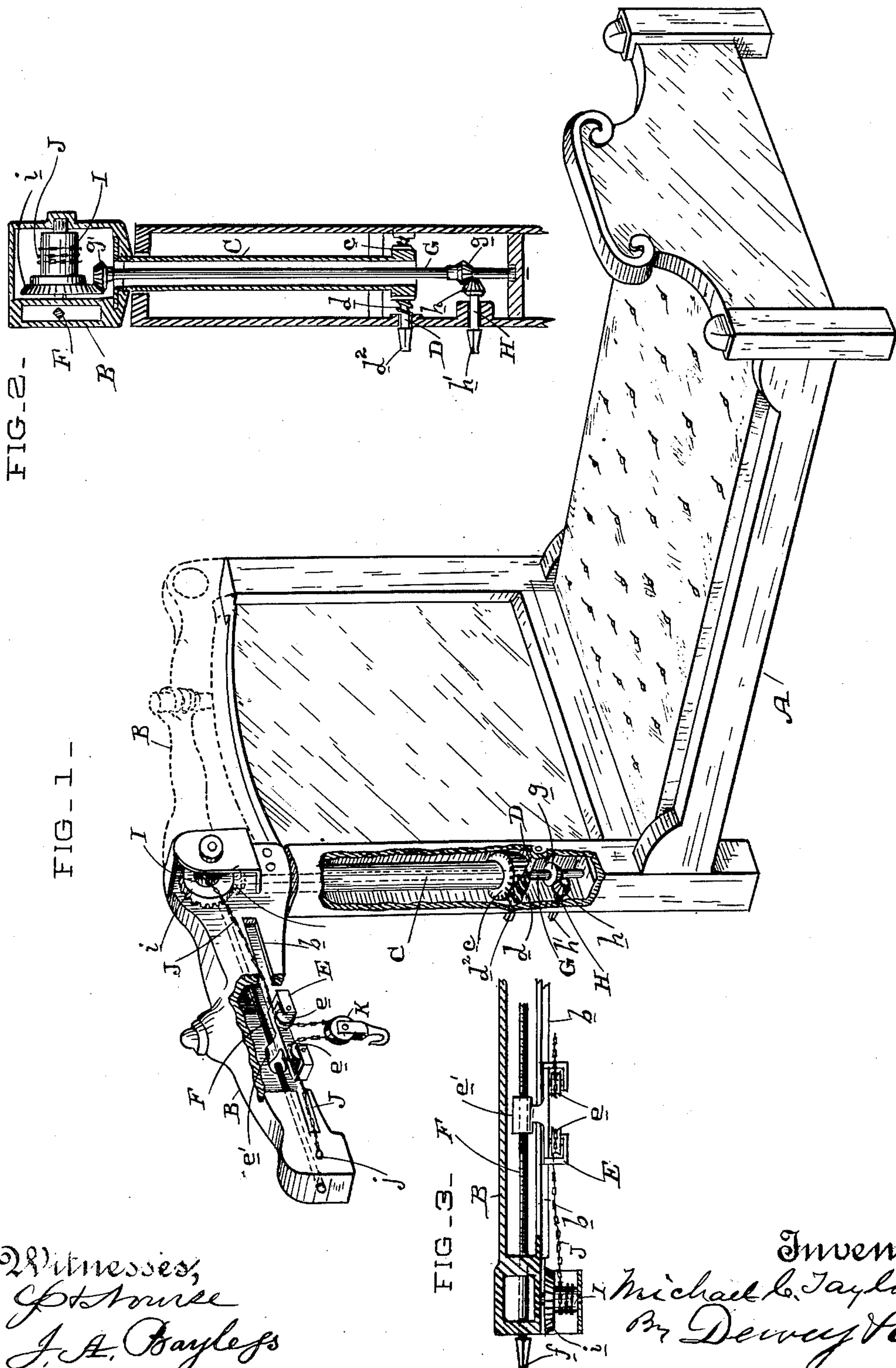


(No Model.)

M. C. TAYLOR.  
BEDSTEAD.

No. 462,458.

Patented Nov. 3, 1891.



Witnesses,  
J. A. Bayless

Inventor,  
Michael C. Taylor.  
By Devery H. Co. atty.



# UNITED STATES PATENT OFFICE.

MICHAEL C. TAYLOR, OF GRASS VALLEY, CALIFORNIA.

## BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 462,458, dated November 3, 1891.

Application filed February 10, 1891. Serial No. 380,979. (No model.)

*To all whom it may concern:*

Be it known that I, MICHAEL C. TAYLOR, a citizen of the United States, residing at Grass Valley, Nevada county, State of California, have invented an Improvement in Bedsteads; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the general class of bedsteads, and particularly to attachments to any ordinary bed by which it is rendered useful in handling sick and injured persons, those unable to help themselves, weak, infirm, and aged persons, and invalids.

My invention consists, essentially, in a swinging arm attached to any portion of the bedstead and adapted to swing over and outwardly to one side of the plane of the bed, whereby the person can be suspended from the arm and carried outwardly from over the bed while the latter is being made up.

My invention also consists in the novel arm, the lifting mechanism carried thereby, and the means for operating said mechanism and operating the arm, as will be fully described, and specifically pointed out in the claims.

The object of my invention is to provide a bedstead which can be used as an ordinary one, but which has an easily-operated attachment called into action when the necessity arises, the purpose of which is to lift the patient from the bed and support him outside of it with comfort while the bed is being made up or rearranged.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of a bed, showing the swinging arm extended to one side of the bed, and also showing in dotted lines its position when closed. Fig. 2 is a vertical section of the inner end of the arm and of the bed-post. Fig. 3 is a horizontal section of the arm.

A is a bedstead of any suitable character.

B is the swinging arm, which may be secured to the bedstead at any place and is adapted when not in use to be either out of the way or serve other purposes—as, for instance, hanging a curtain—and when in use can be swung outwardly, so that the patient slung to the arm may be moved out of the

bed. The place and manner of attachment of this arm which I deem best are here shown.

The arm B has one end pivoted upon one corner-post, and throughout its length it is adapted to fit the length of the head-board. When not in use it forms a part thereof and may be of any suitable and ornamental character. The arm is secured to a tubular pivot-shaft C, which passes down into the corner-post, and has on its lower end a worm-gear *c*, with which a worm *d* on a worm-shaft D engages, said shaft having a projecting end *d*<sup>2</sup>, adapted to receive a crank or key, by which it is rotated. Now by rotating the worm-shaft the pivotal shaft C is turned, and with it the arm, so that said arm may be swung from a position in line with and over the head-board to a position in line with the side of the bed-frame, in which position it can serve as a means for hanging a curtain, and it can be swung farther outwardly and completely away from the bed to carry the patient beyond it, as will be presently described.

The hoisting or lifting mechanism for the patient may be of any suitable character. I have herein illustrated one form, as follows: In a suitable guide *b* on the inner side of the arm is fitted and adapted to slide a carrier E, having two pulleys *e*, and said carrier is moved to and fro in the guide by means of a longitudinal screw F, passing into the arm and through a nut *e*' on the inner end of the carrier. This screw has a projecting end *f*, adapted to receive a crank or key. Passing upwardly and freely through the tubular shaft C is a vertical shaft G, which carries on its lower end a bevel-pinion *g*, with which a bevel-pinion *h* on a shaft H engages, said shaft having an extended end *h*' to receive a crank or key and projecting from the back of the bed-post. The upper end of the shaft G carries a bevel-pinion *g*', which meshes with a bevel-pinion *i* on a winding-drum I, upon which a chain J is wound, said chain passing over the two pulleys *e* of the carrier E, and attached at the point *j* near the outer end of the arm. Upon the chain between the two pulleys *e* is fitted a hook-block K, to which the sling mechanism (not shown) is attached.

The operation of the entire attachment is as follows: When not in use the arm B lies



upon and in line with the top of the head-board and forms a part thereof, the mechanism which it carries being out of sight and out of the way. Now whenever it becomes  
 5 necessary for the attachment to be used the shaft D is turned to turn the tubular shaft C, and thereby to throw the arm B over the bed and in a line above where the patient is lying. Then the sling is fitted about the pa-  
 10 tient, and in order to have the hook-block come in proper position the screw F is turned, whereby the carrier E is moved in its guide upon the arm, this movement taking place without effecting any vertical movement of  
 15 the block, as the chain is attached at its outer end; but the block is rolled along by the carrier to the position desired. Then the shaft H is turned to pay out the chain from the drum and thereby lower the hook-block to a  
 20 position where it can be connected with the sling. As soon as this connection is made the shaft H is again turned, whereby the chain is wound up on the drum and the hook-block raised, thereby raising the sling and the pa-  
 25 tient from the bed. The shaft D is now turned once more, whereby through the shaft C the arm B, with the patient suspended from it, is carried outwardly to any position outside of the plane of the bed, whereupon the bed  
 30 can be made up or rearranged. The reverse of the operation takes place to carry the patient back to the bed and lower him.

Having thus described my invention, what I claim as new, and desire to secure by Let-  
 35 ters Patent, is—

1. In a bedstead, the head-section thereof provided with a horizontal swinging arm jour-  
 40 naled in one of the corner-posts and forming the top portion of the head-section, said arm having a guide on its inner side, a carrier adapted to slide in said guide and provided with means for suspending the patient, a shaft, and actuating mechanism within one  
 45 of the corner-posts of the head-section for moving the arm about the shaft, substantially as herein described.

2. In a bedstead, the combination of the swinging arm forming a part of the head-section and from which the patient is suspend-  
 50 ed, a lifting-chain with hook-block, means for winding and unwinding said chain, the sliding pulley-carrier over which said chain

passes, and a means for shifting the position of the pulley-carrier, substantially as herein described. 55

3. In a bedstead, the combination of the swinging arm from which the patient is suspended, having a guide on its inner side, a lifting-chain with hook-block, means for winding and unwinding said chain, and the  
 60 means for regulating the position of the hook-block, consisting of the sliding pulley-carrier, over which said chain passes, the screw F within the arm, and the nut *e'* of the carrier projecting through the guide into the arm, so  
 65 that it may be engaged by the screw, substantially as herein described.

4. In a bedstead, the swinging arm, in combination with the lifting-chain, the hook-block of the lifting-chain, the winding-drum  
 70 of the chain, the shafts G and H, the pinions between said shafts and drum, whereby the latter is operated, the sliding pulley-carrier over which the chain passes, and the screw and nut for operating the pulley-carrier, sub-  
 75 stantially as herein described.

5. In a bedstead, the swinging arm B, in combination with the means for swinging the arm, consisting of the tubular shaft C, connected with the arm, the shaft D, and the gear-  
 80 ing between said shafts, the lifting-chain and hook-block, and means for raising and lowering said block, consisting of the winding-drum, the shafts G and H, the pinions connecting said shafts and drum, the sliding pulley-carrier  
 85 over which the chain passes, and the means for operating the pulley-carrier, consisting of the screw and nut, substantially as herein described.

6. In a bedstead, and in combination with  
 90 its head-board and corner-post, the swinging-arm B, pivoted to the corner-post, said arm when not in use forming a part of the head-board and adapted to be swung over and beyond the plane of the bed, and a lifting mech-  
 95 anism carried by the arm for raising and suspending the patient therefrom, substantially as herein described.

In witness whereof I have hereunto set my hand.

MICHAEL C. TAYLOR.

Witnesses:

S. H. NOURSE,  
 J. A. BAYLESS.