

F. M. BURROWES.
FOLDING CHAIR.
APPLICATION FILED APR. 25, 1907.

940,582.

Patented Nov. 16, 1909.
2 SHEETS—SHEET 1.

Fig. 1.

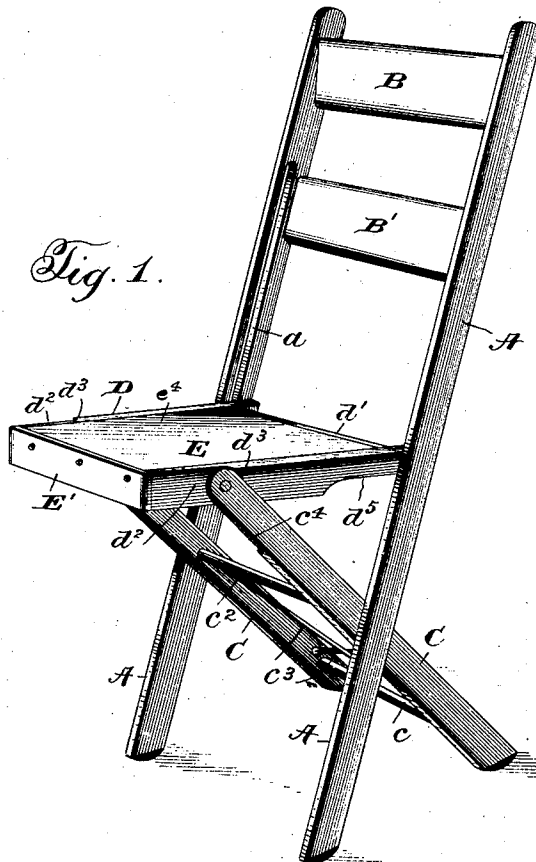
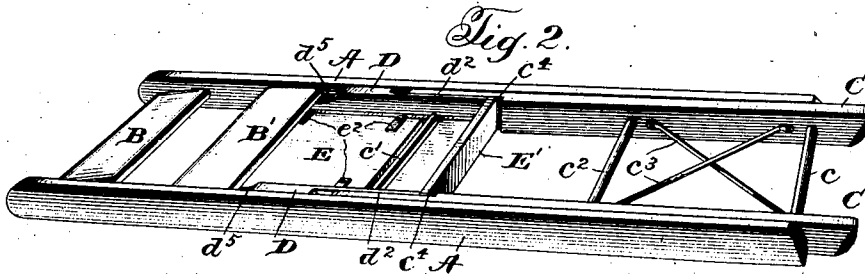


Fig. 2.



Witnesses:

Jas E. Hutchinson.
Thos. R. Heath.

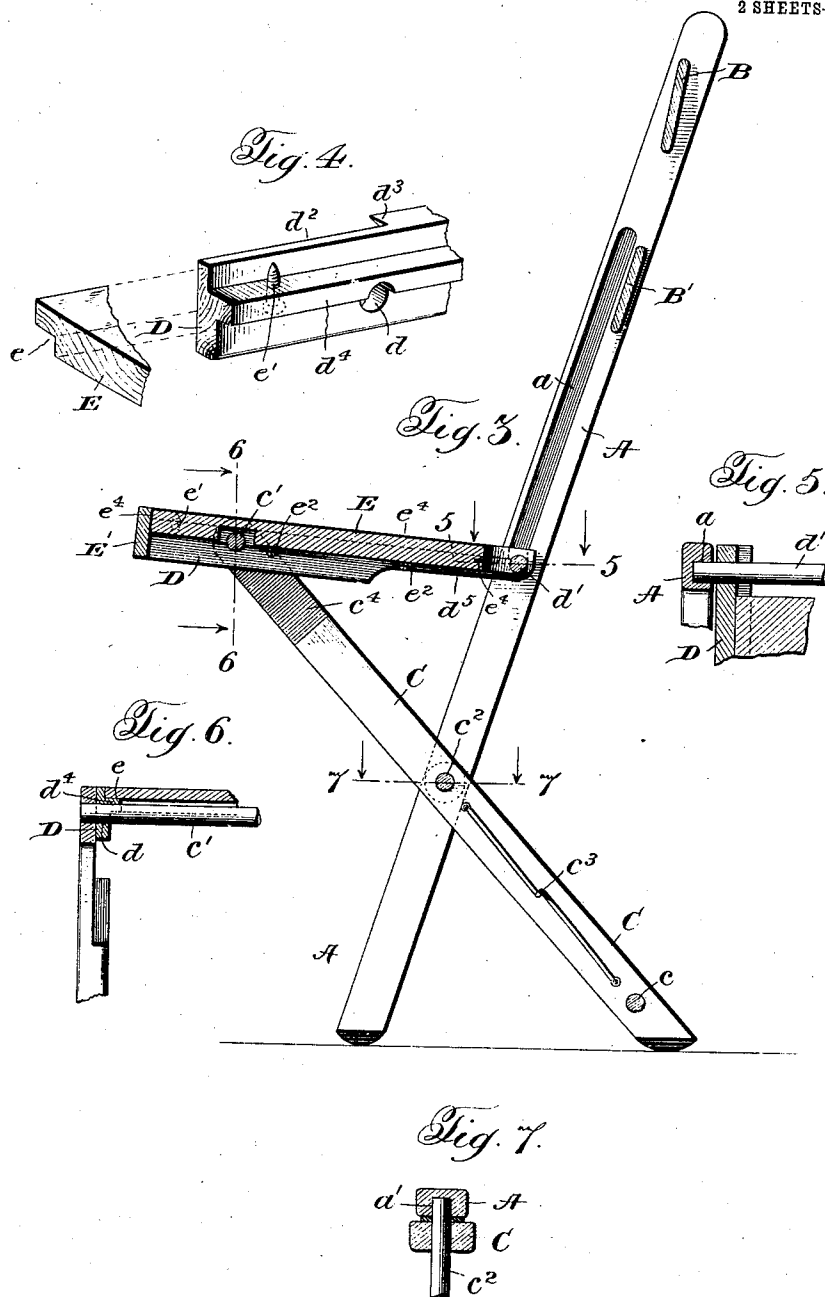
Inventor:

F. M. Burrowes,
By *Wm. Wilson* Attorneys.

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2 SHEETS—SHEET 2.



Witnesses:

Jas E Hutchinson:
Thos R. Smith.

Inventor:

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UNITED STATES PATENT OFFICE.

FRANK M. BURROWES, OF PORTLAND, MAINE, ASSIGNOR TO THE E. T. BURROWES COMPANY, OF PORTLAND, MAINE, A CORPORATION OF MAINE.

FOLDING CHAIR.

940,582.

Specification of Letters Patent.

Patented Nov. 16, 1909.

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To all whom it may concern:

Be it known that I, FRANK M. BURROWES, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Folding Chairs, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an improvement in folding chairs and the object of the invention is the provision of a chair of this type of simple and durable construction, the component parts of which are so fashioned as to permit the chair when not in use to be folded in a compact form.

A further object of the invention is the provision of a novel chair seat of such a construction that it will not be subject to injury from shrinkage or swelling due to atmospheric conditions.

Other objects of the invention will be apparent from the detailed description hereinafter, when read in connection with the accompanying drawings forming a part hereof, wherein a preferable embodiment of my invention is shown and wherein like letters of reference refer to similar parts in the several views.

In the drawings, Figure 1 is a perspective view of my improved chair in its open position, Fig. 2 is a perspective view of the chair in its closed position, Fig. 3 is a longitudinal section of the chair in its open position, Fig. 4 is a detail view showing a portion of one seat frame, side bars, and the seat, Fig. 5 is a detail sectional view on line 5—5 of Fig. 3, Fig. 6 is a sectional view on line 6—6 of Fig. 3, and Fig. 7 is a sectional view on line 7—7 of Fig. 3.

Referring now more particularly to the drawings, A, A designates side bars, the lower ends of which constitute the front legs of the chair and the upper ends of which constitute the side pieces of the back thereof. The inner sides of the side bars A, A are provided with grooves *a* therein, the lower ends of which terminate at a point substantially centrally of said bar.

B designates a plate constituting a back support which rigidly connects the upper

ends of the side bars A, A and B' designates a similar plate positioned below the plate B which constitutes an intermediate back support. The extremities of the plate B' are rigidly connected to the side bars A, A beneath the longitudinal grooves *a* formed therein.

C, C designate the rear legs of the chair, which are pivotally mounted between the lower ends of the side bars A, A and are designed when the chair is in its folded position to lie within the planes of the upper and lower edges of said side bars. The legs C, C are rigidly connected at their lower ends by a rung *c* and at their upper ends by a rung *c'*, to which the forward end of the seat frame is pivoted as will be hereinafter more particularly set forth. The legs C, C are pivoted between the side bars A, A by means of a rung or cross bar *c²* which is rigidly secured therein and the ends of which project beyond the sides thereof and loosely engage openings *a'* formed in the inner sides of said cross bars and extending partially therethrough. The side bars C, C may if desired be further strengthened by securing therebetween crossed brace bars *c³*. The upper ends of the rear legs C', C' terminate in reduced portions *c⁴* between which is pivoted the forward portion of the seat frame.

The seat frame comprises the side bars D, D the forward ends of which are provided with apertures *d* which loosely embrace the rung or cross bar *c'* which rigidly connects the upper ends of the rear legs C, C of the chair and the rear ends of which are rigidly connected by a suitable rung or cross bar *d'*, the extremities of which project beyond side bars D, D and into the longitudinal grooves *a* formed in the inner side of the side bars A, A, the extremities of such cross bar or rung being of a size to slide freely in said groove. The forward ends of the side bars D, D of the seat frame are provided adjacent their connection with the upper ends of the rear legs C, C with recessed portions *d²* which terminate in inclined shoulders *d³* which are designed to abut the edges of the legs C, C when the chair is open and the seat frame is in its lowered position.

The side bars D, D of the seat frame are provided on their interior with ribs d^4 extending longitudinally thereof, the upper surfaces of said ribs being considerably wider than the lower surfaces thereof so that the weight borne by the seat which is designed to be supported upon the upper surfaces of said ribs will be borne by the side bars D, D and not by said ribs. E designates the seat of my improved chair, which is preferably of wood and is provided along its outer edges with recessed portions e which are designed to receive the ribs d^4 on the inner sides of the side bars D, D of the seat frame. The forward portion of the seat is rigidly secured to the side bars D, D of the seat frame by means of screws e' or other suitable fastening means which pass through the ribs on the side bars and engage the seat. The seat is not otherwise secured to the seat frame but is provided on its under side at various points along the outer edges thereof with metallic plates e^2 , the outer ends of which are designed to underlie and lie in close proximity to the lower surfaces of the ribs d^4 . From this construction it will be apparent that as the seat is rigidly connected at one point only with the seat frame, it is free to accommodate itself to any slight swelling or shrinkage due to atmospheric conditions, which would otherwise cause the same to split. While the seat is free to accommodate itself in this manner it will be seen that by reason of the plates e^2 , the same will always be maintained perfectly horizontal. The underside of the seat E is provided with a groove e^3 extending thereacross to accommodate the rung c' which connects the upper ends of the legs C, C and passes through the side bars D, D of the seat frame. This groove is made sufficiently wide to prevent the rung c' from interfering with any expansion or contraction of the seat. Secured to the forward edge of the seat E is a bar or plate E' the ends of which are arranged to overlie the forward ends of the side bars D, D of the seat frame, said bar or plate being similar in width and appearance to the side bars D, D. The rear ends of the side bars D, D of the seat frame are reduced in thickness as at d^5 so that when the chair is folded and the ends of the rung or cross bar d' are moved to the upper ends of the grooves a in the side bars, the rear end of said seat frame will clear the plate B' which constitutes the intermediate back support.

The upper surface of the seat is preferably provided with a covering e^4 of leather cloth or other suitable material, the front and side edges of which are brought down and tacked or otherwise secured to the side and front edges of the seat, these edges being concealed when the seat is secured in posi-

tion by the bar E' and the side bars D, D of the seat frame. The rear edge of the covering is brought down over the rear edge of the seat E and secured within a groove formed therein to present a finished appearance, this edge of the chair seat being exposed when the chair is in its open position. From this construction it will be apparent that owing to the manner in which the seat is secured in the seat frame, should the covering become soiled or worn, the seat may be readily removed and a new covering secured thereto.

From the above description, it will be apparent that the chair may be readily folded and that when so folded all of the parts thereof will lie between the planes of the upper and lower edges of the side bars A, A.

I do not desire to limit myself to the precise form and construction shown in the drawings, as it is obvious that many minor changes might be made thereto without departing from the spirit of the invention.

I claim:

1. In a chair, a pair of parallel back bars, the lower ends of which are extended to form the front legs of the chair and the upper ends of which are provided on the inner sides thereof with longitudinally extending grooves, a pair of rear legs pivotally supported between the lower ends of said back bars, said rear legs being adapted when in folded position to lie wholly within the planes of the upper and lower surfaces of said back bars, a back support rigidly secured between the upper portions of said back bars and at one side of the grooves therein, said back support being positioned between the planes of the upper and lower surfaces of the back bars and a seat pivotally secured at its forward portion to the upper ends of said rear legs and provided at its rear end with projections engaging the grooves in the back bars, the rear portion of said seat being cut away to permit the same to clear the rigid back support when it is moved to its folded position.

2. In a chair, a pair of parallel back bars, the lower portions of which are extended to form the front legs of the chair and the upper portions of which are provided on their inner sides with longitudinally extending grooves, a fixed back support connecting the upper portions of said back bars and underlying the grooves therein, the said back support being positioned between the planes of the upper and lower surfaces of the back bars, rear legs pivotally supported between the lower ends of said back bars and adapted when in folded position to lie wholly within the plane of the upper and lower surfaces of the back bars, seat supporting side bars pivotally connected at their forward ends to

the upper ends of said rear legs and provided at their rear ends with projections engaging the grooves in the back bars, the forward portions of said seat supporting side bars being of substantially the same thickness as the back bars and the rear ends of said side bars being reduced in thickness so as to clear the fixed back support and overlie

the same when the chair is in its folded position.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK M. BURROWES.

Witnesses:

HARRY H. RUSSELL,
STEPHEN W. CARLE.