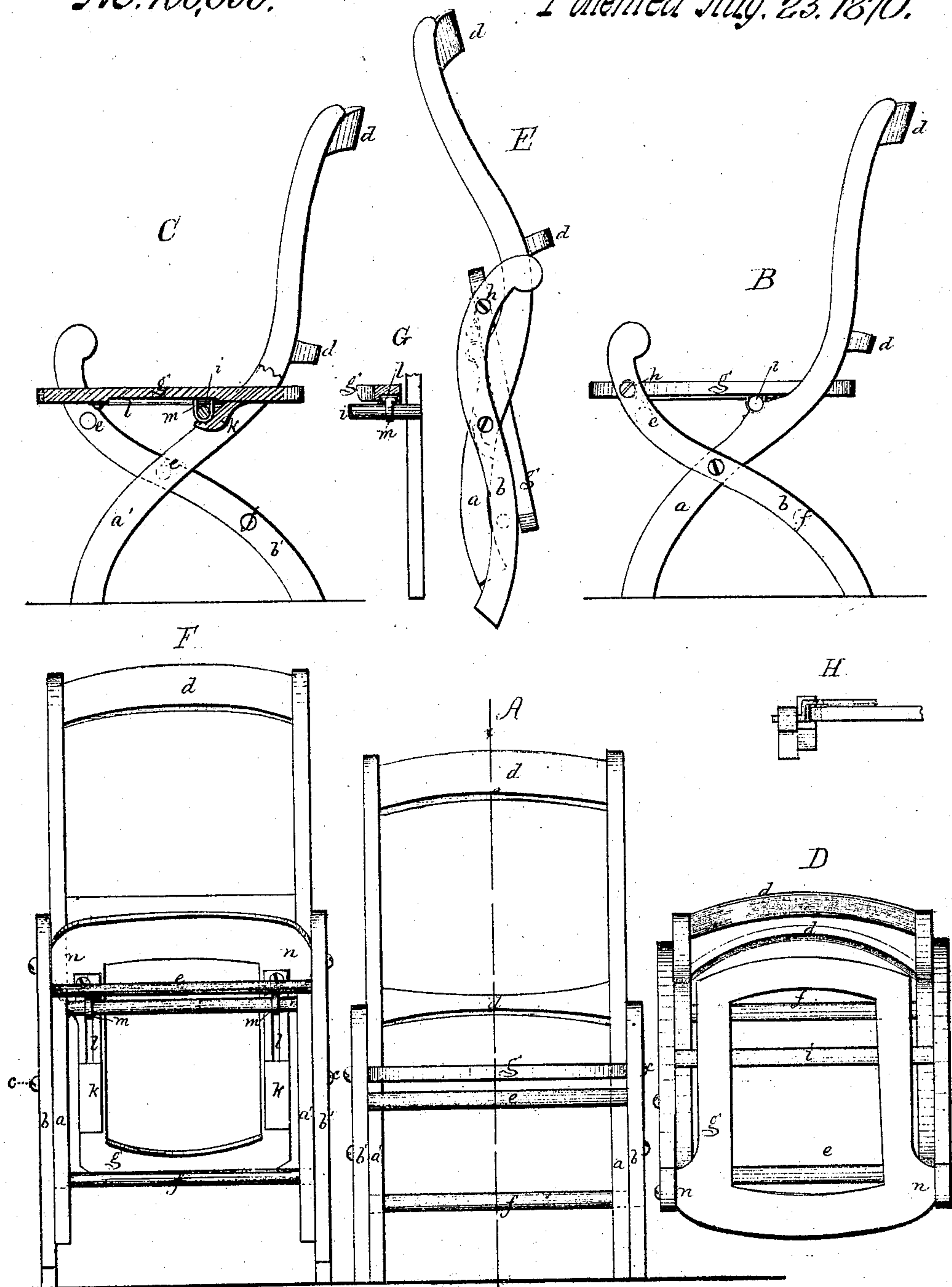


A. W. Stewart,

Folding Chair.

No. 106,633.

Patented Aug. 23. 1870.



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ALEXANDER W. STEWART, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 106,633, dated August 23, 1870.

IMPROVED FOLDING CHAIR.

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

To all whom it may concern:

Be it known that I, ALEXANDER W. STEWART, of Boston, county of Suffolk and State of Massachusetts, have invented Improvements in Folding Chairs; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

United States Letters Patent No. 100,209 were granted to me February 22, 1870, antedated August 23, 1869, for an improved folding chair.

My present invention relates to details of construction of chairs of the same class as that shown and described in said patent.

In the present, as in the said patented chair, two pairs of crossed folding legs are used, with a seat jointed at its front to the tops of two of the legs, and resting at its rear, when the chair is open, upon a round or stretcher extending across the other legs. But instead of hinging the seat at its front to the legs, as in the said patented chair, and making the seat the stretcher that keeps the legs in proper position, I pivot the seat by means of pins, extending through the legs into the opposite edges of the seat, and extend a connecting strut or stretcher across between the legs, just under the seat front, thereby relieving the seat from aiding in the proper support of the legs, and insuring for it a freedom of motion unattainable in a chair in which the legs are connected together at top and to the seat by hinges alone, which hinges are subjected to strain, from the seat being the connection and partial supporter of the legs.

In such patented chair I also show long guide-loops, extending beneath the seat, through which loops plays the seat-supporting bar as the chair is folding. In my present invention I dispense with such loops, which are to some extent unsightly, and use stops or hoops placed under the seat, near the rear part thereof, and serving to arrest the opening movement of the legs, and preventing the spreading of the chair when a person is seated upon it. These details form the main features of my present improvements.

A minor detail of the invention consists in the use of sort of dovetailing grooves in the under side of the seat, T-shaped slides or runners, attached to the seat-supporting bar, running in these grooves, and holding the seat to the bar during the relative movements of the bar and seat.

This detail of construction, however, is not essential to the other features of the invention.

In the present chair the short legs (to the front and upper ends of which the seat is jointed) are placed outside of the other legs, and, as the seat runs between the last legs, it will be obvious that it cannot

have a general width equal to the greater space between the front legs. To cause the front of the seat to fill the space between its supporting legs, I increase its width at the front, thereby concealing the pivots upon which it is hung, and adding to the symmetry of the chair, this detail of construction also forming a minor feature of my present improvements.

The drawing represents a chair embodying these improvements.

A shows the chair in front elevation.

B is a side elevation of it.

C is a section on the line $x x$.

D is a plan of the chair.

E is a side view, and

F a front view of the folded chair.

G is a detail showing groove in bottom of chair-seat.

The chair is represented as devoid of upholstery, for the better illustration of the improvements.

$a b a' b'$ denote the crossing legs of the two pairs of legs, the two legs of each pair being pivoted together, as seen at c , and the legs $a a'$ being extended upward, to form, with the cross-bars d , the back of the chair.

The legs $b b'$ are shown as connected by two rungs, rounds, or stretchers, $e f$, the two legs, $b b'$, and the two stretchers, $e f$, constituting together a rigid frame, not dependent for strength or stiffness upon any of the other parts.

g denotes the seat, arranged at its front, and just above the stretcher e , between the top of the legs $b b'$, and pivoted to these legs by pins h passing through the legs into the chair-edges. Thus supported at the front, the seat, at its rear, rests upon a bar, i , extending across from leg a to leg a' , and between the legs $a a'$, as in my said patented chair.

Upon the under side of each side rail of the chair-seat is the hook or stop k , against which the bar strikes when the legs are opened, and by which the extent of spread is determined, as will be readily understood.

Each hook or stop comes just inside of the leg a or a' when the chair is open, and is concealed from view by the leg, and as the weight of the seat is sufficient to cause it to drop as the chair is folding, I, by the use of these stops, dispense with the long loops, and thereby add greatly to the neatness of the chair.

If, however, it is desirable to have the seat held to the bar i , I make each side rail of the seat with a groove, l , in its under side, this groove enlarging from its mouth, so that a T-shaped runner, m , fixed to or embracing the bar i , and having its top in the groove, will hold the seat to the bar, but allow the seat to slide freely over it.

By inspection of the views D and E, it will be seen how the seat is increased in width at the front to fill the space between the legs $b b'$, and conceal the pivoted connection of the seat and legs, ears $n n$, form-

ing the extensions into which the pivots enter. The stretcher *e*, placed beneath the pivots, enables the seat to move very easily, and prevents its binding upon or straining the pivots, as it must necessarily do if the stretcher were not used.

When the chair is made with straight legs, the seat may be pivoted to the legs by means of bent bracket-pivots, as seen at H.

The folding chair thus made is very simple, cheap, and enduring in construction.

I claim—

A folding chair, having its seat pivoted to the two legs, *b b'*, beneath which pivots the legs are connected

by a rigid stretcher, *e*, when all the parts are arranged to fold as shown and described.

Also, in combination with the inner legs *a a'*, between which the seat slides and drops, and the outer legs *b b'*, to which the seat is pivoted, the seat *g*, made wide at its front, to fill the space between the legs *b b'*, to which it is pivoted, substantially as described.

Also, in combination with the folding-seat and the bar upon which it is supported and slides, the grooves *l* and runner *m*, substantially as shown and described.

Witnesses: ALEX. W. STEWART.

J. B. CROSBY,
FRANCIS GOULD.