This invention relates to improvements in folding chairs of the type in which the back and rear legs of the chair are rigid and the seat and forelegs constitute the folding parts. One of the objects of the invention is to afford a chair having the general appearance of a conventional dining room chair, and constructed so that its seat and forelegs are folded simultaneously against the back and rear leg structure by manipulating the seat. Another object is to provide mechanism operatively connecting the seat and forelegs of a folding chair with the back and rear leg structure thereof so arranged as to be substantially inconspicuous when the chair is extended for use.

Other objects and advantages of the invention will appear in the following description.

An illustrative embodiment of the invention is shown in the accompanying drawings, in which:

Fig. 1 is a side elevation of a chair in which the invention is embodied, a portion being broken away;

Fig. 2 is a detail section showing a locking means for the seat and foreleg structure;

Fig. 3 is a side elevation of the chair in a partially folded position, other positions being indicated by dotted outlines; and

Fig. 4 is a fragmentary front elevation showing the relative arrangement of the members that connect the seat and forelegs with the back and rear leg structure of the chair.

The illustrative embodiment of the invention comprises a rigid frame, constituting the back and rear legs 2 of a folding chair, a folding seat 3, a foreleg structure 4, and mechanism, hereinafter described, connecting the seat and foreleg structure with the main frame in folding relation therewith.

The upper portion of the main frame has disposed therein suitable back rests 5 and the rear legs are connected by cross-pieces 6 in the usual manner. The seat 3 has side and front frame members 6 and 7 respectively, and the forelegs 4 connected by cross-pieces 8 and 9 form the foreleg structure.

The mechanism for connecting the seat and the foreleg structure with the main frame consists of two groups of members, the one being the counterpart of the other, assembled suitably for installation respectively in the right and left hand sides of the chair. In each assembly are included an anchor plate 10, a hinge bracket 11 having an upturned extension 12 which is secured to said plate at the upper end thereof by a pivot 13, a link 14 pivoted at one end thereof to said hinge bracket and provided at its opposite end with a pivoted lug 15, a lever 16 pivoted at one end thereof to said hinge bracket at a point thereon spaced rearwardly from the inner end of said link and provided at its opposite end with a pivoted lug 17, and an operating arm 18 one end of which is pivoted on said anchor plate at the lower end thereof and the opposite end of which arm is pivoted to said lever at a point located thereon between the ends thereof.

The anchor plate 10 of each assembly is secured to the inner face of the corresponding rear leg 2 by means of screws 19, the hinge bracket 11 is secured to the inner face of the side frame 20 members 6 of the seat by screws 21, and the lugs 15 and 17 are similarly secured respectively to the inner faces of the cross-pieces 8 and 9 in the foreleg structure.

The lever 16 has a lateral offset 21 adjacent 75 its connection with the hinge bracket 11 (Fig. 4) so that sufficient space between the hinge bracket and the lever is provided to accommodate the arm when in folded position. Also, the link 14, lever 16 and the arm 18 are suitably curved to permit folding thereof without obstruction.

A locking means is provided for securing the seat to the foreleg structure when the chair is in extended position for use. An example of such means is shown in Fig. 2 which consists of a perforated spring tongue 22, mounted on a block 22' in the foreleg structure, which tongue has latching engagement with a pin 23, that projects from the inner face of the front seat frame member 7, when the seat rests upon the foreleg structure, and is disengaged therefrom by means of a push-rod 24 disposed movably in the front seat frame member 7.

In operation, the seat is released from latched engagement with the tongue by applying pressure to the push rod, and is then swung upwardly into folded position against the back of the chair. Concurrently with the folding movement of the seat the foreleg structure is drawn backwardly into folded position beneath the seat and against the rear legs by action of the lever 16 and the operating arm 18 connected therewith, and is guided by the link 14. When the seat is moved from folded to extended position the lever is thrust outwardly by the operating arm causing the foreleg structure, guided by the link, to assume its proper position for supporting the seat.

Another feature of the invention is that the assembled members of the mechanism connecting the seat and foreleg structure with the main
frame are so disposed as to preclude liability of the fingers to become pinched or clothing to become wedged between any of the folding parts of the chair structure.

I claim:

1. In a folding chair, a rigid frame constituting a back and rear legs, a seat, a foreleg structure, and mechanism operatively connecting the seat and foreleg structure with said main frame, said mechanism consisting of right and left hand assembled groups of members, in each of which are included an anchor-plate secured to said main frame, a hinge bracket secured to said seat and pivoted on said plate, link and lever members pivotally secured at their ends to said hinge bracket and foreleg structure at points thereon spaced apart, and an arm having pivot connections at its ends with said plate and lever connection.

2. In a folding chair, a rigid frame constituting a back and rear legs, a seat provided with means pivotally connecting it with said frame, a foreleg structure adapted to support said seat when in extended position, link and lever members the ends of which are pivotally secured to said seat and foreleg structure at points thereon spaced apart, an arm pivotally connected at its ends with said main frame and lever member to actuate said lever member when the seat is swung from one of its positions to the other and thereby cause folding or unfolding of said foreleg structure accordingly.

3. In a folding chair, a rigid frame constituting a back and rear legs, a seat provided with means pivotally connecting it with said frame, a foreleg structure adapted to support said seat when in extended position, link and lever members the ends of which are pivotally secured to said seat and foreleg structure at points thereon spaced apart, and an arm pivotally connected at its ends with said main frame and lever member to actuate said lever member when the seat is swung from one of its positions to the other and thereby cause folding or unfolding of said foreleg structure accordingly.

4. In a folding chair having a rigid frame constituting a back and rear legs, a folding seat, and a folding foreleg structure, two groups of members connecting said frame, seat and foreleg structure, one for each side of the chair, each group having an anchor plate attached to said frame, a bracket hinged to said plate attached to said seat, lever and link members each pivoted at one end to said bracket and having at their opposite ends pivoted members attached to said foreleg structure, and an arm pivotally connected at its opposite ends respective to said plate and lever member.

5. A folding chair having a frame constituting a back and rear legs, a seat connected pivotally in the frame and disposed to fold upwardly against said frame, a foreleg structure, a mechanism disposed in each side of said chair, each mechanism including members connecting said seat and the foreleg structure to which said members are pivotally connected at their ends at corresponding points thereon spaced apart, and a complementary operating arm connecting said frame and one of said members to which said arm is pivotally connected respectively at its ends, the members and arm of each mechanism being so arranged that when folding the seat the foreleg structure is moved out of contact with said seat and into folded position against said rear legs, and upon unfolding the seat said foreleg structure is moved into seat supporting position beneath the front end of the seat.

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