

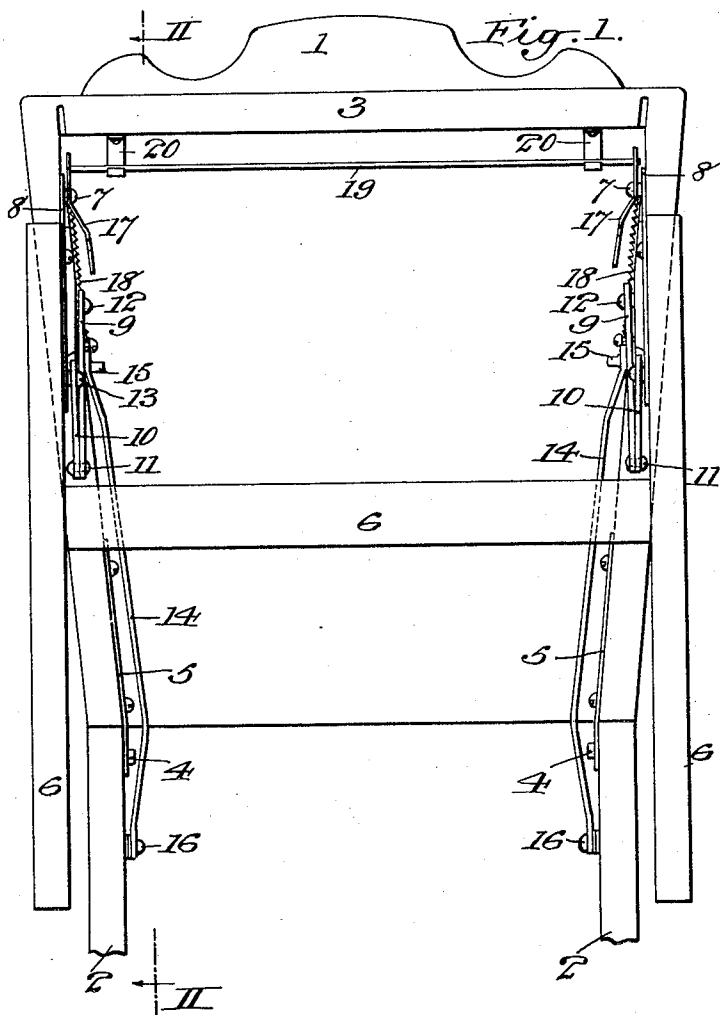
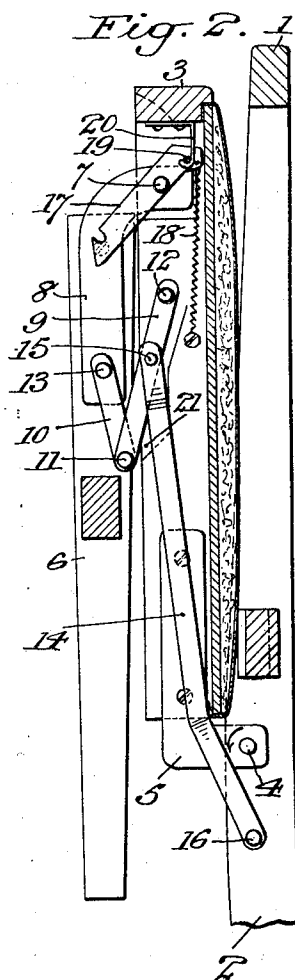
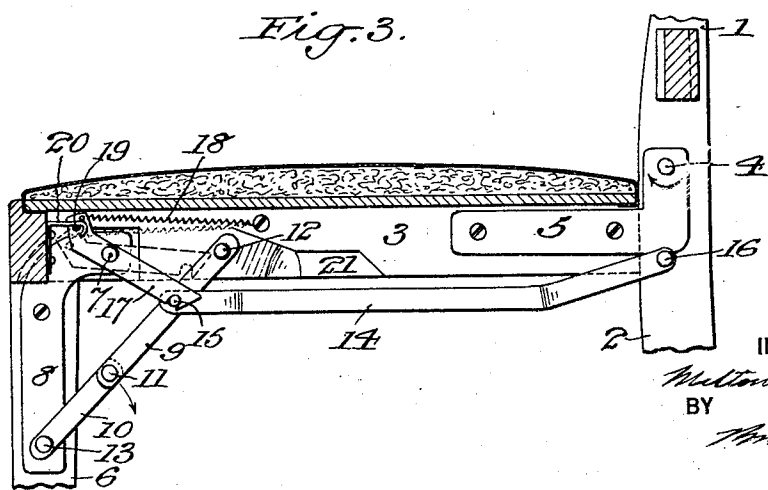
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FOLDING CHAIR

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FOLDING CHAIR

Application filed November 11, 1931. Serial No. 574,371.

My invention relates to folding chairs of the type in which the seat frame folds against a combined back and rear leg frame and where the front leg frame folds against the seat frame.

The object of my invention is to provide novel means for ensuring the simultaneous folding or unfolding movement of the seat and front leg frames and also to provide novel manually releasable means at the front of the chair for automatically locking the chair in its unfolded position, said means being strong and compact and also well concealed when the chair is in its unfolded position.

A practical embodiment of my invention is represented in the accompanying drawing in which:

Fig. 1 represents a detail front view of my improved chair in its folded position;

Fig. 2 represents a vertical section through the same, taken in the plane of the line II—II of Fig. 1 looking in the direction of the arrows; and

Fig. 3 represents a similar section with the chair in its unfolded position, the manually releasable locking means being shown in dotted lines in its released position to permit the chair to be folded.

The combined back and rear leg frame comprises a back frame portion 1 and a rear leg frame portion 2. The seat frame 3 is herein shown as hinged at 4 to the combined back and rear leg frame by the two side hinge straps 5, to fold upwardly against the seat and combined back and rear leg frame. The front leg frame 6 is herein shown as hinged at 7 to the seat frame 3 by two side hinge straps 8, to fold against the seat frame 3.

The lever means which I employ for ensuring the simultaneous folding or unfolding movement of the seat and front leg frames are constructed and arranged as follows:

A folding lever connects the seat and front leg frames upon opposite sides of their hinged connection, at each side of the chair, which folding lever comprises upper and lower arms 9 and 10 hinged together at 11, the upper arm being hinged to the seat frame

at 12 and the lower arm being hinged to the leg frame at 13.

Each folding lever is positively folded and unfolded to positively fold and unfold the front leg frame as the seat frame is folded and unfolded. The means for accomplishing this result is herein shown as an operating lever 14, the front end of which is hinged at 15 to the upper arm 9 of the folding lever and the rear end of which is hinged at 16 to the combined back and rear leg frame at a point below the hinged connection 4 between the seat frame and the combined back and rear leg frames.

The manually releasable means which I employ for automatically locking the chair in its unfolded position is constructed and arranged as follows:

A hook 17 is mounted to rock on each of the hinged connections 7 between the front leg and seat frames, which hook is actuated by a spring 18 to automatically swing the hook into locking engagement with the pin 15 which forms the hinged connection between the upper arm 9 of the folding lever and the front end of the operating lever 14. A handle bar 19 extends transversely across the chair at its front within the seat frame 3, said handle bar connecting the two hooks 17. One or more stops 20, in the present two stops, serve to limit the locking movement of said hooks. The inner faces of the side rails of the seat frame 3 are recessed, as shown at 21, to permit the free action of the levers which control the folding movement of the front leg frame.

In operation: When the chair is locked in its unfolded position and it is desired to fold the chair, the handle bar 19 is manually depressed, thereby lifting the hooks 17 to release them from their locking engagement with the pins 15. As the seat is lifted to fold the same, the actuating lever 14 will fold the arms of the folding lever and thereby cause the folding movement of the front leg frame. As the chair is unfolded, the unfolding movement of the seat frame will cause, through the actuating lever 14 and the folding lever, the unfolding movement of the front leg frame. As the chair reaches its un-

folded position the spring actuated hooks 17 will again engage their pins 15 to lock the chair, thereby providing a rigid interconnection between the front leg frame, the seat frame and the combined back and rear leg frame.

It is evident that various changes may be resorted to in the construction, form and arrangement of the several parts without departing from the spirit and scope of my invention, and hence I do not intend to be limited to the particular embodiment herein shown and described.

What I claim is:

1. In a folding chair, a combined back and rear leg frame, a seat frame hinged thereto, a front leg frame hinged to the seat frame, and means ensuring a simultaneous folding or unfolding movement of the seat and front leg frames, said means comprising a folding lever connecting the seat and front leg frames and a lever connecting the folding lever with the combined back and rear leg frame, and manually releasable means mounted at the front of the seat frame for locking the chair in its unfolded position.

2. In a folding chair, a combined back and rear leg frame, a seat frame hinged thereto, a front leg frame hinged to the seat frame, means ensuring a simultaneous folding or unfolding movement of the seat and front leg frames, said means comprising a folding lever connecting the seat and front leg frames and a lever connecting the folding lever with the combined back and rear leg frame, and manually releasable means for locking the chair in its unfolded position, said means comprising a pin on the folding lever and a spring actuated hook pivoted on the seat frame in position to engage said pin.

3. In a folding chair, a combined back and rear leg frame, a seat frame hinged thereto, a front leg frame hinged to the seat frame, means ensuring a simultaneous folding or unfolding movement of the seat and front leg frames, said means comprising a folding lever having upper and lower arms connecting the seat and front leg frames and a lever connecting the folding lever with the combined back and rear leg frame, and manually releasable means for locking the chair in its unfolded position, said means comprising a pin on the upper arm of the folding lever and a spring actuated hook pivoted on the seat frame in position to engage said pin.

4. In a folding chair, a combined back and rear leg frame, a seat frame hinged thereto, a front leg frame hinged to the seat frame, means ensuring a simultaneous folding or unfolding movement of the seat and front leg frames, said means comprising a folding lever having upper and lower arms connecting the seat and front leg frames and a lever connecting the folding lever with the combined back and rear leg frame, and manu-

ally releasable means for locking the chair in its unfolded position, said means comprising a pin on the upper arm of the folding lever and a spring actuated hook pivoted on the seat frame in position to engage said pin and a stop on the seat frame for limiting the locking movement of the hook.

5. In a folding chair, a combined back and rear leg frame, a seat frame hinged thereto, a front leg frame hinged to the seat frame, a device at each side of the chair ensuring a simultaneous folding or unfolding movement of the seat and front leg frames, each of said devices comprising a folding lever having upper and lower arms connecting the seat and front leg frames and a lever connecting the folding lever with the combined back and rear leg frame, and manually releasable means for locking the chair in its unfolded position, said means comprising a pin on the upper arm of each folding lever and spring actuated hooks pivoted on the seat frame in position to engage said pins, said hooks having a connecting handle bar for manipulating them simultaneously.

6. In a folding chair, a combined back and rear leg frame, a seat frame hinged thereto, a front leg frame hinged to the seat frame, a device at each side of the chair ensuring a simultaneous folding or unfolding movement of the seat and front leg frames, each of said devices comprising a folding lever having upper and lower arms connecting the seat and front leg frames and a lever connecting the folding lever with the combined back and rear leg frame, and manually releasable means for locking the chair in its unfolded position, said means comprising a pin on the upper arm of each folding lever and spring actuated hooks pivoted on the seat frame in position to engage said pins, said hooks having a connecting handle bar for manipulating them simultaneously and means normally engaging said handle bar for limiting the locking movement of the hooks.

In testimony, that I claim the foregoing as my invention, I have signed my name this 7 day of November 1931.

MILTON L. TINSLEY.