(No Model.)

A. B. ALBERT.

FOLDING CHAIR.

No. 428,032. Patented May 13, 1890.

Fig. 1.

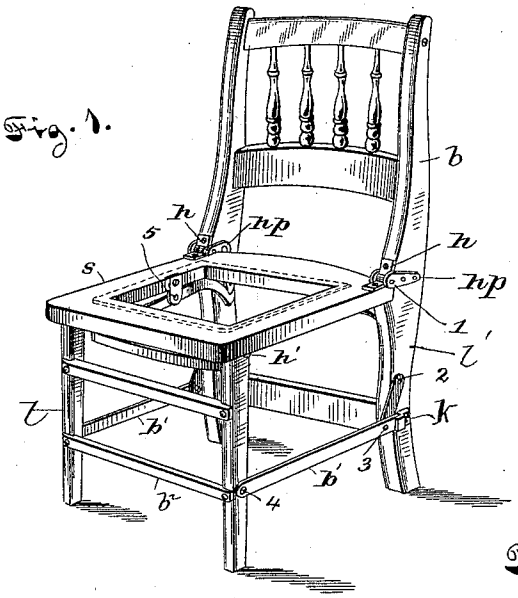


Fig. 4.

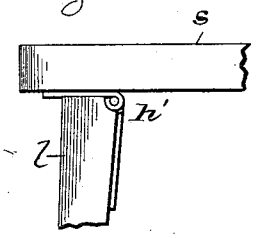


Fig. 2.

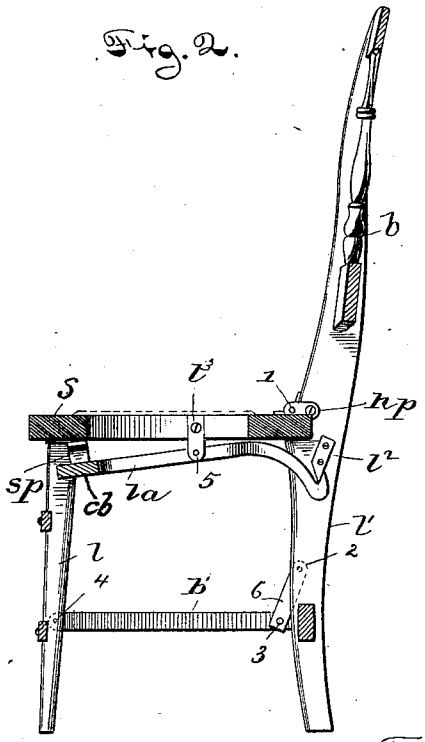


Fig. 3.

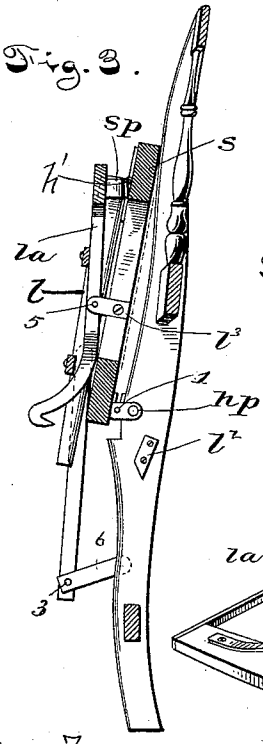


Fig. 6.

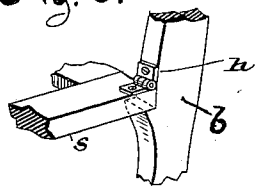


Fig. 5.

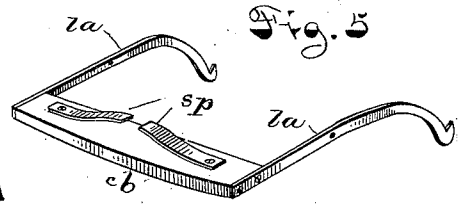


Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

AARON B. ALBERT, OF INDIANAPOLIS, INDIANA.

FOLDING CHAIR.

SPECIFICATION forming part of Letters Patent No. 428,032, dated May 13, 1890.

Application filed November 11, 1889. Serial No. 329,897. (No model.)

To all whom it may concern:

Be it known that I, AARON B. ALBERT, of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Folding Chairs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like letters refer to like parts.

My invention relates to the construction of folding chairs, and will be understood from the following description.

In the drawings, Figure 1 represents a perspective view of my chair in position for use, the seat being removed to show the parts below. Fig. 2 is a section through the center of the seat and back of the chair, showing the arrangement of the locking device on the side and the manner of hinging the parts. Fig. 3 is a view of the same with the seat thrown up. Fig. 4 is a detail view of a part of the fore leg and seat, showing the construction and attachment of the hinge. Fig. 5 is a detail top view of the locking device. Fig. 6 shows the seat connected to the hind leg by an ordinary strap-hinge. Fig. 7 is a detail view of the lug, showing the bearings for the latch-pivot. Figs. 4, 5, 6, and 7 are on an enlarged scale.

In detail the chair consists of a back-frame *b*, the seat-frame *s*, and legs *l l'*, the legs connected by hinged braces *b'*. The back is made in the ordinary form; but the seat *s* is connected thereto by a strap-hinge *h*, as shown in Fig. 6, or by a compound hinge, which consists of the strap-hinge *h* and hinge-plates *hp*, the pintle of the strap-hinge extended and journaled in such hinge-plates, as shown in Fig. 1. This makes the hinge of double strength and bearing, and the hinge-plates, being fastened by screws to the side of the leg, will prevent the screws of the hinge *h* from being loosened or withdrawn by use. The fore legs *l* are hinged to the seat by a strap-hinge *h'*, one leaf of which is reversed with respect to the other, as shown in Fig. 4. The upper leaf, being thrown up at right angles to the lower, forms a metal backing between the end of the leg and the under side of the seat, preventing any wearing of the parts, which are commonly made of wood, furnishing a firm bearing therefor, while the operation of the hinge is in no wise interfered with by this plan of construction. The cross-braces *b'* are connected to the hind legs by links 6, which are pivoted at 2 and 3, as shown in Fig. 2, thus allowing the chair to be folded up in the manner shown in Fig. 2, in which case the link will be thrown out at nearly a right angle to the leg of the back, as shown. These cross-braces *b'* are pivoted to the front legs at 4, while the front legs are connected to each other by ordinary rigid braces b^2, which are fastened by screws or nails. A device *k*, which performs the office of a keeper and stop, is fastened to the hind leg, so that the end of the pivoted braces *b'* will enter this keeper, which, being formed of metal, makes a solid bearing for the rear end of the brace, preventing it from being thrown out so as to interfere with its movement or becoming loose upon its pivots.

It will thus be seen that the back is hinged to the seat at *h*, the hind legs to the brace *b'* by a link, which is pivoted at 2 and 3, and there is no connection other than this hinge and link between the parts, while the brace is pivoted at 4 to the front legs, and these hinged at *h'* to the under side of the seat, as hereinbefore described, and thus all the connections of the parts are movable upon hinges or pivots, so that the folding of the chair is an easy and simple matter.

When the chair is thrown down for use in the manner shown in Fig. 1, it is locked in position by the following device: The latch-arms *la*, having hooks at their rear ends, are connected in front to the cross-bar *cb*, which serves as a sort of a treadle, and upon the top of this cross-bar is fastened a small spring *sp*, adapted to bear against the under side of the seat. The latch-arms are journaled at 5 in the lug l^3, which is fastened to the side of the chair-seat, as shown in Fig. 2, and a locking-lug l^2, with a beveled end, is fastened at a convenient place on each side of the hind legs, so that the hook of the latch-arm will engage with this lug when the chair is thrown down, and the parts will then assume the position shown in Fig. 2. The tension of the spring *sp* operates to hold this latch in place, and when it is desired to disengage such latch and fold up the chair the operator takes hold of the cross-brace *cb*, presses it toward the seat, and this movement causes the latch-arm to swing upon

its pivotal bearings, the latch is disengaged from the lug and thrown down, the pivot 5 being the fulcrum of this movement, and by lifting up the seat and pressing it toward the back the chair may be folded up in the position shown in Fig. 3.

It will be understood, of course, that when the chair is thrown down the locking mechanism is operated automatically by the controlling-spring *sp*, and pressure upon this spring is necessary to relieve it so as to fold up the chair.

I am aware that chairs have been constructed which are adapted to be folded up flat, the seat against the back and the front legs against the seat, and do not herein claim the same, broadly, as my invention; but I am not aware that any folding chairs have been constructed wherein the parts are hinged together and locked in place and adapted to be unlocked and folded up in the manner herein shown and described.

What I claim as my invention, and desire to secure by Letters Patent, is the following:

1. A folding chair comprising a back-frame, a seat hinged thereto, fore legs hinged to such seat and connected to the back by a brace pivoted directly to such fore legs, and a link, which is in turn pivoted at an acute angle to the hind legs, a locking device comprising a treadle having arms journaled in bearings centrally connected to the side rails of the seat, such arms having latches or hooks at their ends, lock plates or lugs secured to the back-frame or legs for engaging such hooks or latches, all combined substantially as described.

2. In a folding chair, a back-frame with rear legs, a seat-frame hinged thereto in front and about midway, fore legs hinged to the front rail of such seat and pivotally connected by a link to an angular link, which is in turn pivoted to the hind legs, in combination with a spring-controlled treadle-locking device having side arms pivotally connected to the sides of the seat-frame and provided with hooks at their inner ends for engaging stops fixed to the back-frame, substantially as described.

3. In a folding chair, the treadle-locking mechanism comprising the cross-bar *cb*, hooked latch-arms *la*, secured at each end thereof, the spring *sp*, fastened upon the cross-bar, such latch-arms pivoted to the seat-rails and engaging with stops on the back, all combined substantially as described.

4. In a folding chair, a back-frame with legs, a seat hinged thereto in the rear, fore legs hinged to the front of the seat, an automatic spring-controlled treadle mechanism for locking the parts in position for use, the fore and hind legs connected by hinged braces, in combination with the keeper *k*, connected to the hind legs for receiving and holding the end of such hinging brace, all combined substantially as described.

5. In combination with a folding chair, a keeper and stop *k*, for receiving and retaining the ends of the hinging brace *b'*, in combination with such brace pivoted to the fore legs and to an angular link 2, pivoted to the hind legs of such chair.

In witness whereof I have hereunto set my hand this 2d day of November, 1889.

AARON B. ALBERT.

Witnesses:
C. P. JACOBS,
E. B. GRIFFITH.