No. 639,554.

Patented Dec. 19, 1899.

A. GRENIER.

COMBINED FOLDING CHAIR AND COUCH.

(Application filed Dec. 30, 1898.) 2 Sheets—Sheet 1. (No Model.) Witnesses:

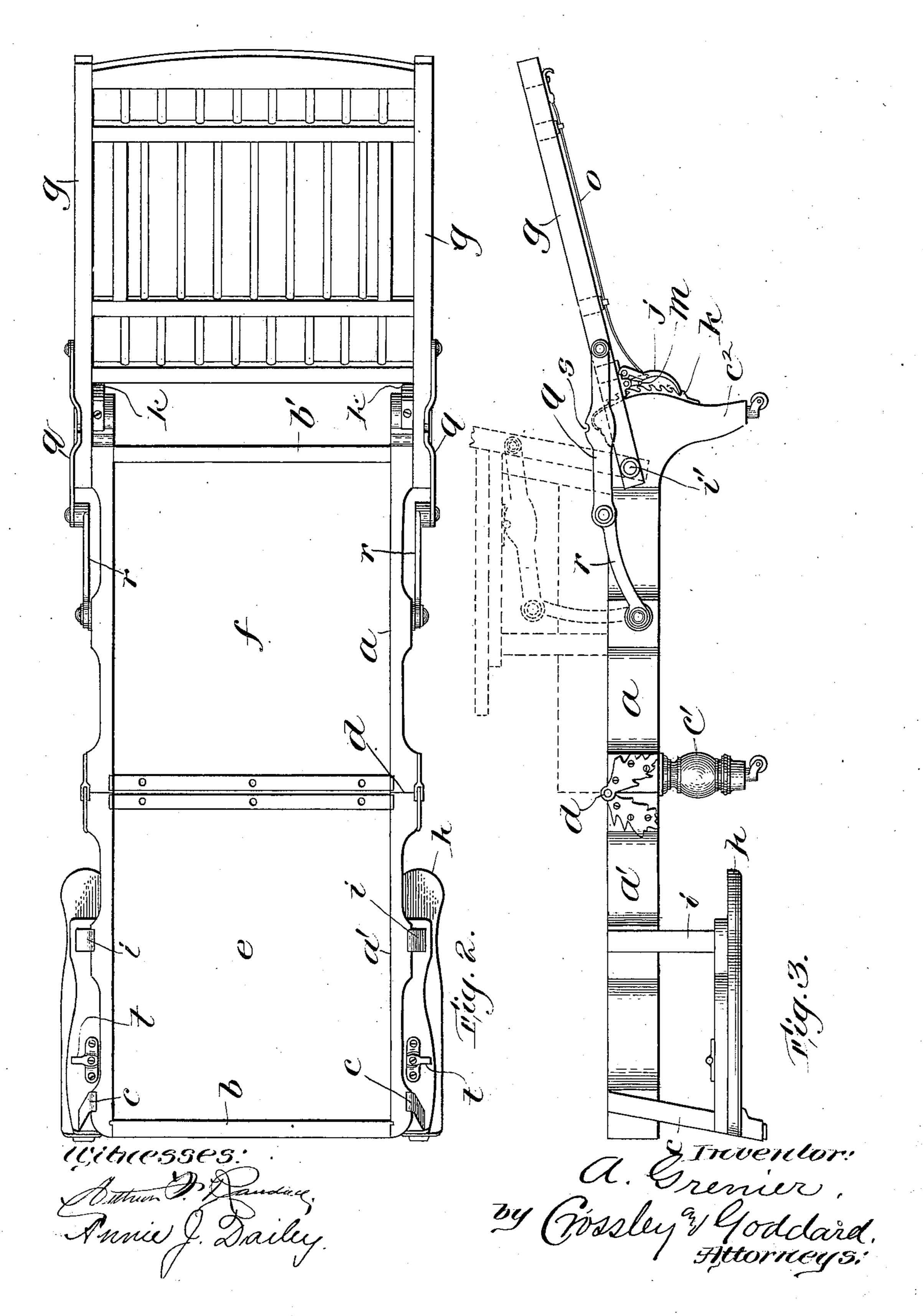
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2 Sheets—Sheet 2.



United States Patent Office.

ADOLPH GRENIER, OF CAMBRIDGE, MASSACHUSETTS.

COMBINED FOLDING CHAIR AND COUCH.

SPECIFICATION forming part of Letters Patent No. 639,554, dated December 19, 1899.

Application filed December 30, 1898. Serial No. 700,739. (No model.)

To all whom it may concern:

Be it known that I, Adolph Grenier, of North Cambridge, in the county of Middlesex and State of Massachusetts, have invented 5 certain new and useful Improvements in a Combined Folding Chair and Couch, of which the following is a description sufficiently full, clear, and exact to enable those skilled in the art to which it appertains or with which it is most nearly connected to make and use the same.

My invention has relation to combined reclining-chairs and beds or couches.

It is the object of the invention to provide an article of furniture of the character mentioned which may be adjusted to form a substantial arm-chair, a reclining-chair, or a couch or bed and in its equipments for these adjustments or services to be strong and durable, easily and conveniently operated, and be useful in the highest degree in all of its aforesaid adjustments without having any clumsy features or parts that are in the way in moving around it.

To these ends my invention consists of a combined folding chair or bed, all as will be hereinafter more fully set forth, and finally pointed out in the claim.

Reference is to be had to the annexed drawjo ings and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

Of the drawings, Figure 1 is a side elevation of my invention, showing it folded or adjusted to chair position. Fig. 2 is a plan view showing the invention adjusted into couch or bed position. Fig. 3 is a side view of the invention adjusted as shown in Fig. 2.

In the drawings, a a' designate the side rails of the base or bottom of my combined chair and couch or bed, with which side rails and the tie-bars bb' there extend downwardly legs cc'c², the legs c' and c² forming the legs of the device when folded up as a chair, as shown in Fig. 1. The cross-ties to the side rails, including the side rails, form the bottom of the chair or bed, which is made in two sections, as shown, and hinged together at the center, as at d, so that the section e may be folded over upon the section f and form a chair, or the section e may be opened out from

the section f to form a bed. The legs c are connected with the outer end of the section e, and when the latter section is folded upon 55 the section f the said legs will extend up along the sides of the back g and form, as it were, a part of the frame. Extending forwardly from the legs c when the latter are folded into chair form are arms h, which are 60 supported at their outer ends by standards i, extending between the arms and the side bar a'.

The back g is pivoted to the rearward part of the side rails a, as at i', so that the upper 65 end of the back can be swung downward or upward, as may be desired, and to maintain the back in any position to which it may be moved I pivot thereto pawls j, the free ends of which engage the teeth formed in the seg-70 ments k, secured to the outer surface of the upper part of the legs c^2 .

There is one pawl pivoted to each side bar g of the back, and in order to raise the pawls out of engagement with the teeth of the rack 75 k I support a rod l in suitable bearings connected with the back and provide said rod with laterally-extending fingers m, which project under the pawls, and also with an arm n, which extends rearwardly and to which the 80 lower end of a rod o is pivoted, the said rod extending up along the back of one of the side bars g and having a finger-piece at its upper end, so that by drawing up on the finger-piece the rod o may be lifted, the rod l turned in its 85 bearings, and the fingers m raised to lift the pawls out of engagement with the segments k, and when the rod o is released the pawls j will drop by their own gravity into engagement with the teeth of the segments.

Connected with the side bars g of the back and with the rails a are jointed bars q r, one being when in normal position—that is, when the device is adjusted in the position of a chair—in horizontal position and the other in 95 substantially vertical position. The horizontal bar q is provided in its upper end with the notch s, into which a lug t on the under side of the arm h may drop when the device is adjusted in the position of a chair, so as, in connection with the pawls j, to form a very firm support for the back in connection with the bottom of the chair.

The legs c' and c^2 may be provided with cas-

ters in order that when the device is adjusted in chair position it may be rolled around over the floor precisely as is done with an easy-

chair or other article of furniture.

When the device is adjusted in chair position, as shown in Fig. 1, even though the pawls j should be lifted out of engagement with the segmental rack k, the back cannot be thrown back, as it will be held in position by the enro gagement of the lug t with the notch s in the bar q, and in order to open it out into a reclining-chair position or in the position of a couch or bed, as is shown in Figs. 2 and 3, it is necessary to raise the arms and one end of the 15 section f and swing them outward, which can readily be done, and when swung outward to the fullest extent—that is, with the side bars a in parallelism with the bars a'—the bars c, forming the legs for the tail end of the bed, 20 will rest upon the floor. Then the back will be swung down to as nearly parallelism with the side bars a a' as may be desired and form a pillow or head-rest for the couch or bed.

When the device is adjusted to bed position, the pivoted arms q r will assist in supporting the head-rest or pillow portion, which formerly constituted the back of the chair, so that the pillow portion may sustain any weight that may be put upon it in any use to which a bed or couch may be subjected.

It is the simplicity, durability, strength, and facility with which the parts may be operated, together with the utility of the invention, that

are relied upon as constituting the novel and patentable features of my invention.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it 40

is declared that what is claimed is—

A combined folding chair and bed or cot comprising in its construction a bottom made in two parts hinged together, the two parts being adapted to be folded to form the chair- 45 seat and to be opened to form the bed-bottom, a back adapted to be adjusted from substantially vertical to substantially horizontal position, toothed segments connected with the bottom portion, pawls to engage the teeth of 50 the said segments, means connected with the adjustable back for controlling the pawls, a chair-arm frame provided with lugs, and notched jointed bars connecting the back with the bottom, the construction and ar- 55 rangement being such that when the device is folded the lugs will drop in the notches of the bars.

In testimony whereof I have signed my name to this specification, in the presence of 60 two subscribing witnesses, this 31st day of October, A. D. 1898.

ADOLPH GRENIER.

Witnesses:

WILLIAM VARNEY, JOHN M. LYNCH.