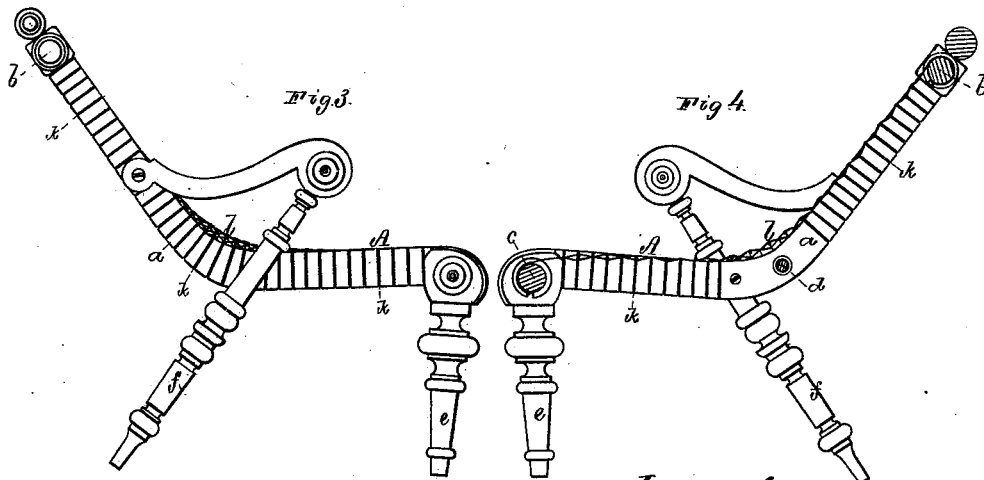
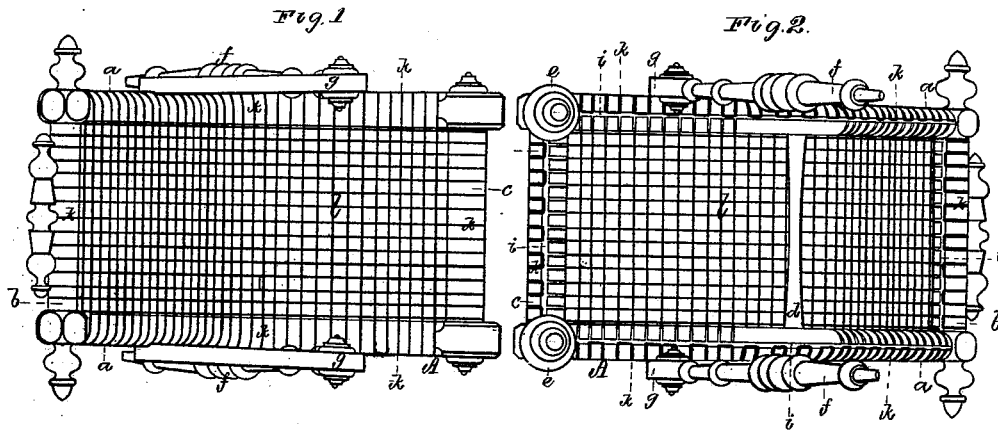


F. H. FOSTER.

CHAIRS.

No. 190,842.

Patented May 15, 1877.



Witnesses

S. W. Piper

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UNITED STATES PATENT OFFICE

FRANK H. FOSTER, OF CHELSEA, MASSACHUSETTS.

IMPROVEMENT IN CHAIRS.

Specification forming part of Letters Patent No. 190,842, dated May 15, 1877; application filed March 6, 1877.

To all whom it may concern:

Be it known that I, FRANK H. FOSTER, of Chelsea, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Chairs; and do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a bottom view, Fig. 3 a side elevation, and Fig. 4 a longitudinal section, of a chair embracing my invention.

The back and seat-frame A of this chair are composed, as represented, of two curved side bars, *a a*, two cross-bars, *b c*, and a rung, *d*, the latter being extended from one side bar to the other at their bends.

The front legs *e e* project down from the frame A at or about at right angles with the seat thereof. The back legs *f f*, however, stand obliquely, in manner as shown, to the seat-portions of the side bars, and are fastened by screws to and project above such portions, and are joined to the arms *g g* near the front ends thereof. The said arms at their rear parts are lapped on and fastened by screws to the back portions of the side bars *a a*.

From the above it will be seen that the pressure of the body of the sitter, when in the chair, against the chair-back, will be counteracted, in a measure, if not entirely, by his weight imposed on the seat, for the back legs by such weight will be caused to operate as levers in a manner to force the chair-arms forward, and cause a draft or strain on the back portions of the side bars. Each of the side and end bars *a a b c* of the frame A is grooved lengthwise on its under side, such being as shown at *i*. It is also provided with a series of other grooves, *k*, arranged at equal distances apart and around it transversely, and opening out of or intersecting the lengthwise groove. Within these transverse and longitudinal grooves a cord or cords or a wire or wires, *l*, are run or arranged and interwoven

in manner as shown, they running from one side bar to the other, and also from one end bar to the other, of the chair-frame.

In being applied to the frame, the cord or wire is carried in a direction from one transverse groove of one bar to its opposite groove of the other bar. Next, the cord is bent down in the latter groove, and thence into the longitudinal groove, and into the next transverse groove. The cord is next carried back within the last-named groove, and in the opposite direction across the chair to the opposite groove. After having run the cord as many times as may be necessary transversely across the entire seat and back of the chair in such way, I next run it successively lengthwise of the frame in like manner from each groove to the opposite groove, and interweave it with the transverse and parallel ranges of it, whereby I form an elastic back and seat to the chair, all being as shown. Between the bends of the side bars of the frame A the seat and back will be crowned or arched upward, whereby the tendency of the back and seat to sag down will be counteracted or opposed.

In the above-described chair I claim as of my invention as follows:

1. The combination of the curved frame A and its front legs *e e* with the back legs or levers *f f*, arranged obliquely to the seat and extended up and secured, as described, to the arms *g g*, arranged with and fastened to the frame A, all being substantially as set forth.

2. The frame A, provided with the longitudinal and transverse grooves *i k* arranged in it, substantially as represented.

3. The frame A, provided with the longitudinal and transverse grooves *i k* arranged in it, as described, in combination with the cord or cords *l* laid in such grooves and across the frame and interwoven, essentially in manner as shown and explained.

FRANK H. FOSTER.

Witnesses:

R. H. EDDY,
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