(No Model.)

C. WEBER.

BEDSTEAD FOR INVALIDS AND OTHERS.

No. 342,551. Patented May 25, 1886.

Fig. 1.

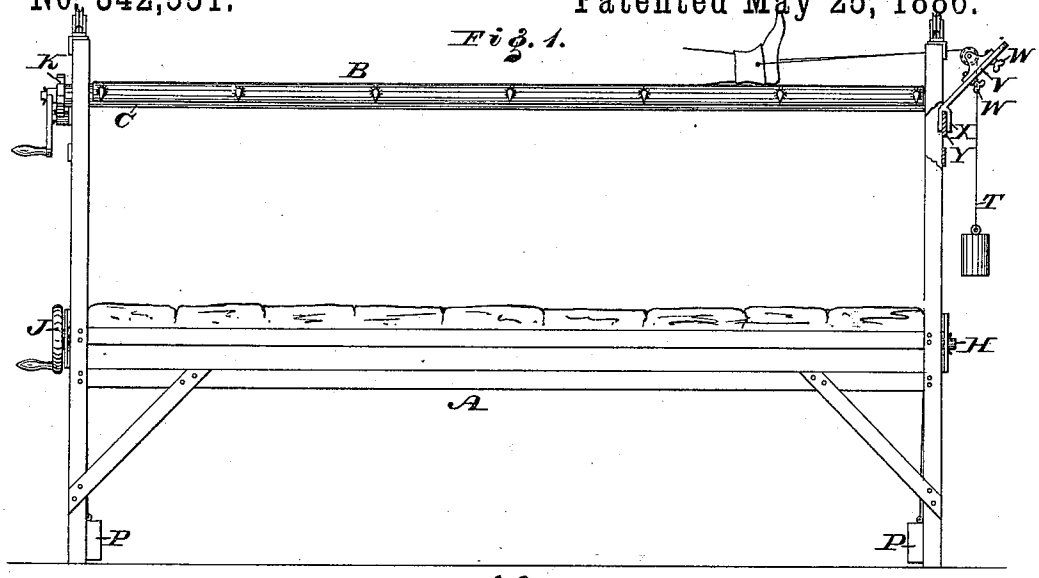


Fig. 2.

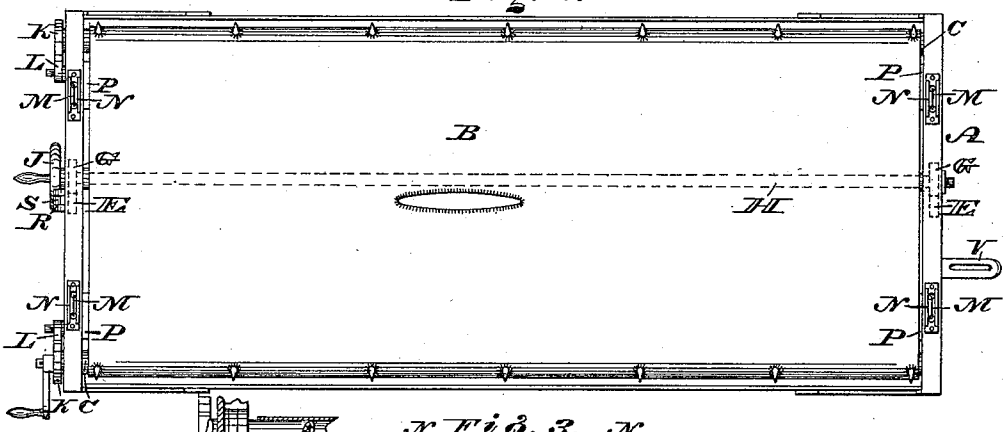


Fig. 3.

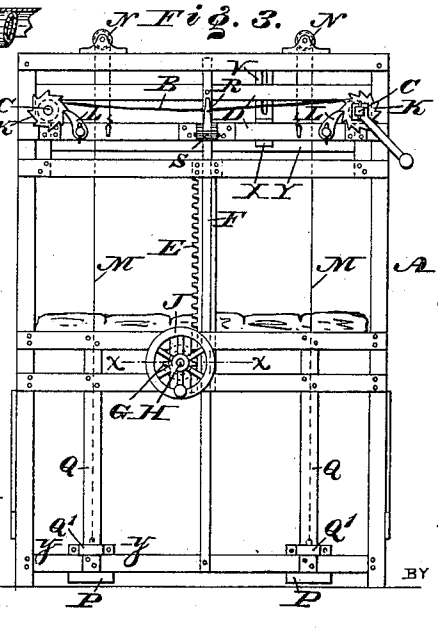


Fig. 4.

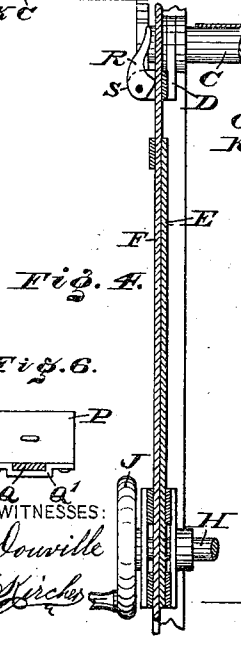


Fig. 5.

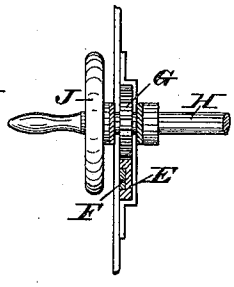


Fig. 6.

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BEDSTEAD FOR INVALIDS AND OTHERS.

SPECIFICATION forming part of Letters Patent No. 342,551, dated May 25, 1886.

Application filed January 23, 1886. Serial No. 189,460. (No model.)

To all whom it may concern:

Be it known that I, CASPAR WEBER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Bedsteads for Invalids, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a side elevation, partly broken away, of a bedstead embodying my invention. Fig. 2 represents a top or plan view thereof. Fig. 3 represents an end view thereof. Fig. 4 represents a vertical section of a portion thereof on an enlarged scale. Fig. 5 represents a horizontal section in line *x x*, Fig. 3, on an enlarged scale. Fig. 6 represents a horizontal section in line *y y*, Fig. 3, on an enlarged scale.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a bedstead for invalids, &c., the same being easily operated and possessing several advantages, as will be hereinafter set forth.

Referring to the drawings, A represents a bedstead, and B represents a bed-bottom, which is connected with rollers C C, which are mounted on a frame, D, the latter having secured to it rack-bars E, which depend from said frame D, and are fitted in guides F on the bedstead A.

G represents pinions, which are secured to the ends of a shaft, H, the latter having bearings on the bedstead A and carrying a crank or operating-wheel, J, whereby said pinions may be rotated, it being noticed that the pinions mesh with the rack-bars E, by which provision the bed-bottom B may be raised or lowered, as desired.

The rollers C carry ratchets K, with which engage pawls L, hung on the frame D, it being seen that the bed-bottom D may be tightened or loosened or its tension adjusted when desired, by properly rotating the rollers, the pawls and ratchets afterward serving to lock the rollers and preventing improper rotation of the same.

Connected with the ends of the frame D are cords M, which pass around pulleys N, mounted at or near the top of the bedstead A, and carrying at their lower ends weights P, which are guided on vertical bars Q, the latter being secured to the bedstead A and entering straps Q', which are secured to the weights, so that as the latter rise and fall they are prevented from swinging and striking the bedstead and making other noises objectionable to invalids.

It will be seen that the bed-bottom may rest on the bed proper, and be occupied in such position.

When it is required to remove the mattress, make or air the bed, or elevate the invalid, patient, or occupant, the wheel J is operated, whereby the bed-bottom is raised from the mattress, the invalid remaining thereon. As the bed-bottom rises, the weight P assists the ascent thereof, thus easing the operation of the wheel J.

In order to retain the bed-bottom at its adjusted height I employ a fastening, R, which consists of a bar pivoted to the frame D, and having a cam-head, S, which is adapted to be tightened against or engage with the guide F, as shown in Fig. 4, thus locking said frame and preventing vertical motion of the bed-bottom.

The advantage derived by using the cam-pawl R is that it does away with the clicking of the ratchet-stop heretofore used in bedsteads of this character, and which not only annoyed but frightened the invalid, resembling in its noise the striking or clashing of surgical instruments. By throwing out the bar or fastening the cam-head releases the frame D and permits the same to be raised or lowered.

For treatment of broken bones, dislocations, &c., of the limbs, especially the legs, which require to be stretched during such treatment, I employ a weighted cord, T, which passes over a pulley, U, on a bracket, V, and is connected with a collar or band fitted on the limb. The bracket is slotted, and the bearings of the pulley are secured in position by means of bolts W, which pass through the slot and permit the vertical adjustment of the pulley on the bracket. The bracket has its lower end forked, as at X, and fitted on a horizontal bar, Y, which latter is secured to the frame D of the bed-bottom, the bracket thus being capable of lateral adjustment relatively to the condition of the case or position of the patient.

The bedstead will be found to be well adapted especially for invalids.

I am aware that it is not new to employ cords and weights in connection with grooved rollers secured to a movable bar, the latter being adapted for attachment to the frame of a bedstead for the purpose of raising or sustaining the limbs of an invalid reclining on the said bedstead, and such I do not claim.

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

1. A rising and falling bed-bottom, in combination with a rack-bar and pinion, a bedstead and a fastening consisting of a bar with a cam-head, which engages with the bedstead, substantially as described.

2. A bedstead provided with a lateral adjustable bracket carrying a pulley having a vertical adjustment and a weighted cord, substantially as and for the purpose set forth.

3. The rising and falling frame D, in combination with the horizontal bar Y, forked slotted bracket V, pulley U, secured to the slotted bracket V by bolts W, weighted cords T, passing over said pulley, substantially as and for the purpose set forth.

4. In a bedstead, a horizontal end bar secured to a rising and falling frame, in combination with a slotted bracket having a forked portion adapted for attachment to said bar, said bracket extending outward and upward from said bar, a pulley adjustably secured to said bracket, and a weighted cord passing over said pulley and through said bracket, all substantially as and for the purpose set forth.

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