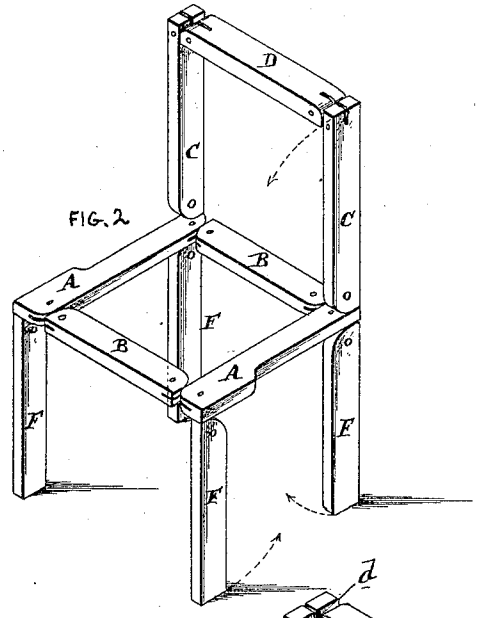
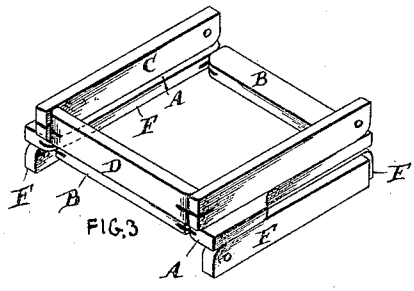
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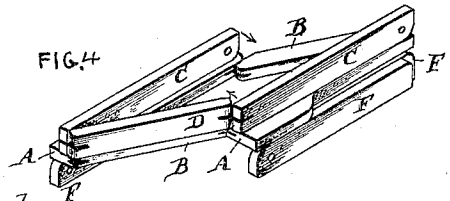
C. A. SPAHN & H. D. N. MILLER.

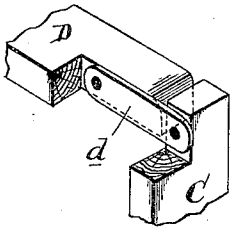
PORTABLE CHAIR.

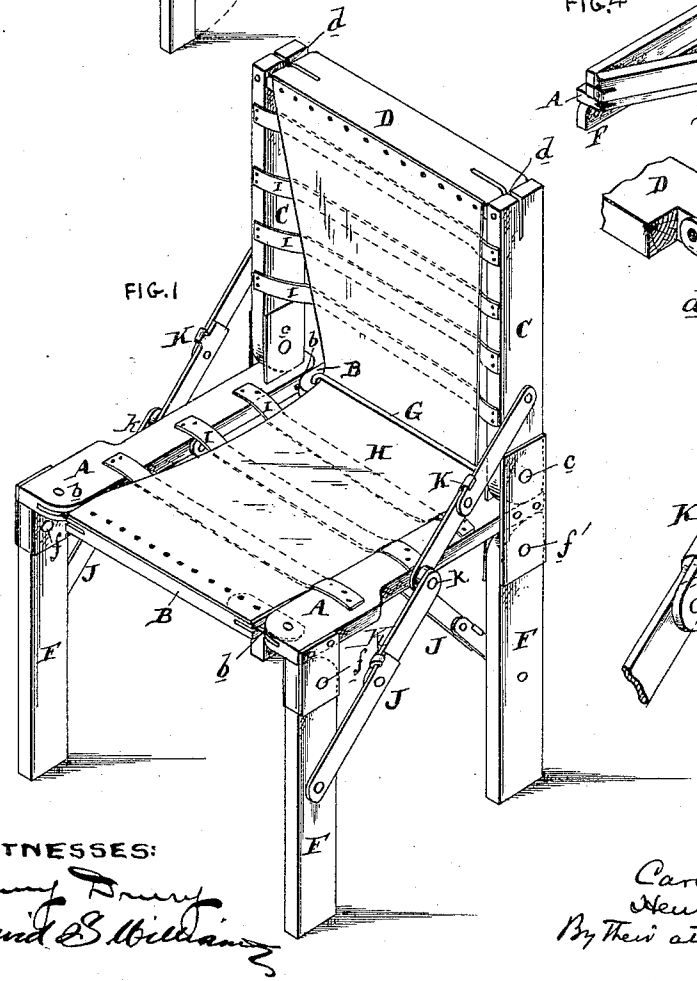
No. 430,703. Patented June 24, 1890.

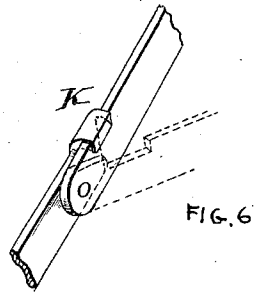












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PORTABLE CHAIR.

SPECIFICATION forming part of Letters Patent No. 430,703, dated June 24, 1890.

Application filed June 25, 1889. Serial No. 315,543. (No model.)

To all whom it may concern:

Be it known that we, CARL A. SPAHN and HENRY D. N. MILLER, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Portable Chairs, of which the following is a specification.

Our invention has reference to portable chairs; and it consists of certain improvements, which are fully set forth in the following specification and shown in the accompanying drawings, which form a part thereof.

The object of our invention is to form a collapsible chair which shall be capable of being folded into the smallest possible space, and thereby rendered portable and adapted to be carried by the hand.

In carrying out our invention we form the entire frames with joints at every corner or juncture of two frame-pieces. Thus the seat has a joint at each corner, the legs are each jointed to the seat, the two uprights of the back are jointed to the seat, and the tops of the two uprights of the back are jointed by a jointed head-bar. To support the chair in rigid shape when opened, we use hinged braces or struts between the legs and seat and back and seat. The upholstery of the chair is made flexible, so that it shall not in any way interfere with the condensibility of the chair.

In the drawings, Figure 1 is a perspective view of a chair embodying our invention. Fig. 2 is a general perspective view showing the parts of the frame. Fig. 3 is a perspective view showing the frame folded up into its first position. Fig. 4 is a similar view showing the final fold of the frame. Fig. 5 is a perspective view with part broken away, showing one of the hinge-joints between the head-bar and one of the uprights of the back; and Fig. 6 is a perspective view of the hinge part of one of the braces.

The seat is made up of the four frame-pieces A A B B, hinged together at the corners by plates *f*. The legs F are hinged to the corners of the frame-pieces A A at *f'*, so as to fold upward against the under side of these frame-pieces, as shown in Fig. 3. The rear legs fold up to the inside of the front legs. When these legs are moved down into position, the jointed braces J between them and the frame-pieces A hold them firmly from closing up again. These braces J may be such as are commonly found in trunks, only made more solid. The front legs are preferably separated slightly more than the rear legs.

C C are two uprights for the back, and are hinged to the rear ends of the side frame-pieces A A of the seat at *c*, and are adapted to fold down, as indicated in Fig. 3. The upper or free ends of the parts C C are united by a head-bar jointed to them by links *d d*, Fig. 5. The back is supported, when raised, by the jointed braces K K, similar to the braces for the legs pivoted to the frame-pieces A A at *k*.

H is a fabric of any description, and is secured to the head-bar, then passes down and under a rod G, connected to the rear frame-piece B of the seat, and finally extends forward to the front frame-piece B of the seat, to which it is secured. Additional supports may be used under the fabric H in the form of cross-bands I, of suitable textile material.

From the arrows of Fig. 2 it is seen that the back and legs fold in different directions and may be brought to the shape shown in Fig. 3. Furthermore, it will also be seen that from the joints or hinges *d* and *b* it is possible to force the two diagonal corners together, as indicated in Fig. 4. The upholstery has been omitted from Figs. 2, 3, and 4 for the better illustration of the frame-work. When the chair is condensed to the shape shown in Fig. 4, it may be carried with an ordinary shawl-strap.

We do not confine ourselves to the exact details of construction, as they may be modified without departing from the spirit of the invention.

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

1. A chair having its seat composed of two side frame-pieces and two end frame-pieces pivoted at their ends to said side frame-pieces and having its legs hinged to said seat.

2. In a collapsible chair, the seat composed of hinged frame-pieces jointed at the corners,

in combination with the legs hinged to the seat and a back formed of two uprights hinged to the seat-frame pieces independent of the legs and connected at their tops by a head-bar jointed to the uprights.

3. In a collapsible chair, the seat composed of hinged frame-pieces jointed at the corners, in combination with the legs hinged to the seat, a back formed of two uprights hinged to the seat-frame pieces and connected at their tops by a head-bar jointed to the uprights, upholstery secured to the head-bar and front seat-frame piece, and a loose connection between the upholstery and the rear seat-frame piece.

4. In a collapsible chair, the seat composed of hinged frame-pieces jointed at the corners, in combination with the legs hinged to the seat, a back formed of two uprights hinged to the seat-frame pieces and connected at their tops by a head-bar jointed to the uprights, and jointed braces between the back and seat-frames and legs and seat-frames.

5. A chair having a seat portion collapsible in the plane of its seat, combined with a back portion collapsible in the plane of the back and hinged to the seat portion, and legs hinged to the seat portion independent of the back and collapsible upon the said seat portion.

6. A chair having its seat portion formed of four pieces positively connected together by pivots or hinges to form a quadrilateral seat-frame collapsible in the plane of the seat, and a back pivoted or hinged to said quadrilateral seat-frame.

In testimony of which invention we have hereunto set our hands.

CARL A. SPAHN.
HENRY D. N. MILLER.

Witnesses:
ERNEST HOWARD HUNTER,
S. T. YERKES.