

1,291,737.

A perspective view of a rectangular frame assembly. It consists of two main vertical panels, each featuring a series of small circular holes along its edges. The top edge of the left panel is labeled 49, and the right panel's top edge is labeled 62. A horizontal member at the bottom is labeled 6. Various other parts are labeled with numbers like 48, 61, 46, 47, 41, 38, 50, 7, 56, 52, and 63.

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UNITED STATES PATENT OFFICE.

FRANK BLANDO, OF NEW YORK, N. Y.

FOLDING CHAIR.

1,291,737.

Specification of Letters-Patent.

Patented Jan. 21, 1919.

Original application filed July 12, 1916, Serial No. 108,871. Divided and this application filed May 14, 1918. Serial No. 234,391.

To all whom it may concern:

Be it known that I, FRANK BLANDO, a subject of the King of Italy, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Folding Chairs, of which the following is a full, clear, and exact specification.

This invention relates to folding chairs, and has for its object to provide an improved structure which may be folded compactly and carried like a satchel or suitcase, and which may be unfolded and used as a chair. A special object is to provide improved and simplified means for folding the legs of the chair compactly when not in use, and for retaining them in unfolded position when used as a chair. This application is a division of application filed July 12, 1916, Ser. No. 108,871.

The invention will be first hereinafter described in connection with the accompanying drawings, which constitute part of this specification, and then more specifically defined in the claims at the end of the description.

In the accompanying drawings, wherein similar reference characters are used to designate corresponding parts throughout the several views:—

Figure 1 is a perspective view of the device folded into approximately the compass of an ordinary suitcase.

Fig. 2 is a perspective view showing the device partly opened or unfolded.

Fig. 3 is a side elevation of the device arranged as a steamer chair, and

Fig. 4 is a detailed perspective view of a means for locking the legs in unfolded position.

The structure comprises essentially a seat frame 1, a back frame 2 hinged at 3 to the rear edge of the seat frame, legs 4 foldably carried by the seat frame, a foot supporting frame 5 hinged to the front edge of the seat frame, and an inclosing frame 6 also hinged to the rear edge of the seat frame and designed to cover the legs when the structure is folded up into compact form as shown in Fig. 1.

The legs 4 are joined together in front and rear pairs, both pairs hinged at 7 to the under face of the seat frame, the two front legs swinging together and the two rear legs swinging together. The front legs are spaced farther apart than the rear legs in order to

permit the latter to fold between the former as best shown in Fig. 2. A pair of bracing links 8 and 9 connects each of the rear legs to the front leg on the same side, the link 8 being pivoted to the upper end of the rear leg, the link 9 pivoted to the lower end portion of the front leg and said links 8 and 9 being pivoted together at their other extremities, as at 10. The link 8 is longer than the link 9 to permit the former to fold first against the bottom of the seat frame, and the link 9 to afterward swing about on the pivot 10 so as to overlap the adjacent end portion of the link 8. To further brace the legs in unfolded position a pair of links 11 and 12 are arranged on each side, the link 11 being pivoted to the lower end portion of the rear leg, the link 12 being pivoted to the links 8 and 9 at 10, and said links 11 and 12 being pivoted together at their other ends as at 13. This pivoted connection 13 is preferably formed by a rod 14 extending across from one pair of links 11 and 12 at one side of the chair to the corresponding pair of links on the other side of the chair, so that both sets of links 11 and 12 may be folded or unfolded together. Shoulders 15 on the lower end portions of the rear legs serve as stops for limiting the downward swing of the links 11 at a point where the pivotal connection 13 between said links 11 and the links 12 is below the line determined by the pivot point 10 and the point of connection of the link 11 to the rear leg. The links 11 and 12 will thus be supported in a slight downwardly broken position when the legs are unfolded as shown in Fig. 3, in which position they will be normally held by gravity until it is desired to fold up the structure. To hold the links 8 and 9 in extended position, a swinging frame 16 is pivoted to the upper ends of the front legs and carries a cross piece 17 having notches 18 adapted to snap into supplemental notches 19 in the links 8. When the notches 18 and 19 are engaged, as shown in Fig. 3, the bracing links 8 and 9 will be positively retained in extended position and the legs held rigidly open or unfolded.

The foot supporting frame 5 folds flat on top of the seat frame when not in use, as fully disclosed in application Ser. No. 108,871 above mentioned. When said foot supporting frame is swung out on its hinges 21, as illustrated in Fig. 3, the pillow 20 may be

used either as a cushion or as a head rest. The free end of the frame 5 is equipped with folding supports 22 which may be retained in folded position by spring clips 23.

5 Arms 41 are hinged at 42 to the back frame 2, and are connected to the seat frame 1 by straps 43 hinged at 44 to the under faces of the arms, and at 45 to the upper face of the seat frame, said straps and arms forming
10 parallelograms with the seat and back frames so that the arms will be automatically folded or unfolded when the back frame is swung upon its hinges 3. The front end portions of the side pieces of the frame 1
15 are beveled or inclined, as shown at 46, and the rear end portions of the arms are correspondingly beveled, as at 47, to permit said arms to fold into the plane of the seat frame, thus making the structure more compact
20 when folded.

The inclosing frame 6 is connected to the bottom of the seat frame by double hinges 48 which permit it to be swung into folded position so that blocks 49, carried by the
25 hinged end of said frame and other blocks 50 carried by the free end thereof may fill out the spaces at opposite ends of the folded legs 4, see Fig. 1, and to also permit said frame 6 to be swung upward so as to lie
30 against the rear face of the back frame 2, as illustrated in Fig. 3. The frame 6 may be secured in the latter position by suitable fastening means indicated at 52, Fig. 2, and fully described in application Ser. No.
35 108,871 hereinbefore mentioned.

The extension frame 38 is hinged to the free end of the back frame 2 by means of the hinges 57 arranged on the inner faces of said frames. These hinges permit the
40 extension frame to be folded at right angles to the back frame when the device is folded up, or to be extended in line with said back frame when the device is unfolded. When the device is folded up as shown in Fig. 1, the inclosing frame 6 covers the under side of the seat frame and conceals the folded legs, while the back frame 2 covers the top of the seat frame. The extension frame 38 connects the back frame 2 to the inclosing
50 frame 6 and covers the front edge of the seat frame. Said extension frame is fastened in folded position by means of keepers 56 thereon engaging the fastening devices indicated at 52 in Fig. 2. The frames 2, 6
55 and 38 are preferably covered on the outside by suitable waterproof material 61 which also extends along the double hinges 48 so as to cover the rear edge of the seat frame. This waterproof covering may be made of
60 one piece extending from the free end of the frame 6 along said frame, across the rear edge of the seat frame, along the back frame and across the extension frame, so that when the device is folded it will have the appearance of a suitcase or traveling bag.
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A handle 62 is secured to one side piece of the seat frame for carrying the device when folded. As an additional means of securing the structure in folded position, a strap 63 may be fastened around it, as shown in Fig. 70 1, said strap being preferably passed below the handle 62. It will be understood, of course, that the back frame, seat frame and foot supporting frame are covered on the inside with canvas or other suitable material 75 65. The free end of the frame 6 may be provided with a handle bar 69 for convenience in folding or unfolding the device.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:— 80

1. In a folding chair the combination with a seat frame, of legs carried thereby, and adapted to fold in pairs, pivoted links connecting the upper end portions of one 85 pair of legs with the lower end portions of the other pair, other links connecting the pivotal points of the first links with the lower end portions of the first pair of legs, shoulders on the first legs to serve as stops 90 for the second links, and means for holding the first links extended.

2. In a folding chair the combination with a seat frame, of legs carried thereby, and adapted to fold in pairs, pivoted links 95 connecting the upper end portions of one pair of legs with the lower end portions of the other pair, other links connecting the pivotal points of the first links with the lower end portions of the first pair of legs, 100 and means for holding the first links extended.

3. In a folding chair the combination with a seat frame, of legs carried thereby, and adapted to fold in pairs, pivoted links 105 connecting the upper end portions of one pair of legs with the lower end portions of the other pair, other links connecting the pivotal points of the first links with the lower end portions of the first pair of legs, 110 and a frame pivoted to the upper end portions of the second pair of legs and adapted to hold the first links extended.

4. In a folding chair the combination with a seat frame, of legs carried thereby, 115 and adapted to fold in pairs, pivoted links connecting the upper end portions of one pair of legs with the lower end portions of the other pair, other links connecting the pivotal points of the first links with the 120 lower end portions of the first pair of legs, shoulders on the first legs to serve as stops for the second links, and a frame pivoted to the upper end portions of the second pair of legs and adapted to hold the first links extended. 125

5. In a folding chair the combination with a seat frame, of legs carried thereby, and adapted to fold in pairs, pivoted links connecting the upper end portions of one 130

pair of legs with the lower end portions of the other pair, other links connecting the pivotal points of the first links with the lower end portions of the first pair of legs, 5 a frame pivoted to the upper end portions of the second pair of legs and adapted to hold the first links extended, there being interengaging notches in said frame and first links for retaining said frame in operative 10 position.

6. In a folding chair the combination with a seat frame, of legs carried thereby, and adapted to fold in pairs, pivoted links

connecting the pivotal points of the first links with the lower end portions of the 15 other pair, other links connecting the pivotal points of the first links with the lower end portions of the first pair of legs, a frame pivoted to the upper end portions of the second pair of legs, and adapted to hold the 20 first links extended, and means for retaining said frame in engagement with the first links.

In testimony whereof I have signed my name to this specification.

FRANK BLANDO.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."