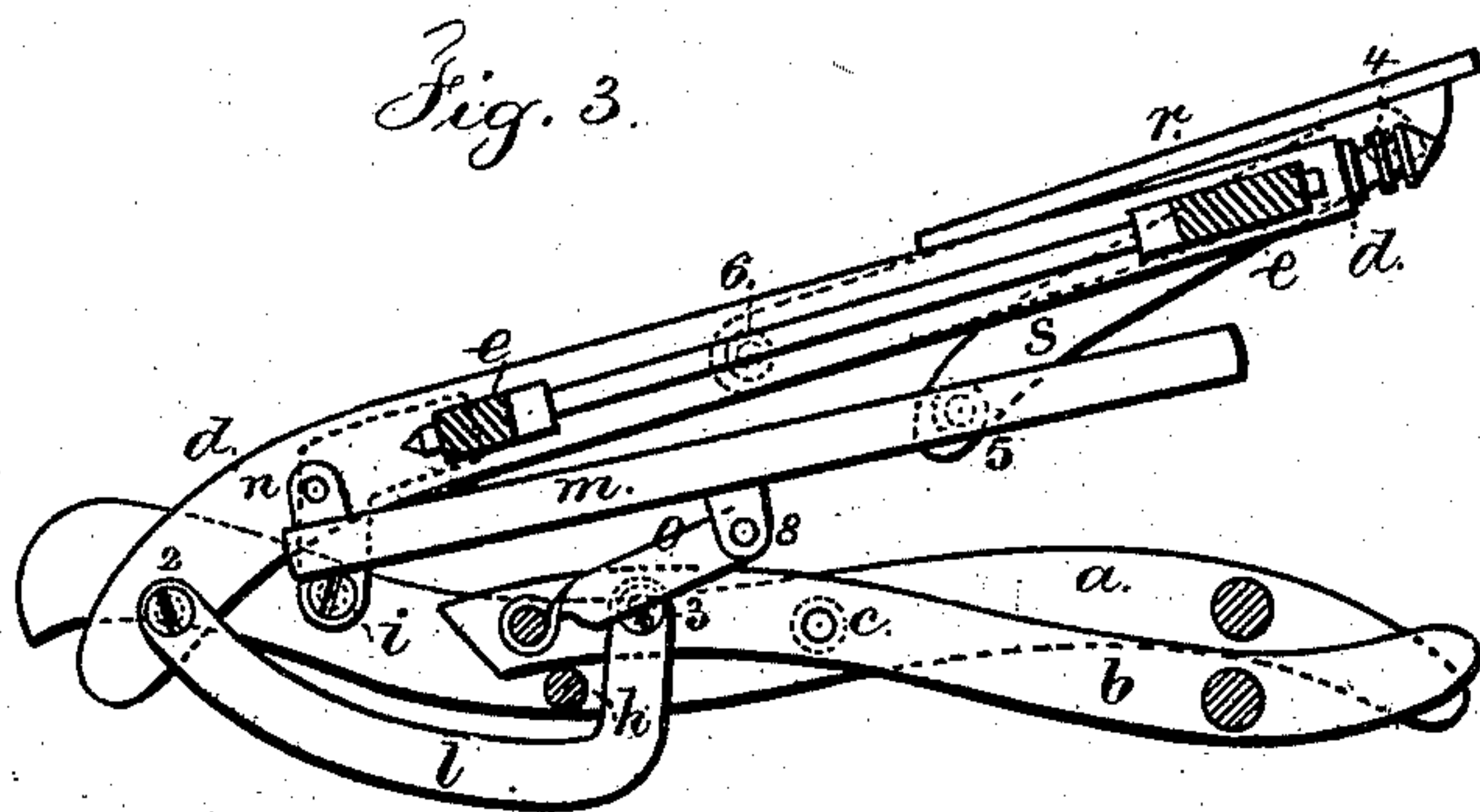
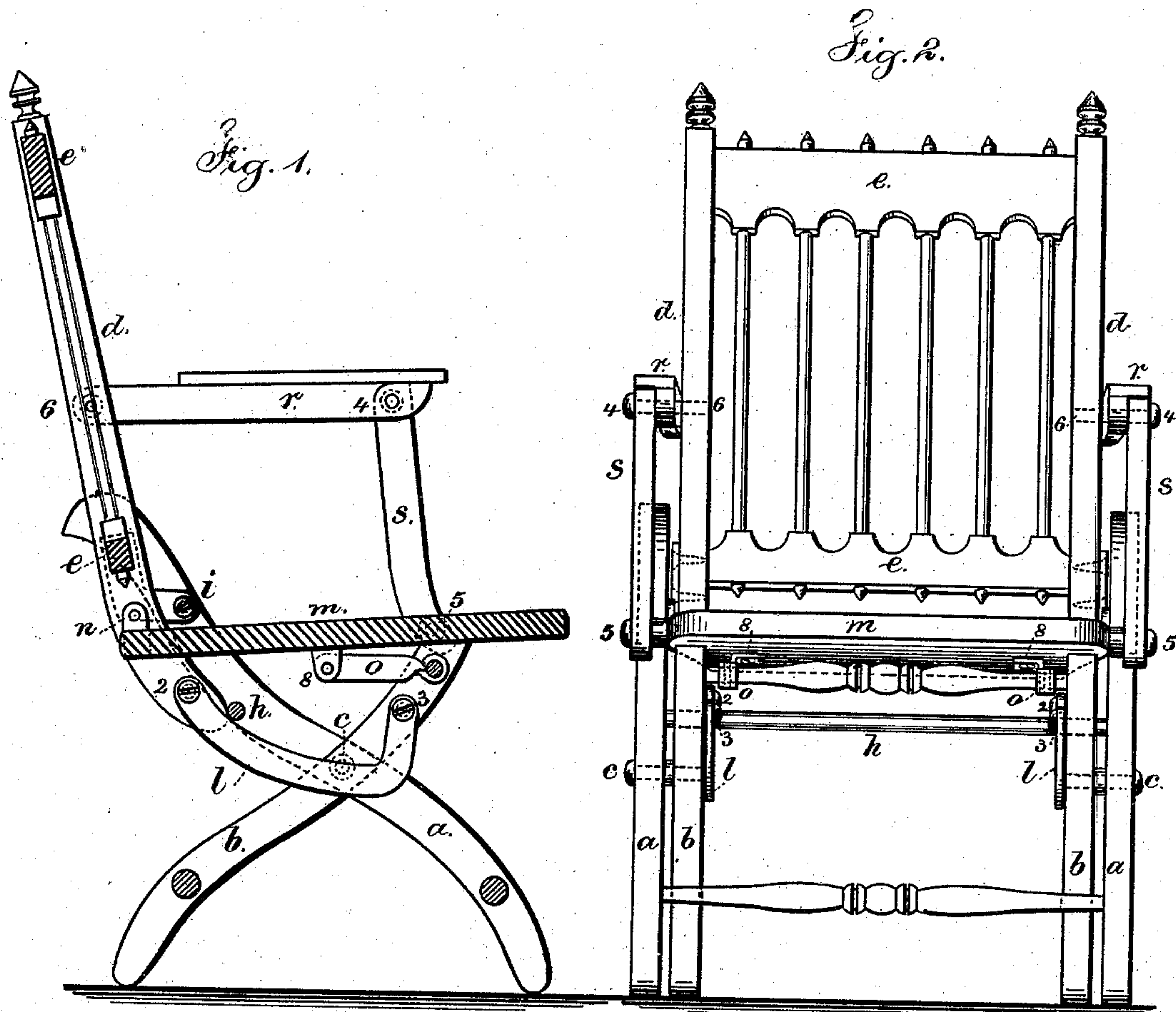


E. TUCKER.
Folding-Chair.

No. 228,144.

Patented May 25, 1880.



Witnesses

Chas. H. Smith
Geo. J. Pinckney

Inventor

Ephraim Tucker
per Lemuel W. Serrell atty.

UNITED STATES PATENT OFFICE.

EPHRAIM TUCKER, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO
EDWARD W. VAILL, OF SAME PLACE.

FOLDING CHAIR.

SPECIFICATION forming part of Letters Patent No. 228,144, dated May 25, 1880.

Application filed May 26, 1879.

To all whom it may concern:

Be it known that I, EPHRAIM TUCKER, of Worcester, in the State of Massachusetts, have invented an Improvement in Folding Chairs, of which the following is a specification.

Folding chairs have been made with X-legs, a hinged back, and a stop to arrest the movement of the back.

I make use of the folding X-legs, a back, and links extending from the lower part of the back-frame to the back legs above the pivots, so that as the chair is folded the back and back legs move together, and the X-legs are folded by moving the back forwardly and downwardly. I also combine with such back, folding X-legs, and links a folding rigid seat and folding arms.

In the drawings, Figure 1 is a vertical section of the chair as open for use. Fig. 2 is a front elevation, and Fig. 3 is a section, of the chair as folded.

The X-legs *a b* are pivoted together at *c*, and the back-frame, composed of the side pieces, *d*, and cross-pieces *e*, is pivoted to the upper part of the front legs, *a*, at or near the seat. I have shown the pivot as made by plates fastened to the side pieces of the back and extending forward, and having the pivot-screws *i*, that unite the plates to the legs *a*. There is a stop that limits the backward movement of the back-frame *d e*. Such stop may be of any desired character. I have shown the stop as formed by the cross-rail *h*, that connects the upper parts of the legs *a*.

I have combined with the folding X-legs, back, and stop links *l*, extending from the back-frame, below the pivots *i*, to the upper part of the back legs, such links *l* being attached at 2 to the back-frame and at 3 to the back legs. These links *l* might be straight if the stop *h* was not a rail crossing from one leg to the other; but in order to clear that stop I have made the links *l* in the bent form shown to allow the parts to fold, as shown in Fig. 3. These links *l* prevent the X-legs folding until the back is moved. They also cause the X-legs and back to fold together, and the back swings forward and downward as the chair folds until the legs and back lie parallel, or

nearly so, with each other, and when the seat is flexible the links *l* perform the double duty of opening the legs and straining the seat, and also of taking the strain partially from the flexible seat when the chair is in use.

I have represented my aforesaid improvement in a chair having a rigid seat, *m*, pivoted to the back at *n* and linked at *o* to the upper ends of the back legs, *b*.

The arms *r* and uprights *s* are pivoted together at 4, and at 5 and 6 to the back and seat, respectively, so that the parts of the arm fold together as the seat and back are brought together.

To fold the chair the seat is to be lifted at the front edge, and the back brought forward toward it. The links *l* serve to fold the X-legs *a b*, and the links *o* describe a half-circle, or nearly so, upon the pivot 8 in swinging from the position shown in Fig. 1 to that in Fig. 3. The reverse movement opens out the chair for use, and the parts become locked and rigid, so as not to fold in the ordinary handling.

I am aware that a strap has been connected between the lower part of the back-frame and the front part of the seat; but this did not prevent the seat folding independent of the back.

I am also aware that the back has been connected adjustably by rigid links with the foot-rest. These links are not permanently pivoted to the front legs.

Chairs have also been made with hooks passing from the lower ends of the back-frame to the upper parts of the back leg; but these require to be unhooked in folding the chair.

In my chair the rigid links, permanently pivoted to the respective parts, prevent one portion of the chair folding without the other.

I claim as my invention—

1: The combination of the rigid links *l*, permanently pivoted to the upper part of the back leg and to the lower part of the back-frame, with the folding X-legs *a b* and back-frame *d e*, pivoted to the upper ends of the legs *a*, substantially as specified, the parts being placed and proportioned substantially as described, so as to move together in opening or folding the chair.

2. In combination with the back *d e*, X-legs
a b, stop *h*, and link *l*, the rigid seat *m*, piv-
oted to the back, and the swinging links *o*,
pivoted to the seat and the upper ends of legs
5 *b*, substantially as set forth.

3. The combination, in a folding chair, of
the X-legs *a b*, back-frame *d e*, pivoted to the
legs *a*, the stop *h*, links *l*, folding seat *m*, links

o, and arm-pieces *r s*, pivoted to the seat and
back, as set forth.

Signed by me this 22d day of May, A. D. 1879. ¹⁰

EPHRAIM TUCKER.

Witnesses:

DAVID MANNING, Jr.,
CHAS. R. JOHNSON.