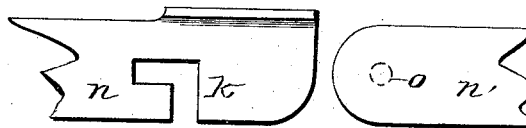
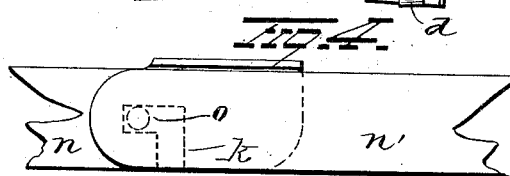
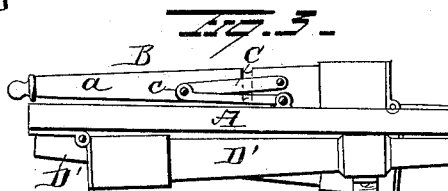
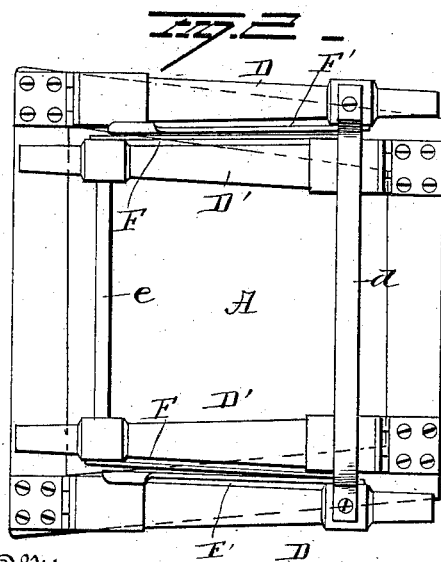
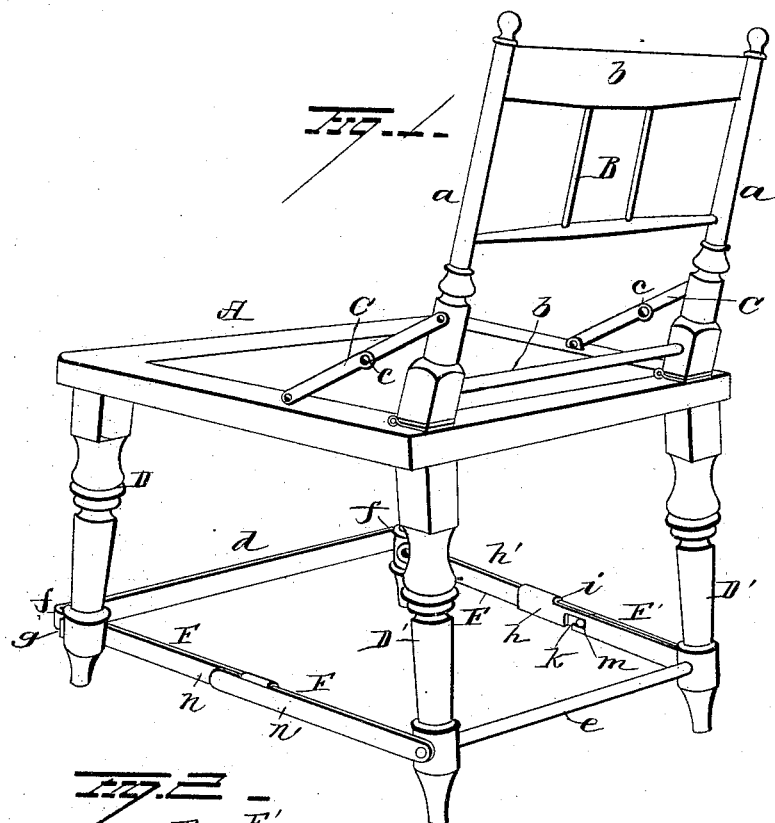


(No Model.)

J. F. A. SPAET, W. F. BERRY & J. T. SNODDY.
FOLDING CHAIR.

No. 383,255.

Patented May 22, 1888.



Witnesses.

E. Nottingham
C. F. Downing

Inventor,
J. F. A. Spael.
W. F. Berry.
J. T. Snoddy.
By their Attorney
H. A. Symmons

UNITED STATES PATENT OFFICE.

JOSEPH F. A. SPAET, WILLIAM F. BERRY, AND JAMES T. SNODDY, OF
MOUNT PLEASANT, IOWA.

FOLDING CHAIR.

SPECIFICATION forming part of Letters Patent No. 333,255, dated May 22, 1888.

Application filed November 30, 1887. Serial No. 256,509. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH F. A. SPAET, WILLIAM F. BERRY, and JAMES T. SNODDY, of Mount Pleasant, in the county of Henry and State of Iowa, have invented certain new and useful Improvements in Folding Chairs; and we 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.

Our invention relates to an improvement in folding chairs, the object being to produce a device of this character that will be of simple durable construction and that may be quickly changed from a folded condition to an open adjustment of its legs and back, and be securely locked when so adjusted, thus affording a substantial and very comfortable seat which resembles an ordinary chair in appearance.

With these objects in view our invention consists in certain features of construction and combinations of parts, that will be hereinafter described, and pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective view of the chair in opened and locked adjustment of its legs and back to fit it for use as a substantial seat. Fig. 2 represents a plan view of the bottom of the chair with its legs and back folded for transportation. Fig. 3 is an edge view of the side of the chair as it appears when the legs and back are in folded position. Fig. 4 shows one of the sectional locking stretcher-bars detached from the chair-legs, with the two parts locked together, the lantern-lock being shown in dotted lines. Fig. 5 represents one of the locking stretcher-bars, with two parts separated to show form of construction of the locking ends.

A represents the seat of the chair. This may be made entirely of wood cut of a size to afford a seat of suitable dimensions. We prefer to make the seat with a frame or border of wood that has its front and rear edges parallel and the side edges pitched inwardly toward each other from the front edge of the seat to the rear edges of same, so as to render the seat narrower at the rear edge, where the back is attached.

The seat-frame may be covered with leather

or fibrous material, such as oil-cloth or carpet. This method of producing a seat renders it lighter, as well as more comfortable for use.

The back B of the chair may be made of various forms to suit the taste of the designer. We show a simple, strong, and neat style, which consists of two side posts, *a*, that are connected at the top and bottom ends by cross-stretchers *b*, which enter socket-holes made in the posts *a* to receive their dowel ends.

The top of the back-frame may be made somewhat wider than the lower portion to correspond to the form of the seat when folded on it, and to afford a folding movement the back posts, *a*, are hinged to the top surface of the seat in a manner to allow the back B to lie closely upon the seat-frame A, as shown in Fig. 3. In order to support the back when in an upright position and relieve the hinges from an improper strain on their joints, the folding braces C are provided. The braces C are made of strips of metal and have joints *c* formed near their center, each brace consisting of two pieces, preferably of equal lengths. These pieces are joined so as to lap their ends, and are pivoted together in a manner to allow a folding action to each brace. When the back is raised off of the seat, the braces unfold and are fully extended, as shown in Fig. 1, when the back is adjusted for use, and it will be seen in this figure that the braces C are pivoted to the chair seat and back to extend diagonally between these parts, and thus be in position to afford support to the back when the chair is occupied.

The legs D D' of the chair are each hinged at their respective corners on the lower side of the chair seat A, and these hinge connections are so made as to permit the legs to be folded and lie closely in contact with the lower side of the chair-seat, as shown in Fig. 3, and from the fact that the rear edge of the chair-seat A is of less width than its front edge the rear legs, D', will lie inside of the front pair of legs, D, when all are folded. The rear pair of legs is connected by a cross brace or stretcher, *e*, which may be of ordinary form and be inserted in socket-holes in the legs in the ordinary manner.

The front stretcher, *d*, which serves to connect the two front legs, D, is preferably made

of metal. It is bent to produce offsets *f* in its body, which project it away from the legs in front of the same, and also afford ears *g* at each end of the stretcher, whereby it may be secured to the front face of each front leg, as shown in Figs. 1 and 2. The stretcher *d* is bent as shown, to allow it to clear the rear legs when the chair is folded, as shown in Fig. 3, and thus allow the front legs to fold closely upon the seat. The front and rear pairs of legs of the chair are adapted to be securely braced apart when the chair is to be put into service by the locking stretcher-bars *F F'*. These bars are each made of two pieces, which are of such relative length as to permit the formation of their locking joints near the center of length between the front and rear legs. The portion *h* of the bar *F*, which is pivoted to the outer face of one of the rear legs, *D'*, is cut to form a lip, *i*, which latter is bent to overhang the outer face of the bar *h*, and near to this lip a lantern-lock notch, *k*, is cut through the body of the bar.

Upon the front portion, *h'*, of the bar *F*, which is intended to lock with the rear piece, *h*, a stud, *m*, is secured to project from the inner face of the free end of this bar, the other end being pivoted to the inner surface of the front leg, *D*, the stud *m* being adapted to lock with the notch *k*, and when introduced the two portions *h h'*, which together form the stretcher-bar *F*, are made to line on their top and bottom edges, which will cause the lip *i* to hook over the top edge of the front portion, *h'*, and thus secure the stretcher-bar *F* in locked adjustment to keep the front and rear legs of the chair to which it is pivoted in an upright position.

The locking stretcher bar *F'*, which is pivoted upon the other legs of the chair, is constructed in a manner similar to the bar *F*, with exception that the lantern-lock slot is formed in the front piece, *n*, and the locking-stud *o* is fastened on the inner end of the rear piece, *n'*, so as to lock in an opposite direction from the lock made on the stretcher-bar *F*.

In adjusting the chair for use the legs are first given a nearly upright position, they being so hinged as to allow them to project slightly beyond the front and rear edges of the seat to afford a more secure base. The locking-bars *F F'* are now connected and forced downwardly, so their lantern-locks are secured by engagement of the lips *i*, and as the length of the bars *F F'* is so proportioned to the spread of the front and rear pairs of legs as to firmly brace them apart a substantial seat is afforded. The back is now elevated and the chair is ready for use as a seat. A reversal of the operation will leave the chair folded for packing in small space, as shown in Fig. 3.

The folding chair described may be used for

various purposes to advantage—as, for instance, it may be carried along for use in camping-out excursions, picnic parties, and for other similar purposes. It may also be utilized where extra seats are needed occasionally in places of amusement, for conventions, or in churches where at times it is necessary to provide additional seats for large audiences. For all these purposes the folding chair is well adapted, as it may be quickly adjusted for use, and, when opened and locked, affords a very comfortable chair. After temporary use the chairs may be folded to occupy but a small space and be compactly packed away until again needed.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a folding chair, a locking stretcher-bar constructed of two pieces pivoted at its opposite ends to the front and rear legs of the chair, and provided with a lantern-lock and guard-lip at their meeting ends to lock the two portions of the stretcher-bar together, substantially as set forth.

2. In a folding chair, the combination, with a seat and front and rear legs hinged to the lower side of the seat at its corners, of two stretcher-bars, each formed of two pieces pivoted to the front and rear legs, and provided at their adjacent ends with lantern-locks and overhanging lips or flanges to lock the front and rear legs apart, substantially as set forth.

3. In a folding chair, the combination, with a seat, front and rear legs hinged to fold upon this seat, and an offset metal brace or stretcher secured to the outer face of the front legs, of two stretcher-bars, each formed of two pieces which are pivoted at their ends to the front and rear legs, and provided with lantern-locks and overhanging lip-flanges to lock the pieces together and brace the front and rear legs apart, substantially as set forth.

4. In a folding chair, the combination, with a seat, a back hinged to the top surface thereof, and diagonal jointed braces for supporting the back in an upright position, of hinged legs, a brace attached to the outer face of the front legs, and two pivoted stretchers, each composed of two sections pivoted together, and provided with a lantern-lock and guard-lip at their meeting ends to lock the two portions of the stretchers together, substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

JOSEPH F. A. SPAET.
WILLIAM F. BERRY.
JAMES T. SNODDY.

Witnesses:

C. F. PITCHER,
ED MADDING.