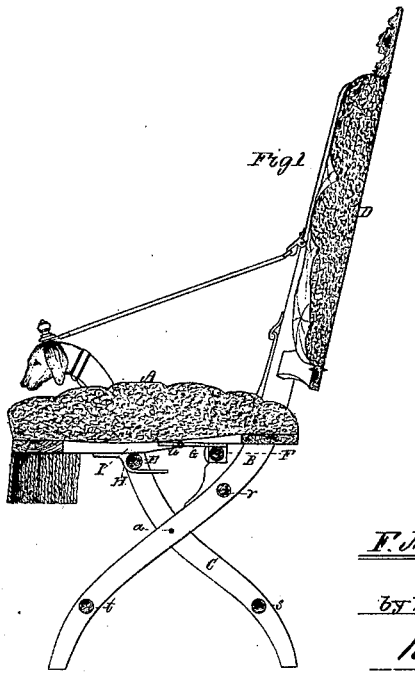
F. M. Holmes,

Folding Chair.

No. 112,041. Patented Feb. 21. 1871.

Fig 1.



Witnesses

S. N. Piper

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by his attorney

R. H. Eddy

Fig 2.

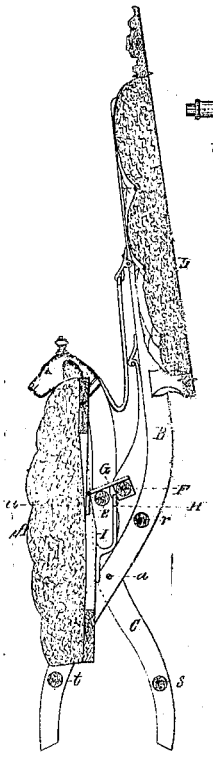
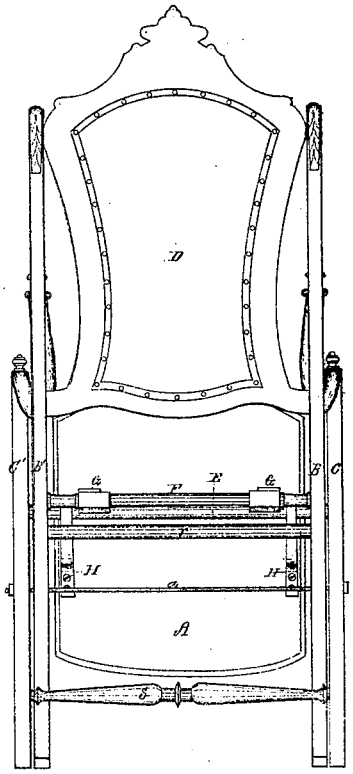


Fig 4.

Fig 3.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

FRANCIS MARCH HOLMES, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 112,041, dated February 21, 1871.

IMPROVEMENT IN FOLDING-CHAIRS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, FRANCIS MARCH HOLMES, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Folding-Chair; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a vertical section of one of my improved chairs in an unfolded state, ready for use;

Figure 2 is a vertical section; and

Figure 3, a rear elevation of it as folded.

The main features of the folding-chair, as improved by me, consist of a seat, A, two sets of crossed levers B B′ C C′, a back, D, and two seat-supporting rungs E F.

The longer levers, B B′, are crossed on the smaller ones, C C′, and pivoted thereto, the pivoted rod being shown at *a*. It goes through both sets of levers.

Furthermore, the longer levers are disposed between and against, or in close contiguity with the shorter levers.

The shorter levers are connected by the front-supporting rung E of the seat, and also by another rung *s*, the latter being disposed below the pivotal rod, such rungs, E *s*, being tenoned and firmly fastened in the levers so as to be immovable relatively thereto.

The longer levers are connected in a similar manner by two rungs *r t*, arranged as represented, and also by the back D, disposed between such levers in manner, as shown.

The rearmost seat-supporting rung, F, has pivots or journals at its ends to rest in bearings in or applied to the longer levers; and furthermore, it has two short plates or arms, G G, extended from it, and pivoted or hinged at their front ends to the seat, the two seat-supporting rungs having their axes at unequal distances from the axis of the pivotal bar *a*, and the seat being provided with an inclined bottom or cam, shown at I, or the equivalent thereof, such as, while the chair may be in the act of being unfolded, will raise the seat on the front rung into a horizontal position, or to the extent of the difference in altitudes of the axes of the two seat-supporting rungs, or thereabout.

On the chair being folded, its parts take positions relatively to each other, as shown in fig. 2, the seat A being in an upright position in front of the rung E, and supported by the hinge plates or arms G, resting in inclined positions on the said rung E.

When the seat is horizontal or in the position to receive a sitter, one or more hooks or stops H, extended down from it, bear against the front rung, and thus aid in supporting the parts of the chair in their proper positions for the chair to be used by a sitter.

Figure 4 is a top view of the rotary seat-supporting rung F, with its journals and its arms G G, and the hinge plates *u u*, each of such arms in fact composing one leaf of a hinge, which leaf is to be long enough to project beyond the rung somewhat greater than the thickness or diameter of the front rung E, all being as represented, and to enable the seat to take a vertical, or about a vertical position when the chair is folded and resting on its four feet.

What, therefore, I claim as my present improvement in the folding-chair, provided with the seat A, the two sets of crossed levers B B′ C C′, and two seat-supporting rungs E F, as described, consists in—

The rungs E F, as arranged with their axes at unequal distances from that of the pivotal bar *a*, and the seat, as provided with the elevating cam I, or its equivalent, and hinged or connected with the back rung F, as explained, and such rung pivoted to the levers B B′, all being substantially as hereinbefore described and as represented.

F. M. HOLMES.

Witnesses:
R. H. EDDY,
J. R. SNOW.