

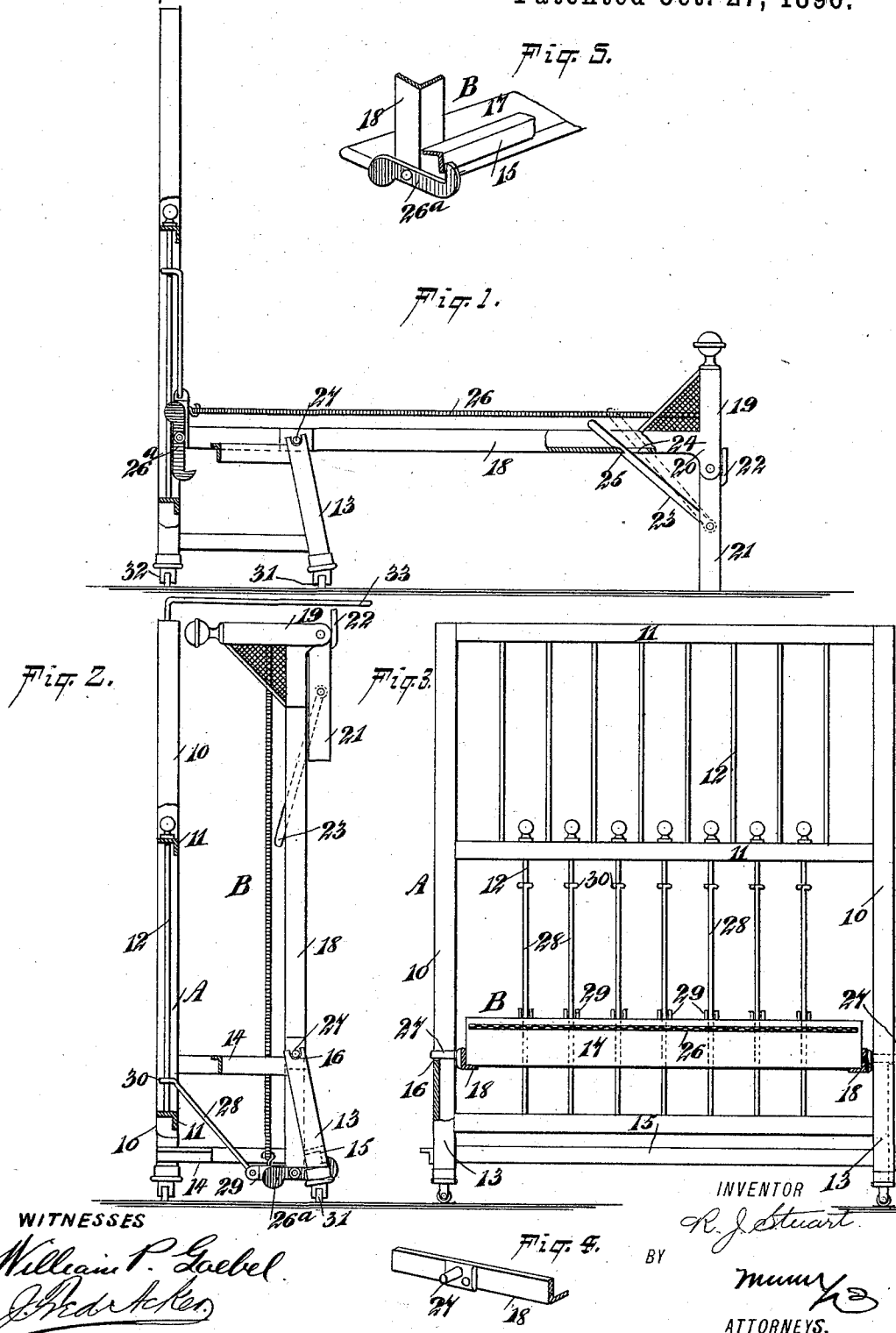
(No Model.)

2 Sheets—Sheet 1.

R. J. STUART.
FOLDING BED.

No. 570,348.

Patented Oct. 27, 1896.



(No Model.)

2 Sheets—Sheet 2.

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Fig. 6.

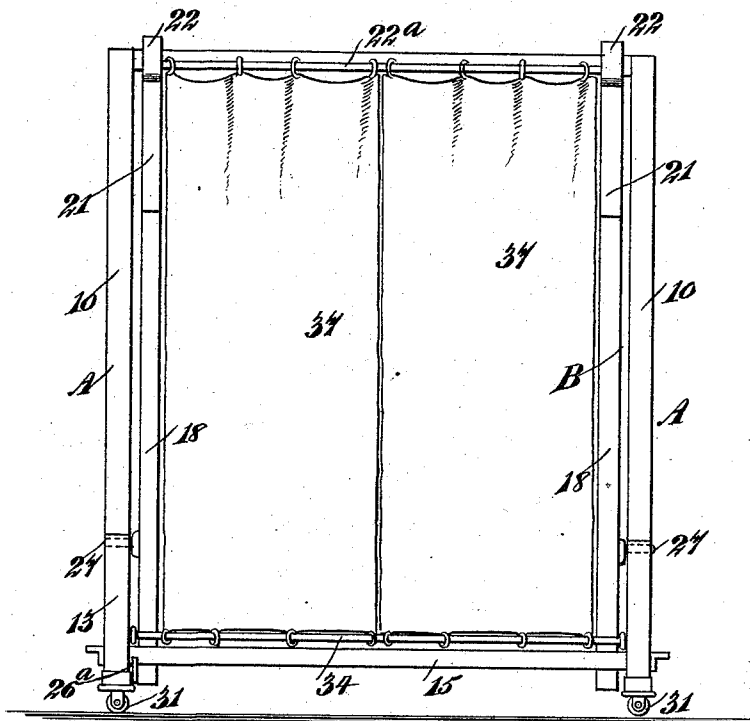


Fig. 8.

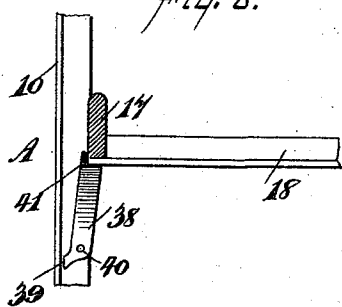
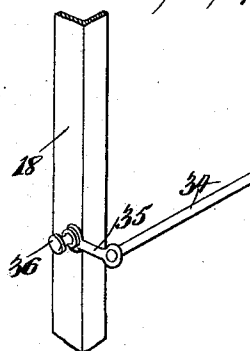


Fig. 7.



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ROBERT J. STUART, OF NEW HAMBURG, NEW YORK.

FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 570,348, dated October 27, 1896.

Application filed December 31, 1895. Serial No. 573,901. (No model.)

To all whom it may concern:

Be it known that I, ROBERT J. STUART, of New Hamburg, in the county of Dutchess and State of New York, have invented a new and useful Improvement in Folding Beds, of which the following is a full, clear, and exact description.

My invention relates to improvements in metallic folding beds, and the object is to provide a bed of this character that will be simple and durable in construction and easily operated, with automatic means for securing it in position.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a partial side elevation and partial sectional view of the bed and supporting-frame, the bed being in its lowered position. Fig. 2 is a side elevation of the bed in its upper or folded position, a portion of the supporting-frame being in section. Fig. 3 is a vertical section through the bed, looking in direction of the head, the bed being in its lower or horizontal position. Fig. 4 is a perspective view of a side rail of the bed, illustrating the application of a pivot thereto. Fig. 5 is a detail perspective sectional view of the lower portion of the bed in vertical position and a lower bar of the supporting-frame, showing the manner in which the bed is locked to the said bar. Fig. 6 is a front elevation of the improved bed folded up, illustrating the application of curtains to the bed proper and in an adjustable manner. Fig. 7 is a detail perspective view of a portion of the adjustable rod for the curtain of the bed; and Fig. 8 is a detail view of a latch applied to the head of the bed, adapted to prevent the foot from being thrown upward when the preponderance of weight is at the head.

In carrying out the invention the supporting-frame A for the bed B comprises a head-board, which consists ordinarily of side bars 10, connected by cross-bars 11, the latter being usually made of angle-iron, as illustrated; and the cross-bars are connected by series of

rods 12 or their equivalents and two legs 13, which are connected with the sides of the head-board by horizontal cross-bars 14; and the aforesaid legs are connected at the front preferably by means of two bars 15, as shown in Fig. 2, and these bars are also preferably made from angle-iron, as illustrated in dotted lines in Fig. 1, especially the lower bar. The legs 13 are at an angle to the head-board and incline from their upper ends in direction of the foot of the bed, whereby the space between the bottom portions of the legs and the bottom portion of the head-board is much greater than the space intervening the upper end of the legs and the head-board. Under this construction the legs 13 serve as braces for the head-board and effectually prevent the latter from being tipped forwardly or in direction of the foot of the bed. A bearing 16 is formed in the upper end of each leg 13, being adapted to receive the pivots of the bed B. The bed comprises a suitable head-bar 17, side bars 18, preferably of angle-iron, and a foot-board 19 of any desired shape, the said foot-board being provided with a downward extension 20 from the bottom of each of its sides, and these extensions may be in the nature of lugs or ears, as shown in Fig. 1.

A leg 21 is pivoted at its upper end to each extension 20 of the foot-board, and each leg has a plate 22, block, or its equivalent secured to its upper, outer, or forward face, and when the legs 21 are at an angle to the bed or are in position to support the foot-board thereof the said blocks extend upward to an engagement with the outer or forward face of the foot-board and limit the outward movement of the legs, preserving them in horizontal alinement with the side portions of the foot-board. Each leg has a locking-bar 23 pivotally connected with it at a point between its ends, and these locking-bars are carried upward through slots 24 in the sides 18 of the bed, as shown in Fig. 1, and each locking-bar has preferably a notch 25 formed in one of its edges to receive an end wall of the slot 24, through which the bar passes, and this locking engagement between the bars and the bed takes place when the bed is in its horizontal position. The action is automatic, since when the bed is lowered from the vertical to the horizontal position the legs swing

outward and the bars naturally drop until they are locked to the bed, which will be when the legs 21 are perpendicular and in engagement with the floor.

- 5 When the bed is in its elevated or folded position, as shown in Fig. 2, the legs 21 fold flat against its outer or forward face and the major portion of the locking-bars will be between the side pieces of the bed and the mattress-support
10 26. The mattress-support may be of any approved construction and is secured to the head-bar 17 of the bed and to the foot-board of the same.

A pivot-pin 27 is secured to the outer face
15 of each side bar 18 of the bed, and these pins are made to enter the bearings 16 in the stationary legs 13, and these bearings are preferably open at the top, so that the bed may be readily lifted from its supporting-frame.

- 20 In order that the pillows and other bedding at the head of the bed shall be properly supported when the bed is in its upright position, supporting-rods 28 are employed, pivoted to lugs 29, preferably located upon the upper
25 edge of the head 17 of the bed, and the upper end of each supporting-rod 28 is held to slide upon a rod 12, located at the bottom-portion of the stationary head-board of the bed, and this is accomplished by forming horizontal eyes
30 30 at the upper end of the supporting-rods, through which eyes the bars 12 loosely pass. When the bed is in its lower or horizontal position, the supporting-bars 28 will be practically vertical and out of the way, as shown
35 in Figs. 1 and 3; but as the bed is folded up these supporting-bars slide downward on the rods 12 and form together a pocket to receive the pillows and bedding at the head of the bed.

- 40 A latch 26^a, preferably a gravity-latch, is fulcrumed upon one or upon both ends of the head-bar 17 of the bed. Ordinarily the latch 26^a is fulcrumed at its center and is provided at each end with a head, the other end being
45 weighted to such an extent that when the bed is in its upright position the latch will be horizontal and will engage with the lower cross-bar 15, connecting the stationary legs 13, as shown in Fig. 5, and when the bed is in its
50 horizontal position the latch will be perpendicular, as illustrated in Fig. 1.

The stationary legs 13 are provided with casters 31, but the said casters are at a right angle to the floor or other surface upon which
55 the legs have bearing. Casters 32 are likewise provided for the bottom of the stationary head-board, and a curved rail 33 is sometimes secured to the top portion of the stationary head-board, to which rail a curtain
60 may be attached to conceal the bed when the latter is folded up, or if, in practice, it is found desirable the curtain may be permanently attached to the outer face of the bed, extending from one end to the other.

- 65 In Fig. 6 I have illustrated a preferred means for attaching a curtain to the bed. The pivot-pin of the foot-legs 21 is carried

from one side of the bed to the other, forming a curtain pole or rod 22^a. A second pole or rod 34 is placed at the head-section of the
70 bed, crossing that surface which is the under face of the bed when down and the front face when up. This lower rod 34 is connected at its ends with brackets 35, which are adjust-
75 ably attached to the outer faces of the side pieces 18 of the bed by adjusting or set screws 36, as shown in Fig. 7. One or more curtains 37 are hung upon the poles 22^a and 34 in any approved manner, as shown in Fig. 6.

It is necessary that some fastening device
80 should be placed at the head of the bed to prevent the foot portion being carried upward by reason of a preponderance or weight at the head. To this end I pivot a latch 38 upon the inner face of one or both uprights
85 10 of the supporting-frame A, as shown in Fig. 8. The latch is provided with a lug 39 adjacent to its pivot 40 and with a recess 41 in its upper end. The pivot of the latch is placed forward of the transverse center of
90 the upright to which it is connected, and, as the upright is an angle-iron or is of like construction, when the upper end of the latch is forwardly inclined its inclination will be limited by the lug 39 striking the member of the
95 upright connected to that to which the latch is pivoted. When the latch is in the position just described and the bed is brought down to a horizontal position, the recessed
100 end of the latch will engage with the head portion of the bed and will prevent it being carried downward. Before the bed is carried to its upper position the latch is carried rearward, where it will remain, if permitted, out of the path of the bed, owing to its eccentric
105 position upon the upright of the supporting-frame.

Having thus described my invention, I claim as new and desire to secure by Letters
110 Patent—

1. In a folding bed, the combination with that face of the folding section which is the under face when the said section is down and the front face when the section is up, of a curtain-rod fixed at one end of said section
115 and an adjustable curtain-rod located at the opposite end of the section, as and for the purpose specified.

2. In a folding bed, the combination with the folding section of the same and the sup-
120 porting-legs at the foot portion of said section, of a curtain-rod constituting the pivot-points of said legs, adjustable brackets located at the head portion of the folding section of the bed, and a curtain-pole supported by the said
125 brackets, substantially as shown and described.

3. In a folding bed, the combination with the folding section of the bed and the support for the same, of a gravity-latch carried by the
130 support and having its pivot placed eccentrically to the path of the head of said section, said latch being adapted for engagement with the head of the folding section when the

latter is in its lower position and a lug on the lower end of the latch adapted to engage with the support for limiting the movement of the latch, substantially as shown and described.

5 4. In a folding bed, the combination, with the supporting-frame, comprising a stationary head-board and legs connected with the front portion of the said head-board, of a bed
10 at its center on the head portion of the said

bed, and having a weighted end opposite the latch end and a keeper-bar connected with the said legs and adapted to be engaged by the latch when the bed is in its elevated position, as and for the purpose set forth.

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Witnesses:

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