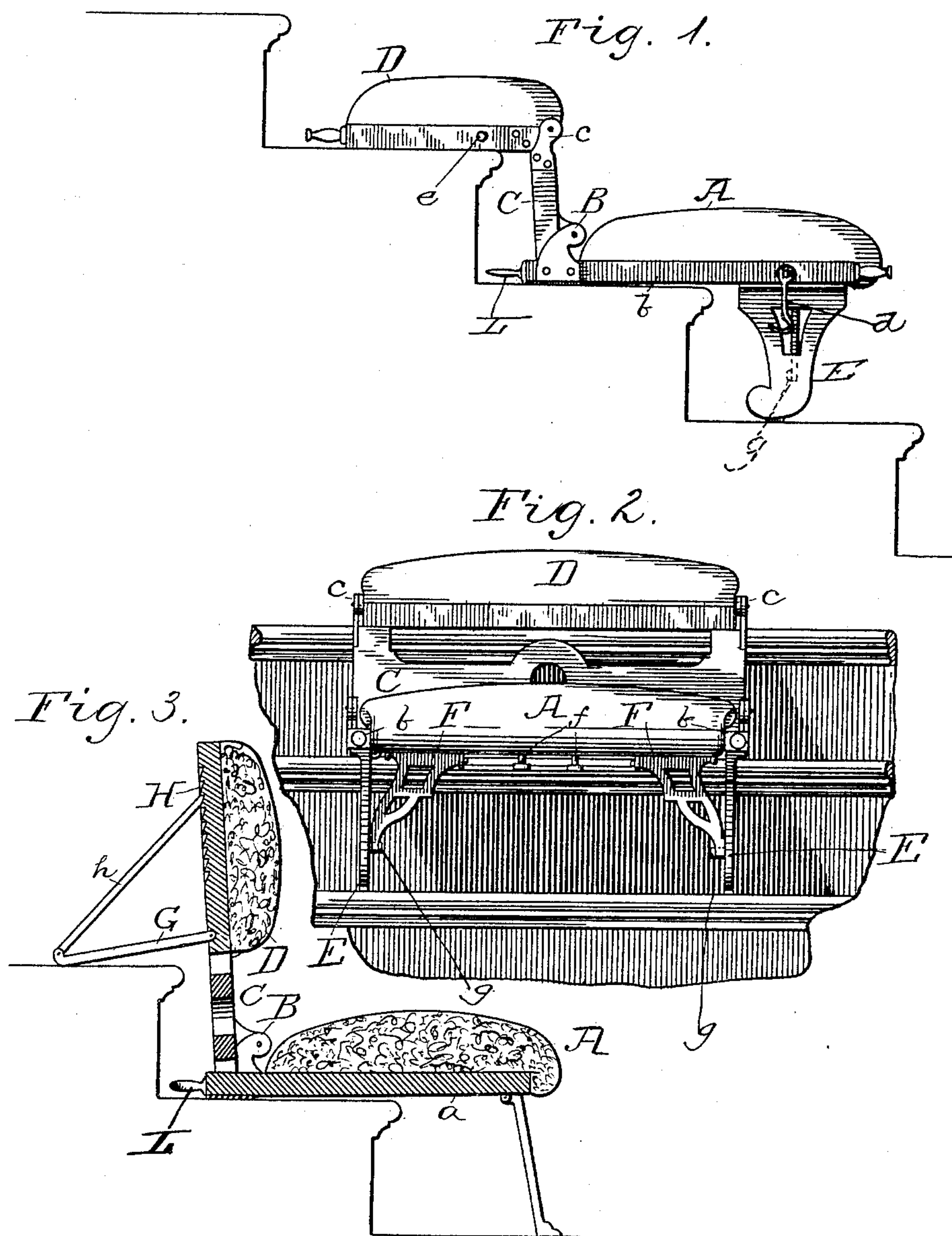


(No Model.)

G. A. M. LILJENCRA NTZ.
FOLDING STAIR CHAIR.

No. 435,701.

Patented Sept. 2, 1890.



Witnesses
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UNITED STATES PATENT OFFICE.

GUSTAVE ADOLPHUS MATHIAS LILJENCRANTZ, OF CHICAGO, ILLINOIS.

FOLDING STAIR-CHAIR.

SPECIFICATION forming part of Letters Patent No. 435,701, dated September 2, 1890.

Application filed July 27, 1889. Serial No. 313,855. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVE ADOLPHUS MATHIAS LILJENCRANTZ, a citizen of Sweden, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Folding Stair Chairs or Settees, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Heretofore when it has been desired to utilize the stairs of outdoor steps of residences to lounge on in pleasant weather rugs and carpets have been utilized to make them comfortable. These, however, are not as comfortable as could be wished, and it is to obtain comfort and ease that I have provided a chair or settee which is particularly adapted to this purpose, and which is simple and cheap of construction, and which when not in use can be folded into a compact form and carried from place to place very conveniently, substantially as hereinafter fully described, and as illustrated in the drawings, in which—

Figure 1 is a side elevation of my improved chair. Fig. 2 is a front view of the same, and Fig. 3 is a transverse vertical section of the same.

In the drawings, A represents a seat-cushion mounted on a suitable frame or board *a* with its side pieces *b* preferably extending a suitable distance to the rear to form a means to secure the vertical leaf of a hinge B. The other leaf of this hinge is secured to the side edge of a back-connecting frame C, and this frame C has hinged to its upper edge the arm-rest D by means of the hinges *c*. The arm-rest D is preferably cushioned, and is of such a depth or width that it, together with the width of the back frame C, will, when folded over seat A, correspond to the width of said seat. When thus folded, the arm-rest and seat are held together by means of the hooks *d*, pivoted to the side edges of pieces *b*, near their forward ends, which catch over the pins *e*, projecting laterally from the side edges of the frame of the arm-rest D.

In order to support the forward portion of seat A, which is of a width sufficient to project out over the front edge of the step on which its rear portion rests quite a distance, I provide

the legs E E, of any suitable design, which are hinged transversely to the ends of the frame *a*, so that when not in use they can be folded in against the under surface of said frame and held in such position by a turn-button *f* or other suitable means. If it is thought necessary to brace the legs I, can do it very easily by hinging to the under surface of frame *a* just next to and at right angles to the pivotal center of said legs E the braces F. The outer pivotal stud of these braces nearest the legs is journaled in bearings nearer the under surface of frame *a* than the inner pivotal stud. Consequently when swung downward the free end of said braces press outward against the legs as they approach the perpendicular position until they strike and are stopped by lugs *g*. The consequence is that as the legs can swing outward past the perpendicular plane of the end edges of the seat they are locked fast by said braces. This or any other method of securing the legs from independently swinging inward may be adopted.

Instead of legs E, which fold in longitudinally under frame A, I could provide a leg-frame which in Fig. 1 would be hinged to frame *a* near the front edge and would swing out under the same. Any support for the forward portion of the seat A, either of the former or latter character, would suffice.

If it was desired to convert the arm-rest D into a part of the back, it could be done by swinging it upward from its position shown in Fig. 1 until it was in about the same plane as back frame C, as shown in Fig. 3, and there could be attached to the frame of said arm-rest near its pivotal point the arms G, which have pivotally connected to their outer ends the braces *h*, so that they can only fold upward. The outer ends of these braces are pointed and enter the serrations of a rack H made in the back of the arm-rest frame with reference to said brace. When not in use, the brace is folded against the arm G, and the latter then folded flat against the back, where it can be held by any suitable retaining device.

Those parts of the legs, seat-frame *a*, or side pieces *b* thereof, and the arm-rest frame which rest on the steps may be provided with protected bearing-surfaces, as with rubber or feet, to protect the steps, &c.

When my improved chair is folded together for convenience of transportation, I can provide it with a hand-grasp L, which is secured to the rear edge of frame *a*, so that it can stand easily wherever placed. The forward ends of side pieces *b* of frame *a* may be extended a short distance to provide legs, as shown. The rear ends of the side pieces of the frame of the arm-rest may also be provided with extensions for the same purpose. Thus when folded the chair may rest upon the four legs.

I do not wish to be confined to the exact construction shown, as it is evident that it may be changed without departing from the spirit of my invention. The back frame, for instance, might be upholstered in front; or, the arm-rest and back frame might be dispensed with altogether, although I much prefer their use.

What I claim is—

1. A stair-chair consisting of a seat A of a width sufficient for the rear edge to rest upon one step and its front portion to project out over the edge of said step and folding legs to support the forward-projecting part thereof.

2. A stair-chair consisting of a seat A of a width sufficient for the rear edge to rest upon one step and its front portion to project out over the edge of said step, legs to support the forward-projecting part thereof, and braces for holding said legs in position, said legs and braces being hinged to said seat in such manner as to permit them to be folded in against said seat when not in use, as set forth.

3. A stair-chair consisting of a frame C, hinged to the rear edge of said seat, and an arm-rest hinged to the side of said frame C farthest from the seat, said seat resting on one step and said arm-rest resting on the next step above the seat, as set forth.

4. A stair-seat A of a width sufficient for its rear edge to rest upon one step and its front portion to project out over the edge of said step and legs to support the forward-projecting part of said seat, in combination with the back frame C, hinged to the rear of said seat, and the arm-rest D, hinged to the side of said frame C farthest from said seat, and so constructed as to rest on the step next above that upon which the rear portion of said seat rests upon, as set forth.

5. A stair-seat A, in combination with an arm-rest D, arm G, pivoted, as described, to the back of said arm-rest nearest the edge thereof contiguous to said seat, and brace *h*, pivoted to the free end of said arm, as set forth.

6. The combination, with seat A, having the hook pivoted to the side thereof and handle secured to the rear edge thereof, of back frame C and arm-rest D, arranged as described, the latter having a lateral pin projecting from the end thereof, as set forth.

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Witnesses:

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