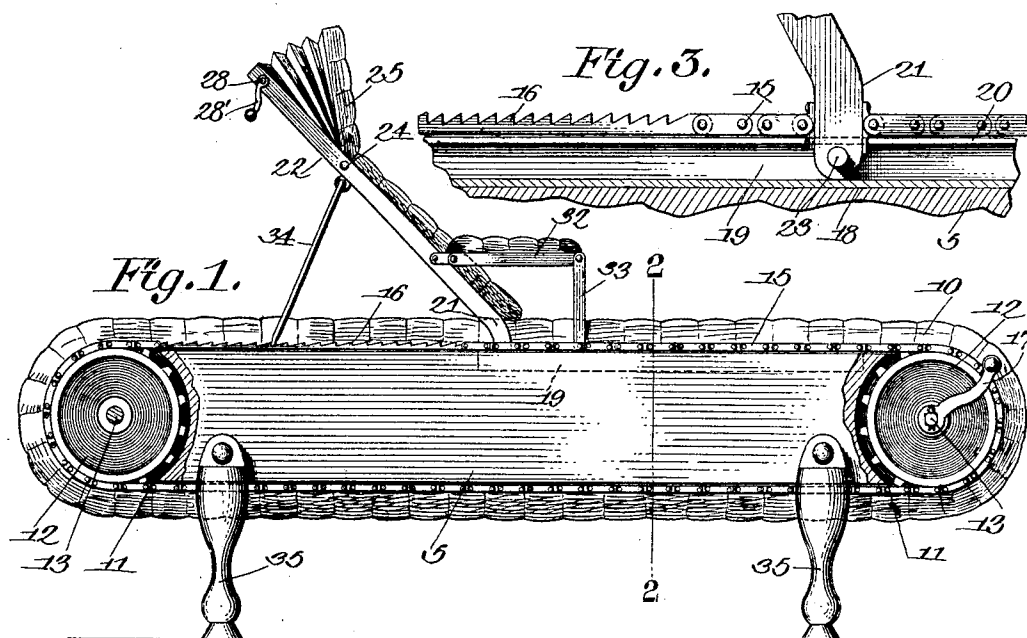
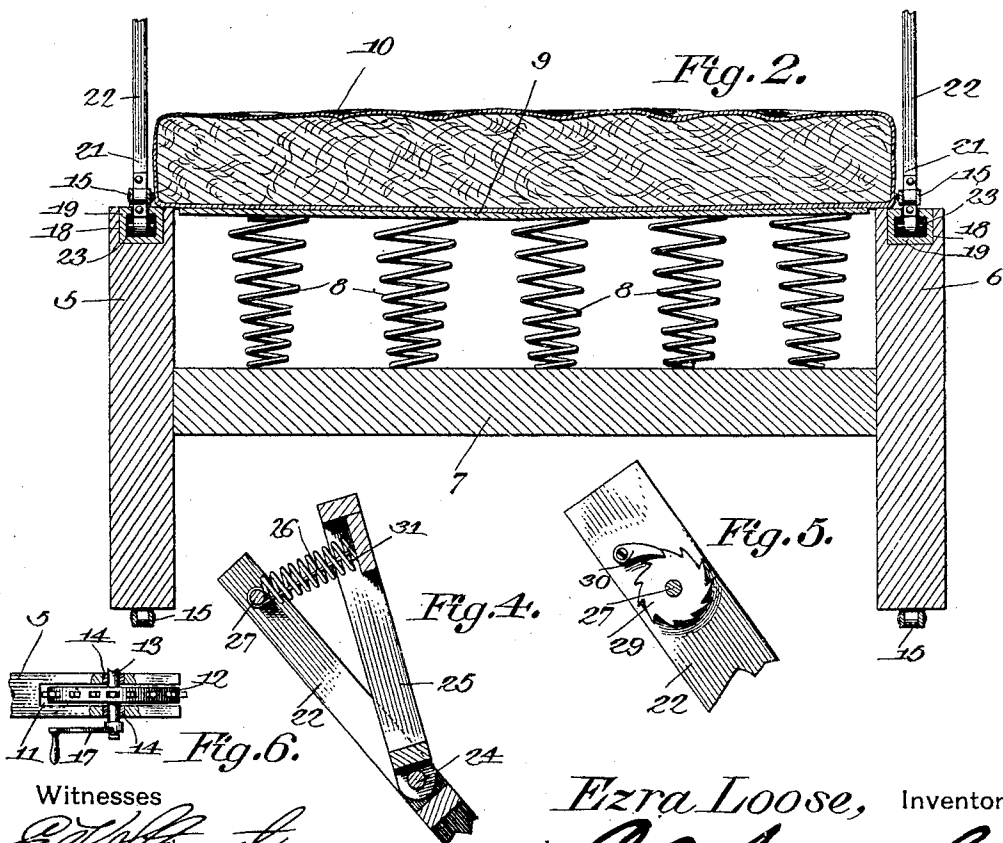


No. 805,805.

PATENTED NOV. 28, 1905.

E. LOOSE.
COMBINED COUCH AND INVALID CHAIR.
APPLICATION FILED MAR. 3, 1905.



Witnesses

E. J. H. H. H.
L. N. H. H.

Ezra Loose, Inventor.
by *C. A. H. H.*
Attorneys

UNITED STATES PATENT OFFICE.

EZRA LOOSE, OF JONESTOWN, PENNSYLVANIA.

COMBINED COUCH AND INVALID-CHAIR.

No. 805,805.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed March 3, 1905. Serial No. 248,360.

To all whom it may concern:

Be it known that I, EZRA LOOSE, a citizen of the United States, residing at Jonestown, in the county of Lebanon and State of Pennsylvania, have invented new and useful Improvements in a Combined Couch and Invalid-Chair, of which the following is a specification.

This invention relates to a combined couch and reclining-chair, and has for its object to provide an inexpensive, durable, and efficient device of this character particularly designed for use by invalids, convalescents, and other persons and capable of being conveniently adjusted to various positions whereby the comfort of the invalid may be assured.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts herein-after fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportions, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

In the accompanying drawings, forming a part of this invention, Figure 1 is a side elevation of a combined couch and chair constructed in accordance with my invention. Fig. 2 is a transverse sectional view on the line 2 2 of Fig. 1. Fig. 3 is a longitudinal sectional view of a portion of the frame. Fig. 4 is a longitudinal sectional view of a portion of the chair-back. Fig. 5 is a side elevation showing the ratchet for adjusting the head section, and Fig. 6 is a top plan view of one end of one of the side rails.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The improved device consists of a supporting-frame comprising a pair of parallel side rails 5 and 6, connected in any suitable manner by transverse beams 7, upon which are secured suitable coil-springs 8, having their upper convolutions fastened to a strip of canvas or other flexible material 9, which serves to yieldably support the endless mattress 10 in position on said supporting-frame, as shown. The opposite ends of the side rails are bifurcated, as indicated at 11, for the reception of sprocket-wheels 12, the latter being rigidly secured to transverse shafts 13, journaled in suitable bearings 14. Engaging the upper

and lower edges of the side rails 5 are sprocket-chains 15, the opposite ends of which engage the teeth of the sprocket-wheels 12 and are fastened in any suitable manner to movable rack-bars 16, slidably mounted on the upper edges of the side rails, as shown. The sprocket-chains 15 are secured in any suitable manner to the mattress 10 and are movable to present unsoiled portions of the mattress at the top of the couch by means of a terminal crank 17 engaging the squared end portion of one of the transverse shafts 13.

Seated in suitable longitudinal recesses 18 in the upper edges of the side rails are slotted tubes or guide members 19, provided with inwardly-extending flanges 20, adapted to engage the side bars 21 of an adjustable back rest or section 22, the ends of said side bars being fastened to the chains 15 and having their terminal portions provided with laterally-extending lugs 23, which engage the side walls of said guide members and serve to prevent accidental displacement of said adjustable back.

Pivoted to the side bars 21, as indicated at 24, is a movable head-section 25, the free end of which is adjustable with respect to the back 22 by means of a cord or other flexible medium 26, one end of which is attached to the head-section and the opposite end thereof to transverse rod 27. The rod 27 is provided with a squared end 28, adapted to receive a wrench or crank 28' for rotating the same, and is also provided with a ratchet 29, adapted to engage a pawl 30 for locking the head-section in adjusted position, there being a coil-spring 31 interposed between said rod and the free end of the head-section, whereby the latter is yieldably supported on the movable back. Pivoted to the side bars 21 of the adjustable back are folding arms 32, the pivoted ends 33 of which rest upon the side rails 5 and 6, while pivoted to the rear portions of said bars are adjusting-rods 34, which engage the teeth on the movable rack-bars 16 and serve to support said back-section at any angle or inclination with respect to the mattress. The couch is provided with supporting-feet 35, pivoted to the side rails of the frame and capable of being swung upwardly against the latter to thereby permit said feet to be conveniently folded when transporting or shipping the couch.

It will thus be seen that by operating the crank 17 the mattress, back-section, and rack-bars may be moved longitudinally of the frame to any desired position and said back-section

adjusted at any angle or inclination with respect to the frame by causing the rod 34 to engage the different teeth on said rack-bars. It will also be observed that the opposite ends 5 of the guide members 19 serve to limit the longitudinal movement of the back-section, while said section may be folded downwardly on the mattress and the supporting-feet folded upwardly against the side rails, so as to occupy very little space when not in use.

Having thus described the invention, what is claimed is—

1. A couch comprising parallel side rails, a mattress mounted for rotation thereon, a back-rest carried by the mattress, and a rack-bar movable with said mattress for adjusting the back-rest with respect to the side rails.

2. A couch comprising parallel side rails provided with longitudinal guides, a mattress 20 mounted for rotation on said side rails, a back-rest carried by the mattress and engaging the longitudinal guides, and a rack-bar movable with said mattress for adjusting the back-rest with respect to the side rails.

3. A couch comprising parallel side rails, shafts journaled in said side rails and provided with sprocket-wheels, rack-bars adjustable longitudinally of said rails, sprocket-chains secured to the rack-bars and engaging the 30 teeth on said sprocket-wheels, a mattress secured to the sprocket-chains, a back-rest carried by said chains, and rods pivoted to the back-rest and engaging the teeth on the rack-bars for adjusting said back-rest with respect 35 to the side rails.

4. A couch comprising parallel side rails having their opposite ends bifurcated, sprocket-wheels journaled in the bifurcated ends of the side rails, rack-bars slidably mounted 40 on said side rails, chains secured to the rack-bars and engaging the teeth on the sprocket-wheels, a mattress secured to the sprocket-chains and mounted for rotation therewith, a back-rest carried by said chains, and means 45 pivoted to the back-rest and engaging the teeth on the rack-bars for adjusting the back-rest with respect to the side rails.

5. A couch comprising parallel side rails, guiding members seated in the upper edges of the side rails, a mattress mounted for rotation 50 on said side rails, a rack-bar movable with the mattress, a back-rest carried by the mattress and provided with laterally-extending lugs for engagement with the guiding members, and means pivoted to the back-rest and engaging 55 the teeth on the rack-bar for adjusting said back-rest with respect to the side rails.

6. A couch comprising parallel side rails, guiding members seated in the upper edge of the side rails and provided with spaced inwardly-extending flanges, a mattress mounted for rotation on said side rails, an adjustable back-rest carried by the mattress and having its end portions fitting between the flanges of the guiding members and provided with laterally-extending lugs for engagement with 65 said guiding members, rack-bars slidably mounted on the side rails and movable with the mattress, and a rod pivoted to the back-rest and adapted to engage the teeth on the 70 rack-bars for adjusting said head-rest with respect to the side rails.

7. A couch comprising parallel side rails connected at their opposite ends by transverse shafts having sprocket-wheels mounted therein, feet pivoted to the side rails, rack-bars slidably mounted on the upper edges of the side rails, sprocket-chains secured to the rack-bars and engaging the teeth on the sprocket-chains, an endless mattress secured to the 80 sprocket-chain, a back-rest carried by the chains, a rod pivoted to the back-rest and adapted to engage the rack-bars for adjusting the back-rest with respect to the side rails, and a crank secured to one of said transverse 85 shafts for adjusting the mattress and back-rest longitudinally of the side rails.

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

EZRA LOOSE.

Witnesses:

DAVID F. RANK,
W. H. BOYER.