N. FRYMAN.

FOLDING CHAIR.

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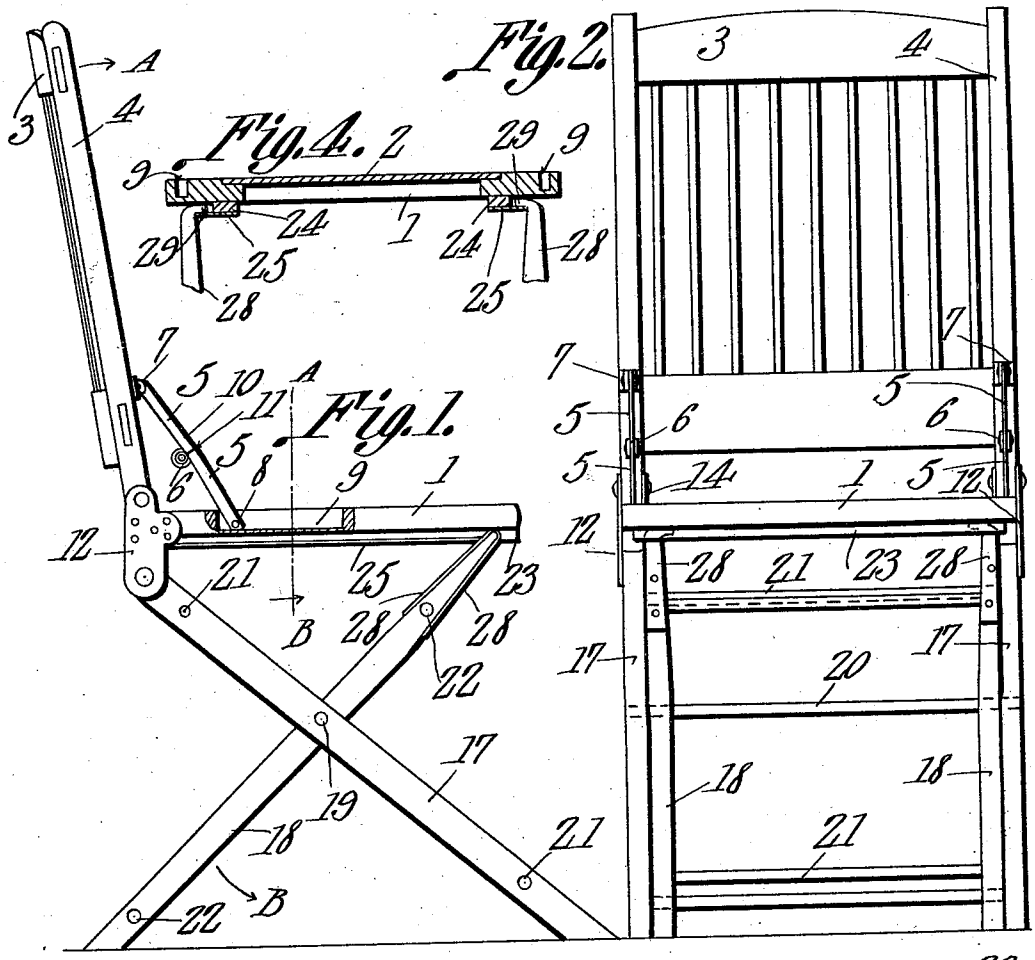
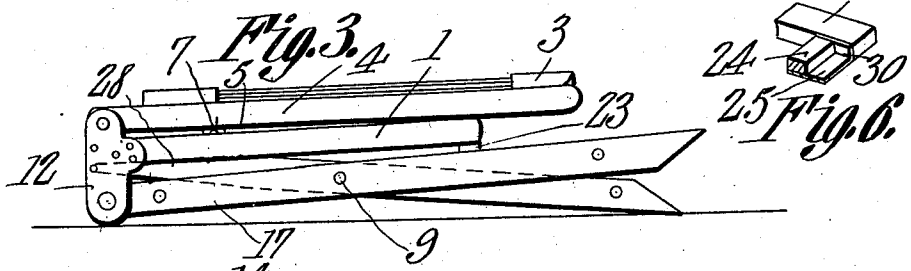
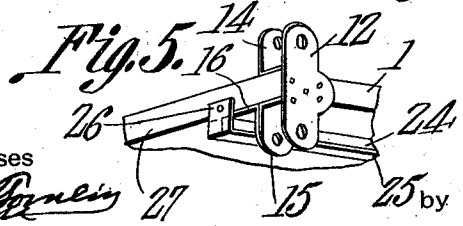
1,001,193.

Patented Aug. 22, 1911.







Witnesses

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FOLDING CHAIR.

1,001,193. Specification of Letters Patent. Patented Aug. 22, 1911.

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To all whom it may concern:

Be it known that I, NICHOLAS FRYMAN, a citizen of the United States, residing at Arcanum, in the county of Darke and State of Ohio, have invented a new and useful Folding Chair, of which the following is a specification.

It is the object of this invention to provide, in a simple, merchantable, and inexpensive form, a chair, adapted to be folded up into small compass.

Another object of the invention is to provide, in a chair including a pivotally connected back and seat, a means operative to hold the back against tilting rearwardly, the said means in no way interfering with the folding of the back against the seat, or requiring manipulation, in order that the folding operation may take place.

Another object of the invention is to provide a novel means for assembling pivotally with the seat of a chair, the legs and the back thereof.

Another object of the invention is to provide a guide in which the end of one of the legs of the chair may slide when the chair is folded, the guide coöperating to maintain and to strengthen, the pivotal union between the seat of the chair and the back and the legs thereof.

In the drawings—Figure 1 is a side elevation of the chair unfolded and set up, parts being broken away; Fig. 2 is a front elevation of the chair; Fig. 3 is a side elevation of the chair, folded up; Fig. 4 is a transverse section upon the line A—B of Fig. 1; Fig. 5 is a detail perspective of one corner of the seat of the chair, designed to show a connection which is mounted thereon; and Fig. 6 is a detail perspective showing the coöperation between certain elements which enter into the construction of the chair.

The seat of the chair comprises an open frame 1, to which the bottom 2 is secured. The back 3 of the chair is provided with side bars 4, connected with the seat in a manner to be described hereinafter. A toggle is provided, the parts 5 of which are pivotally connected, as shown at 6, at their adjacent ends, the said parts 5, at their remote ends, being connected to the side bars 4, as shown at 7, and to the frame 1, as shown at 8.

The chair is a symmetrical structure, and the connection between the back, the seat, and the legs, will be confined to one side of the chair, it being understood that the description applies with equal propriety to the other side of the chair.

In the upper face of the frame 1, there is a slot 9, and, when the back 3 of the chair is folded downwardly against the seat thereof, this slot 9 is adapted to receive the folded toggle parts 5. It is within this slot 9, that one of the toggle parts 5 is connected with the seat, as denoted by the numeral 8. The adjacent end faces 10 of the toggle parts 5 abut against each other in such a way as to maintain the toggle parts out of alinement with each other, and to dispose said parts at an angle, the apex 11 of which is disposed away from the back of the chair. By this construction, although the toggle is thoroughly effective to prevent the back 3 from tilting rearwardly, it in no way interferes with the back being tilted forwardly to rest against the seat of the chair. Thus, when it is desired to tilt the back 3 against the seat, the toggle parts 5 will fold up readily, without being manipulated; and this fact flows from the construction whereby the toggle parts 5 are normally held out of alinement with each other, as seen most clearly in Fig. 1 of the drawings.

Secured to the edge of the frame 1, adjacent the rear of the seat, is a plate 12, which outstands beyond the upper and lower faces of the seat. As seen most clearly in Fig. 5 of the drawings, this plate 12 is provided with rectangular extensions, the upper of which, denoted by the numeral 14, is secured to the upper face of the seat, the lower of which angular extensions, denoted by the numeral 15, is secured to the lower face of the seat. A rectangular plate 16 is secured to the lower of said extensions, and bears against the lower face of the seat.

The upper end of a leg 17 is pivoted between the plate 12 and the lower angular extension 15. Another leg 18 is extended across the leg 17, the legs 17 and 18 being pivotally connected, as shown at 19, in their intermediate portions, by a rung 20, uniting the legs at one side of the chair with the legs at the other side of the chair. The legs 17 are connected by rungs 21, rungs 22 serving to connect the legs 18. The lower ends of the side bars 4 of the back 3 are pivotally connected between the plates 12 and the upper rectangular extensions 14.

Secured to the bottom of the frame 1, ad-

jacent the front of the chair and extended transversely of the chair, is a facing strip 23. A brace 24 is secured to the bottom of the frame 1, at right angles to the facing strip 23. This brace 24 extends from the front of the chair seat to the rear thereof and serves to strengthen and to hold together the parts of the frame 1. Secured to the lower face of the brace 24 is, as seen to best advantage in Fig. 4, a plate 25. This plate 25 is somewhat wider than the brace 24 upon which it is mounted, the plate 25 thus outstanding beyond the edge of the brace 24 to form a guide. One end of this plate 25 is, as shown at 26 in Fig. 5, carried upwardly upon the rear face 27 of the frame 1, and secured thereto. As seen in Fig. 6, the forward end 30 of the plate 25 is carried upwardly, and engaged between the forward end face of the brace 24 and the rear face of the transverse facing strip 23. Thus, the plate 25, in addition to its function as a guide, serves to hold together the constituent portions of the bottom of the chair. Secured to the upper end of the leg 18, are diverging plates 28, united at their upper ends, and terminating in an outstanding finger 29, adapted to slide between the plate 25 and the bottom of the frame 1.

When it is desired to fold up the chair, the back 3 thereof may readily be swung in the direction of the arrow A, to rest upon the frame 1, the toggle parts 5 automatically folding, and entering the slot 9 in the frame 1. The lower end of the leg 18 may be swung in the direction of the arrow *b*, the finger 29 moving between the plate 25 and the bottom of the frame, so that the legs 17 and 18 are ultimately brought into approximate alinement at the rear of the chair. The plate 12 is of sufficient length so that, after the legs 17 and 18 have thus been brought into alinement, said legs may be folded upwardly against the bottom of the chair seat, the device, in such instance, being disposed in the form shown in Fig. 3.

It is to be understood that the drawings show typical embodiments merely; many changes will readily present themselves to any skilled mechanic, and these changes, when properly falling within the scope of what is claimed, may be made, without departing from the spirit of the invention.

Having thus described the invention, what is claimed is:—

A chair comprising a seat; a connection including a plate secured to the edge of the seat and having rectangular extensions, the upper of which is secured to the upper face of the seat, the lower of which is secured to the lower face of the seat; an angle plate secured to the lower of said extensions; a facing strip extended along the bottom of the seat adjacent its front; a brace extended from the back of the seat to the front thereof at right angles to the facing strip, the angle plate being secured between the brace and the seat; a plate secured to the lower face of the brace and outstanding beyond said face to form a guide, one end of the plate being secured between the end of the brace and the facing strip, the other end of the plate being carried upwardly over the rear edge of the seat; a back pivoted between the first named plate and the upper of the angular extensions thereof; a leg pivoted between said plate and the lower of the angular extensions thereof; and another leg pivotally connected, intermediate its ends, with the first named leg, and having a finger to slide in the guide.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

NICHOLAS FRYMAN.

Witnesses:

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