## R. DICK. Folding-Chair.

No. 210,842.

Patented Dec. 17, 1878.

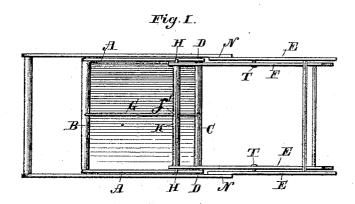


Fig. 2.

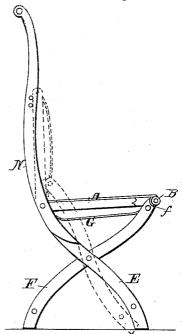
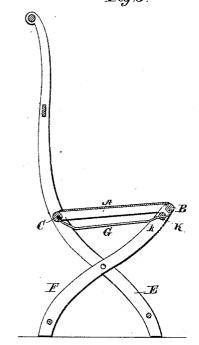


Fig.3.



## UNITED STATES PATENT OFFICE

ROBERT DICK, OF BUFFALO, NEW YORK.

## IMPROVEMENT IN FOLDING CHAIRS.

Specification forming part of Letters Patent No. 210,842, dated December 17, 1878; application filed September 21, 1878.

To all whom it may concern:

Be it known that I, ROBERT DICK, of the city of Buffalo, in the county of Erie and State of New York, have invented certain Improvements in Folding Chairs, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings.

The object of this invention is the production of a chair for general use of the strongest possible construction, the seat and back of which must fold face to face compactly and squarely, without stop or hitch in the hands of any operator, however inexperienced, and susceptible of being produced at a price to make its general use practicable.

The invention consists in forming a concavity in the front end of each of the back legs, into which fits the front bar of the seatframe, and projections on the bar which bind the aforesaid ends of the back legs together, so that the projections and the concavities named shall effectively support the front ends of the sides of the seat, and also both ends of its front bar; and in forming an incline at each end of an elastic wire or rod, which keeps the parts just named in working relation, and which, by its elasticity and inclines, assists in rendering easy the folding and unfolding of

In the accompanying drawings, Figure 1 is a plan view of the chair folded. Fig. 2 is a side elevation. Fig. 3 is a cross-section from the front to the base of the chair.

Like letters of reference refer to like parts

in each of the drawings.

A A are the two side pieces of the seat-frame; B, its front bar, and C its rear bar, outward projections of which pass into the sides of the back-frame at D D, and there serve as pivots, on which the seat turns. E E are the two front legs, which are made fast inside of the side pieces, N N, of the backframe; or they may be cut of one piece with them. FF are the two back legs, pivoted inside of the front legs, EE, by the bolts TT or otherwise, so as to have them range inside of the seat's sides A A, fall within them, and be of the proper length to embrace with their upper concave ends the bar B when the seat is nearly at a right angle with the back, so as to form, in connection with the outward projections, H H, of the bar K, a double support for each front corner of the seat-frame, one at each corner under the front bar, B, and the

other at each corner under the side pieces, A A. G is an elastic wire or rod, passed over the bar K or through the aperture f', and having its two ends made fast, one to the bar B and the other to the bar C, both of which it reaches by an incline or curve formed near each end, adjusted to press back lightly the bar K every time it reaches a full oscillation in either folding or unfolding the chair.

My improved chair operates as follows: In folding or unfolding the chair, grasp the upper bar of the back-frame and the front bar of the seat-frame. A slight force will commence the desired motion, and, continued, will complete it without stop or hitch, because the flexibility of the rod G prevents a rigid dead set, even were the force applied at right angles to the plane of motion; but at the start either way the incline of said rod G, if properly adjusted, not only secures a more favorable application of the force, but actually presses against the bar K in force nearly sufficient to commence the desired motion, while at all other points the elasticity of the rod G relieves k k from all friction on A A, and confines it wholly to a single point between the rod G and the bar K, and thus also aids in securing the perfect ease and certainty of oscillation realized by this invention, while the double support of each front corner of the seat frame, the dispensing with hinges of every kind, with all slots, with all metallic tracks, and with every like addenda, give the chair the manifest neatness, strength, simplicity, and economy of construction so indispensable in a chair for general use.

I claim-

1. In combination with the seat-frame provided with the front bar, B, and pivoted to the back-frame N N, the back-leg frame, F F, provided with the concavities f at their upper ends, and the bar K, provided with the projections H H, as and for the purposes set forth.

2. In combination with the seat-frame pivoted to the back-frame N N, and provided with the bent elastic wire G, the back-leg frame F F and the bar K, provided with the perforation f', as and for the purposes set forth.

ROBERT DICK.

Witnesses:

M. GARDNER. F. B. GROFF.