rear ends to elongated rings *s*, which encircle and slide on the back bars *e* and are suspended by springs *o*, so as to afford a yielding support to the arms. In order to limit the descent of the arm-rests when desired, the back-bars *e* have a number of holes *t* for the reception of pins or bolts *t'*, placed beneath the rings *s*, so as to support them at any desired height. This provision also affords means for adjusting the angle of inclination of the back independently of the leg-rest. When the rings *s* are left free to slide, the position of the back of the chair is determined automatically within the limits permitted by the variable adjustment of the pins or bolts *t'*, according to the position of the body or the legs of the person using it. By the adjustable arrangement of the arm-supports and back-support the connection between the foot-rest and the back-rest is rendered so flexible and easily adjustable that the legs can readily take any desired stretched-out or other position in regard to the body.

In order to provide a convenient rest or support for the legs, a transverse band *x* is arranged so that it can be slid in or out, as desired, upon the side supports *l*.

The chair allows the user not only to recline or lie upon the back, but also upon the side, without any disagreeable or inconvenient pressure being felt. In order that the breast may lie freely and that a cramped position of the body may be avoided, the flexible back *h* may be supported by one or more broad cross-bands having slides at *i i* movable adjustably upon the sides *e e* of the chair-back.

The seat *k* of the chair may be so arranged that it can be easily stretched more or less.

What I claim, and desire to secure by Letters Patent, is—

In a folding chair, the combination of the hinged and folding base consisting of crossed legs *a a* and *b b*, connected at their common center by pivots *c;* the back-frame *e e* hinged to the upper ends of the legs *a a;* the leg-rest *l l* pivoted to the upper ends of the legs *b b* and having standards *q q* projecting from the upper ends of its respective members; the flexible arm-rests *r r* connected in front to

the tops of the standards *q q* and at back at variable height to the members *e e* of the back-frame; springs *o* affording yielding support to the rear ends of the arm-rests and means for limiting the automatic vertical movement of the rear ends of said arm-rests; substantially as described.

In witness whereof I subscribe my signature in presence of two witnesses.

FRITZ VOGEL.

Witnesses:
HENRY HASPER,
WOLDEMAR HAUPT.