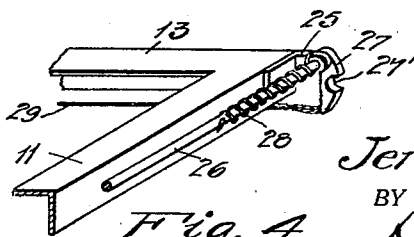
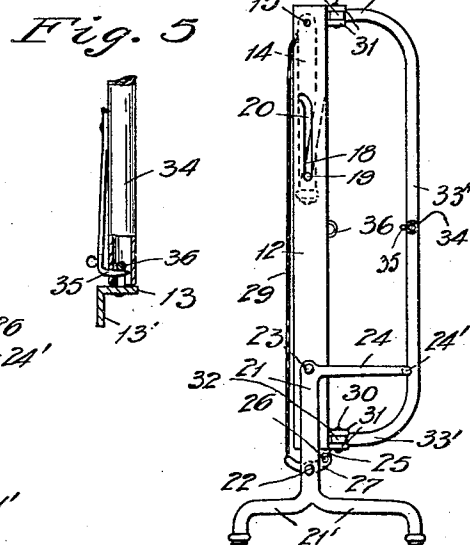
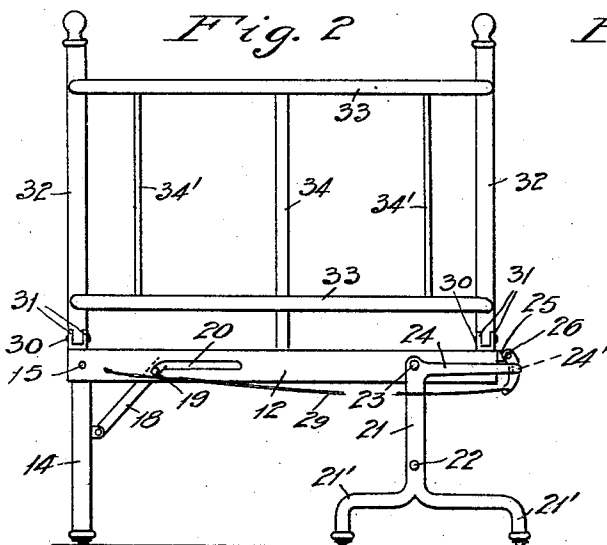
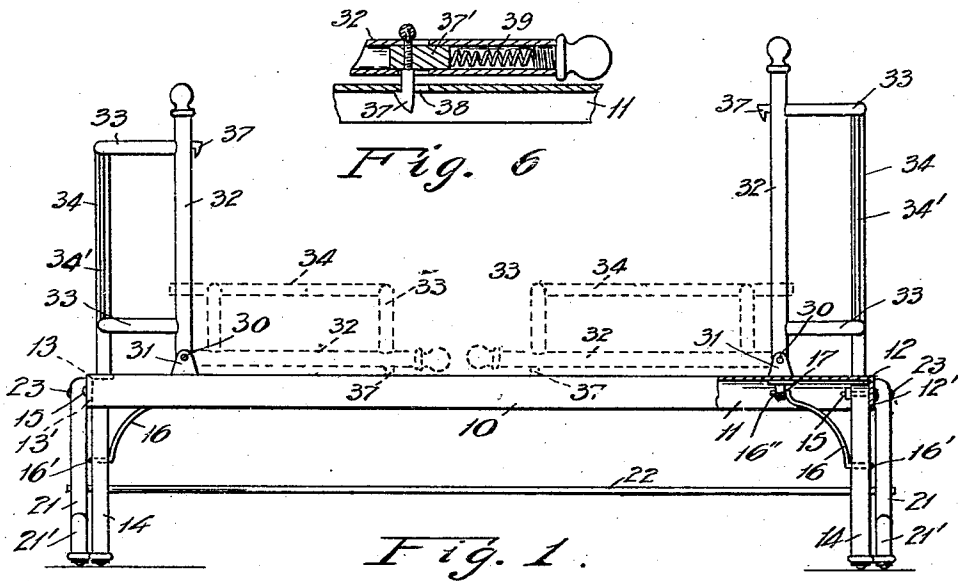


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FOLDING BED.

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935,921.

Patented Oct. 5, 1909.



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FOLDING BED.

935,921.

Specification of Letters Patent.

Patented Oct. 5, 1909.

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To all whom it may concern:

Be it known that I, JEROME McLELAND, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Folding Beds, of which the following is a specification.

This invention relates to folding beds; and its object is the provision of a bed of this character which will be of simple, compact and inexpensive construction, which will occupy but little space when unemployed, and be convenient to adjust into operative condition, or vice versa.

With these ends in view, the invention consists in the novel construction, adaptation and combination of parts, as will be hereinafter described with reference to the accompanying drawings, whereof,—

Figure 1 is a side elevation of a bed embodying my invention; Fig. 2 is an end view of the same in operative condition; and Fig. 3 is a view similar to Fig. 2 but with the bed in inoperative condition. Fig. 4 is a fragmentary perspective view of the mattress supporting frame. Figs. 5 and 6 are detail views partly in side elevation and partly in cross section of a portion of the bed.

The numerals 10 and 11 respectively designate the front and back rails; and 12 and 13 the head and foot end rails of the rectangular bed frame. The aforesaid rails are desirably formed of angle bars comprised of horizontal and vertical flanges. Legs 14 are hinged, as by pins 15, to the respective end rails in proximity to the front rail, and are positioned inside of the vertical flanges 12' and 13' of the end rails. Strut pieces 16 are provided to support these legs against end motion and to accommodate them to the folding in of the legs their extremities 16' and 16'' are pivotally connected with the legs and with apertured blocks 17, or an equivalent, provided upon the underside of the horizontal flanges 10' of said front rail. The axes of the extremities 16'' are arranged to be in alignment with the axes of the pins 15. To limit the forward swing of the legs 14, a link 18 is provided for each and has a pivotal connection at one end with its leg and a stud 19 at the other end to seat in a slot 20 formed in the vertical flange of the respective end rail.

The legs for supporting the rear of the

frame consist of standards 21 having 55 branched, or bifurcated, lower ends 21' to afford extended bearings and are connected with each other by a longitudinal tie-rod 22 and with the frame by pivotal pins 23 located to be at some distance from the back 60 rail 11. Extending rearwardly from the standard 21 of each of these supporting legs is an arm 24 which ends in a rectangular bent portion to provide terminal studs 24', indicated by broken lines in Figs. 2 and 3. 65 The stud of the leg at the head end is directed toward the foot, and the stud of the other leg is directed oppositely.

A lug 25 is provided to project rearwardly from each end of the rail 11 and are bored to 70 furnish bearings for a longitudinal rod 26 having ends which protrude beyond the respective lugs to carry arms 27. These arms are each formed with a notch 27' arranged to register with the studs 24' of the stand- 75 ard arms or with the tie-rod 22 according to the position of the bed frame, for securing the latter in such changed positions. A coil spring 28, Fig. 4, is provided upon the rod 26 to exert an outward swing of the arms 27 80 sufficient to engage the aforesaid parts 22 and 24'. To facilitate the releasing of such engagements a line 29 may be attached to one or both of the arms 27 and connected to the adjacent end rail to be within easy 85 reach of a person when standing in front of the bed to raise or lower the frame thereof, as the case may be. Hinged to and supported by said frame, as by pivots 30 passing through the ears 31 upon the rails 10 and 11, 90 are the posts 32. These posts are advantageously positioned to be at some distance from the adjacent ends of the bed and the pairs of posts at the respective ends are connected by horizontal bars 33 which in 95 turn are connected by spaced vertical bars 34, 34' intermediate the posts at each end.

The assemblages of posts, and horizontally and vertically arranged bars comprise the head frame and the foot frame which are 100 hinged to the bed frame proper. Said horizontal bars are curved or bent to extend toward the adjacent end of the bed, as at 33', directly above the side rails 10 and 11 and thence transversely therebetween, as at 33'', 105 in the same vertical planes with the respective end rails 12 or 13. By thus forming the end portions of the head and foot frames

with off-sets, space is afforded the mattress or bedding when these frames are in the upright positions represented by full lines in Fig. 1; or when folded down, as shown by broken lines in this view, will accommodate such bedding and prevent the displacement of the same. Latch devices are provided for securing the head and foot frames in their upright and horizontal positions.

10 In the former case a hook 35, see Fig. 5, is provided in the bars 34 to engage with correspondingly disposed staple attachments 36 of the end rails 12 and 13; while for the other positions, see Fig. 6, hooks 37 carried by the posts 32 engage the side rails 10 and 11 by the provision of apertures 38 in the rails. The hooks 37 may be carried by blocks 37' slidably mounted within the respective posts and severally influenced by a spring 39 to cause the hooks to engage automatically.

The operation of the invention is as follows: When the bed is to be used the main frame thereof is in the position in which it is represented in Figs. 1 and 2 and with the head and foot frames in positions as represented by full lines in these two views. When, however, the bed is out of use these last named frames are turned down upon the main frame, as denoted by broken lines in Fig. 1, and the frame tilted upwardly as shown in Fig. 3. In its two above described positions the main frame is secured by the arms 27 engaging either with the studs 24' of the rear legs or with the rod 22 and to disengage these arms against the power of the spring 28 the line 29 is employed.

Having described my invention, what I claim, is—

40 1. A folding-bed having a main frame, head and foot frames foldably connected with the main frame in proximity to the ends thereof, legs pivotally connected to the main frame in proximity to the rear thereof, and notched arms provided upon the main frame for locking the same with devices provided upon the last named legs to retain the frame in horizontal and vertical positions.

50 2. A folding-bed comprising a main frame consisting of longitudinal and transversely disposed rails, head and foot frames foldably connected with said main frame, locking devices carried by said head and foot frames for respectively engaging with said transverse and longitudinal rails for securing the head and foot frames in open and closed positions with respect to the main frame, supports for the rear of the main frame, and legs foldably connected with the main frame in proximity to its front.

3. In a folding-bed, the combination of the main frame comprised of longitudinal and transversely arranged rails, a pair of legs, foldably hinged to the frame, a pair

of legs pivotally connected with the frame, and spring actuated means carried by the frame and arranged to engage with devices carried by the last named legs for positively securing the frame in horizontal and vertical positions.

4. In a folding bed, the combination with the main frame comprised of longitudinal and transversely arranged rails, two pairs of legs, one of which pairs being foldably hinged to the frame, links connecting the legs and slidably engaged in slots provided in the frame, a pair of legs pivotally connected with the frame, and notched arms carried by the frame and arranged to engage with devices carried by the last named legs for securing the frame in horizontal and vertical positions, of foot and head frames foldably connected with the first named frame, and means for securing the foot and head frames in open and closed conditions with respect to said main frame.

5. In a folding-bed, the combination with the main frame comprised of longitudinal and transversely arranged rails, two pairs of legs, one of which pairs being foldably hinged to the frame, links connecting the legs and slidably engaged in slots provided in the frame, a pair of legs pivotally connected with the frame, means carried by the frame and arranged to engage with devices carried by the last named legs for securing the frame in horizontal and vertical positions, and a spring serving to effect the engagement between the said means and said devices, of foot and head frames foldably connected with the first named frame.

6. In a folding-bed, the combination with the main frame comprised of longitudinal and transversely arranged rails, two pairs of legs one of which pairs being foldably hinged to the frame, a pair of legs pivotally connected with the frame and severally provided with bifurcated lower ends, means carried by the frame and arranged to engage with devices carried by the last named legs for securing the frame in horizontal and vertical positions, and a spring serving to effect the engagement between the said means and said devices, of foot and head frames foldably connected with the first named frame, and means for securing the foot and head frames in open and closed conditions with respect to the said main frame.

7. In a folding-bed, the combination with the main frame comprised of longitudinal and transversely arranged rails, two pairs of legs one of which pairs being foldably hinged to the frame, links connecting the legs and slidably engaged in slots provided in the frame, a pair of legs pivotally connected with the main frame and severally provided with bifurcated lower ends, notched arms carried by the frame and arranged to

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named legs for securing the frame in hori-
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named frame, and means for securing the
foot and head frames in open and closed con-
ditions with respect to said main frame.

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