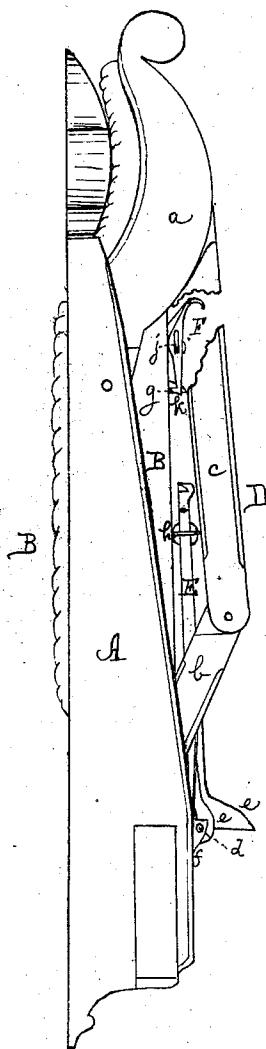


WATKINS ^{and} M'CONNELL.

Improvement in Folding Chairs.

No. 118,500.
Fig. 2.



Patented Aug. 29, 1871.

Fig. 1.

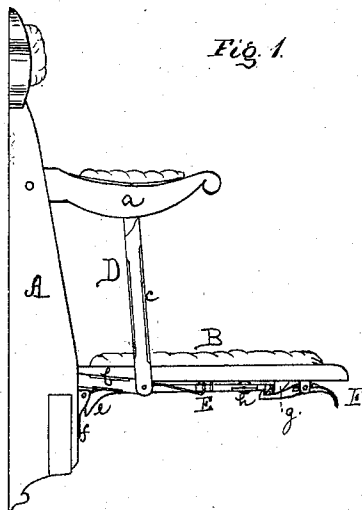
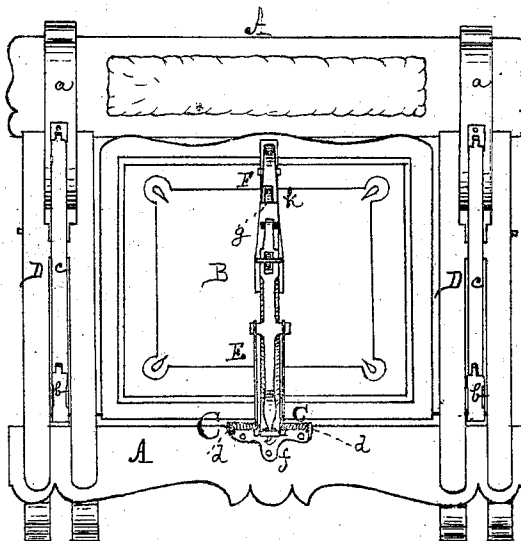


Fig. 3.



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UNITED STATES PATENT OFFICE.

EDWARD WATKINS AND ANDREW McCONNELL, OF PHILADELPHIA, PA.

IMPROVEMENT IN FOLDING CHAIRS.

Specification forming part of Letters Patent No. 118,500, dated August 29, 1871.

To all whom it may concern:

Be it known that we, EDWARD WATKINS and ANDREW McCONNELL, of the city and county of Philadelphia and State of Pennsylvania, have made new and useful Improvements in Folding Chairs; and we do hereby declare the following to be a clear and exact description of the nature, sufficient to enable others skilled in the art to which our invention appertains to fully understand and use the same, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a side view of the device, illustrating our invention. Fig. 2 is a similar view in a folded state. Fig. 3 is a front view thereof in a folded state.

Similar letters of reference indicate corresponding parts in the several figures.

Our invention consists in a chair, the seat of which is provided with a spring to throw up said seat when the occupant removes therefrom, and with a hinged lever for taking up the weight and removing strain from the journals of the seat. It also consists in a hinged lever for sustaining, in part, the weight of the person occupying the seat, thereby relieving the joint or hinge of the seat from strain. It finally consists in a catch having pivotal and longitudinal movements, so as to lock the seat when extended or open, or be rendered inoperative for that purpose, as may be desired or necessary.

In the drawing, A represents the back or frame of a chair, which may have suitable feet, or be made to be secured to the wall, front of desks, or elsewhere. B represents the seat or leaf, which is pivoted to the back A and made to fold up in line with said back. On the lower side of the seat B is arranged a spring, C, which is so located that when the person who has been occupying the seat rises therefrom the seat at once flies up and is folded. This feature is quite important. No starting of the seat is necessary, and no manipulation of the hand is required to cause the operation of folding, it being entirely automatic. D represents arm-rests, which consists of the rests proper *a* and the lower arms *b*, which are pivoted to the back or frame A and to each other by the arms *c*. The journals of the seat or leaf A are sufficiently extended to have secured to them the arms *b* of the rests D.

When the rests are drawn out or down they open, as does also the seat; or by pressing down the seat the rests open. In either case the arms and seat open together, and when the seat is thrown up the rests follow its operation. Thus the seat and arms may be folded out of the way, whereby a passage is formed across the room wherein the seats are arranged, and the entrance and exit of persons to and from the room are not interfered with. A lever, E, is hinged to the lower portion of the frame or back A, its free end bearing against the under side of the seat B, and having a longitudinal motion thereon. In the present case the pintle *d*, which forms the bearings for the lever, also supports the spring C, and the ends of the latter are hooked or hung on projections or notches in the lever. The pivoted end of the lever is formed with a shoulder, *e*, which, when the seat is down, is designed to bear against the lower portion of the frame, or against a bracket, *f*, which is secured thereto, said bracket holding the pintle *d* of the lever. The other end of the lever, when the seat is down, will come against a stop, *g*, secured to the seat.

It will be seen that when the seat is open or in position for the occupant the lever E is braced between the stop *g* and bracket *f*, and receives a portion of the weight on the seat and relieves the hinge or joint of the latter of strain.

A small wheel or roller, *h*, may be arranged with the lever to prevent chafing against the seat and lessen friction.

F represents a catch, which is hung on ears secured to the under side of the seat. It is formed with a longitudinal slot, *j*, through which passes the pin which forms the fulcrum of the catch, whereby said catch has two motions, viz., pivotal and longitudinal. The inner end *k* of the catch is hooked to engage with a correspondingly-formed hook on the free end of the lever E. Its outer end is bent to act as a handle, and has a spring bearing against it to press or force in the hooked end *k*, said spring being arranged to hold the catch in place when moved in the direction toward the hinged end of the seat, and thus cause the catch to engage with the hooked end of the lever E when the seat is opened. This locks the seat and prevents it from folding up.

When it is desired to lock or fold the seat the handle end of the catch is pressed in, said catch

then merely moving on its pivot, and the lever is at once released. The spring C now operates on the seat B, as previously stated.

When it is desired to render the catch inoperative against the lever and prevent locking therewith, the former is drawn out to its full longitudinal extent, and is sufficiently removed from the hooked end of the lever as not to engage therewith. In this case, when the seat is relieved of the weight of the occupant it is immediately thrown up by the action of the spring C.

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

1. The spring C and lever E, operating in connection with the seat B, substantially as and for the purpose described.

2. The journals of the seat, extended to form connections with the parts *b* of the arm-rest D, substantially as and for the purpose set forth.

3. The combination, with a folding seat, of the hinged lever E, bracing at both ends and operating in the manner and for the purpose described.

4. The catch F, having pivotal and longitudinal motions, and operating, in combination with the seat B, in the manner and for the purpose described.

The above signed by us this 9th day of February, 1871.

EDWARD WATKINS.
ANDREW McCONNELL.

Witnesses:

JOHN A. WIEDERSHEIM,
PERCY V. KNEASS.