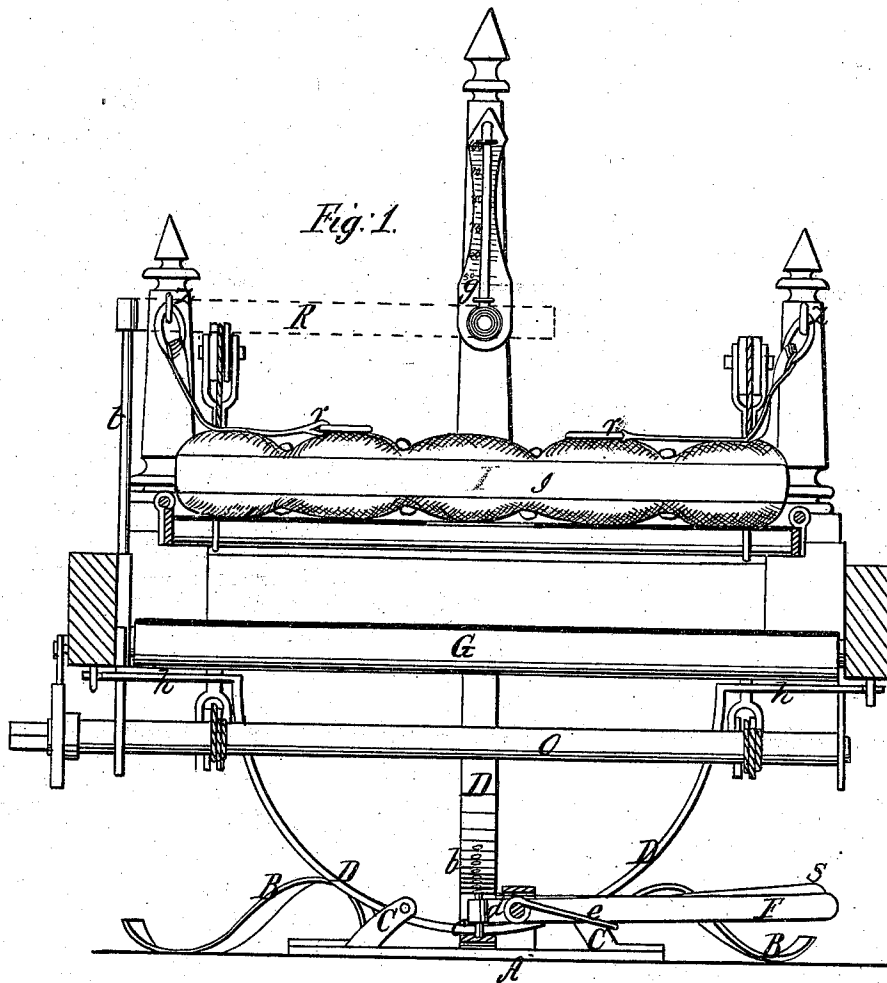


S. S. Brown,

Invalid Bedstead.

No. 87,403.

Patented Mar. 2. 1869.



Witnesses;
 James P. Green
 A. H. Hylman

Inventor;
 Smith S. Brown
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 attys

S. S. Brown,

3. Street's Street. 2.

Invalid Bedstead.

No. 87,463.

Patented Mar. 2, 1869.

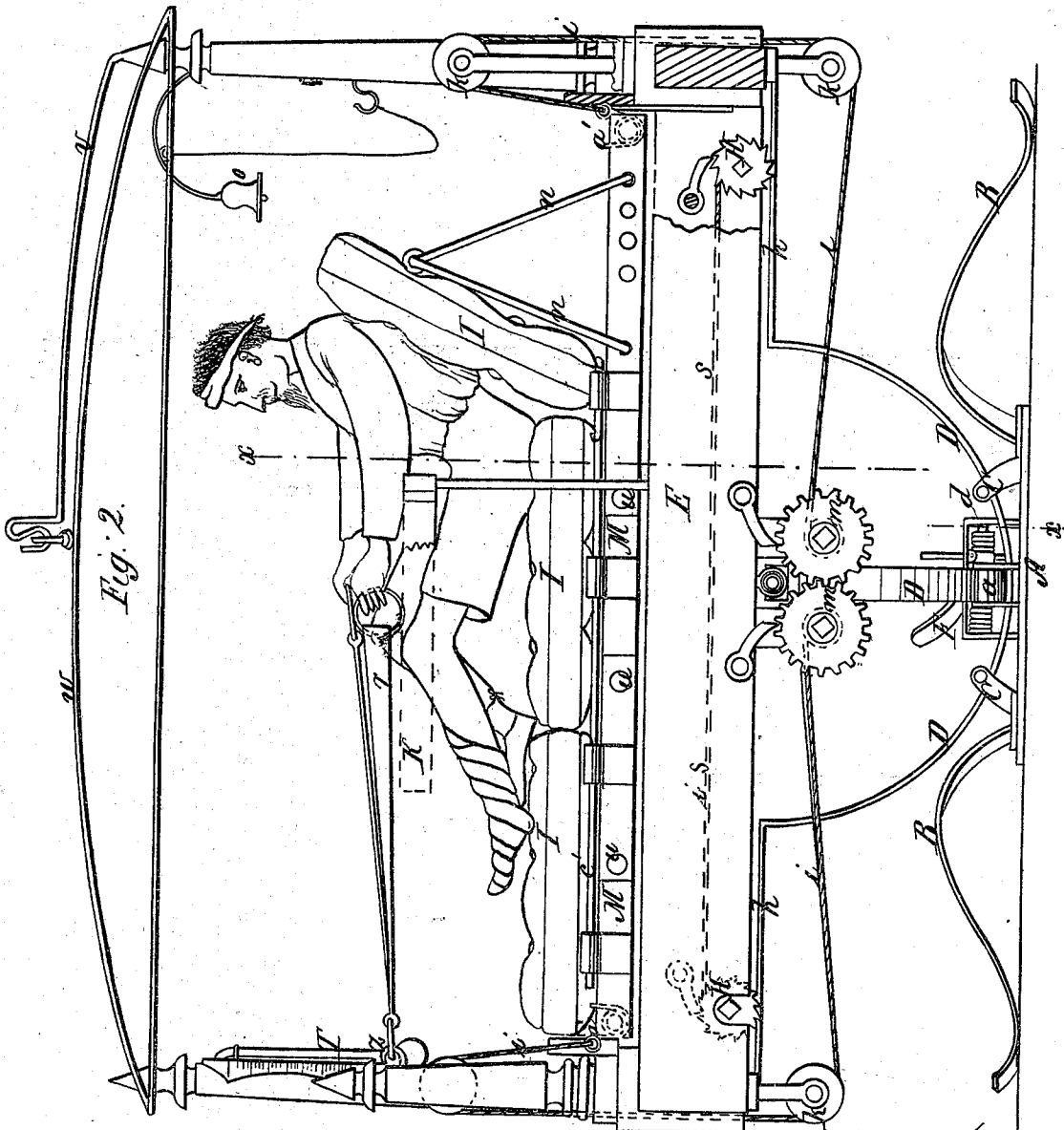


Fig. 2.

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S. S. Brown,

Invalid Bedstead.

No. 87,463.

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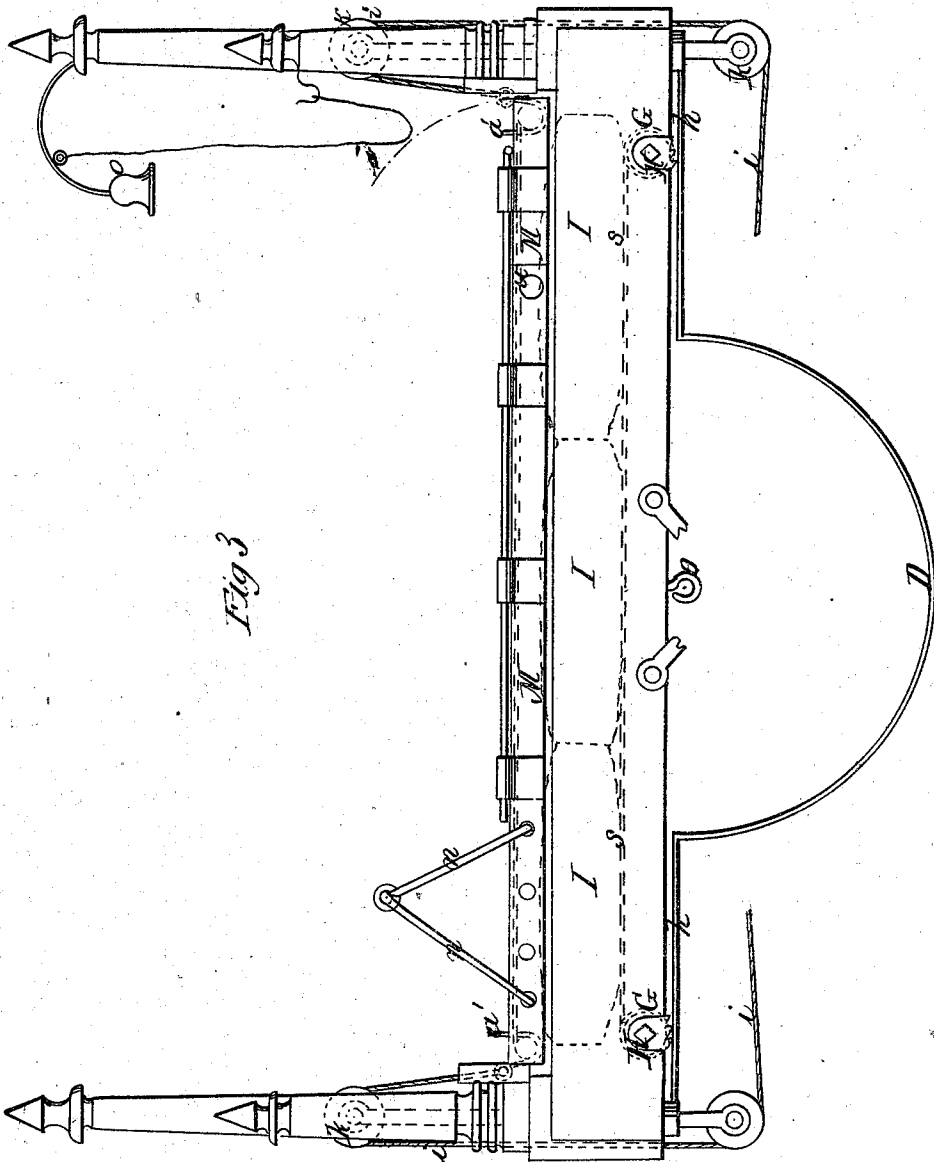


Fig 3

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United States Patent Office.

SMITH S. BROWN, OF WOONSOCKET, RHODE ISLAND.

Letters Patent No. 87,463, dated March 2, 1869.

IMPROVED INVALID-BED AND BEDSTEAD.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, SMITH S. BROWN, of Woonsocket, in the county of Providence, and State of Rhode Island, have invented a new and valuable Improvement in Bedsteads and Beds for Invalids, and others; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1, of the drawings, is a representation of an end view of my bedstead, with the end-board removed and the mattress resting on the top of the bed-frame;

Figure 2 is a side view of the bedstead, with the frame *n*, and a section of the mattress supporting the invalid; and

Figure 3 is a side view, with the bed-frame resting upon the mattress.

My invention relates to bedsteads especially intended for the use of invalids; and

It consists in constructing and combining, in a novel and efficient manner, a bedstead that shall be more perfect and useful for invalids than any similar device heretofore invented.

Letter A represents the base-plate, on which the whole superstructure rests. It is directly under the centre of the bedstead, and is constructed of cast-iron.

The lower surface, which comes in contact with the floor, is perfectly flat, from which project four legs B, extending from the base-plate toward the four corners of the bedstead.

Also, attached to the base-plate are four standards, C, with rollers, *a*, for the semicircular arms D, upon which directly rests the frame-work of the bedstead.

Said semicircular arms are perforated with small holes, *b*, to admit a pin, *c*, sufficiently large to hold the bedstead in any position it is desired to place it for the comfort or convenience of the patient.

The pins are attached to two levers, F and S, which are held in place by an arbor, *d*, running directly through each of the levers.

The levers are thrown into place by a spring, *e*, attached to the lever and base-standard.

Letter E represents the wood frame, attached to the semicircular arms D, by means of hangers or bearings, *h*, in such manner as to allow the bed to turn upon these arms at the point of contact.

The semicircular arms D rest, at their base, upon rollers, *a*, for the purpose of permitting the bed to be tipped sidewise or endwise, for the purpose of turning the patient over without hurting him, and without being compelled to lift him. The object attained by tipping endwise is to change the bearing of the weight of the patient from one part of his body to another.

Letters *s* represent the bed-bottom, which is made of strong canvas, and which is attached to the bed-frame by two rollers, G, one at each end of the bedstead.

The canvas is tightened or loosened by means of ratchet-wheel H, attached to the rollers G, making a firm and strong, yet elastic bottom for the mattress, doing away with slats, springs, and rods.

Letters I represent the mattress, which is in three separate pieces, each piece complete in itself. The object of having the mattress in three separate pieces is to allow of their being changed, thereby avoiding the inevitable result of having the mattress depressed in any part by the patient lying in one position in the bed, while mattresses long in use are always more or less depressed where the heavy part of the body comes in contact with the bed. This one prevents the occupant of the bed from forming a trough in which to lie. They are also more easily turned and handled than larger ones, and receive equal wear in all parts, and can be adjusted to any bed-frame.

Letter M represents a jointed frame, to which is attached a canvas elevator, resting upon the mattress. One side of the elevator is enamelled, to prevent anything from injuring the mattress; the canvas elevator being attached to the jointed frame, which, being fastened at one end, allows the other end of the canvas to be raised or lowered, to suit the wants of the occupant.

The whole canvas, upon which the patient is placed, is raised and lowered by means of two rollers, O, under the centre of the frame, worked by a wrench, and held by ratchet-gears *m m'*, one of which slips past the other, to allow one end of the bed to be raised at a time.

Letters *i* represent cords, running from the rollers, over pulleys, *k*, to the four corners of the canvas, and there secured to the canvas by hooks, *a'*.

In the centre of the canvas is a hole, for the use of patients too weak and feeble to leave the bed.

The canvas, upon which he lies, can be raised, so as to admit of the bed-pan, and also to allow the mattress to be removed, aired, and turned, without disturbing the invalid.

At the centre head-post is a call-bell, *o*, which can be easily rung by the occupant.

To the canvas jointed frame is also attached, when required, a frame, *n*, to be placed at any angle, for the purpose of raising the bed-clothes from the patient occupying the bed, when too weak or low to bear the weight, and also for the person to rest his limbs over or upon.

On the centre foot-post is placed a thermometer, T, so that the patient may notice the change of temperature in the room, and thereby prevent taking cold by injudiciously exposing himself.

A table, R, is also attached to the side of the bed, by means of a bracket, *t*, and pivot, upon which the table turns, thus enabling the person to place the table in any position desired.

The joints *u*, in the frame of the canvas elevator, will permit the invalid to be raised to a sitting posture.

At the foot-post are attached hooks, *z*, which are for the purpose of holding straps, *v*, for the patient to take

hold of, to change his position himself, without calling for assistance.

To the head or foot centre-post is attached an arm, *v*, upon which is suspended a frame, *w*, for mosquito-bar or fly-net.

Letters *c* represent a sliding pin, in jointed frame *M*, resting in staples, as shown, and removable at pleasure, or adjustable to the joints of said frame, which joints may be two or more in number.

I sometimes prefer to place the mattresses above the canvas elevator, and adjust the same, and the patient, in the manner shown on fig. 2 of drawings; but for ordinary use, I prefer the method of adjustment hereinbefore specified, and shown on fig. 3, in which the canvas rests upon the mattress.

What I claim, and desire to secure by Letters Patent, is—

1. The base-plate *A*, legs *B*, standards *C*, rollers *a*, semicircular arms *D*, pin *c*, levers *F* and *S*, arbor *d*, spring *e*, and hangers *h*, substantially as and for the purposes specified.

2. The bed-frame *E*, bottom *s*, mattress *I*, ratchet *H*, jointed frame *M*, with its canvas elevator, as described, table *R*, straps *r*, hook *z*, and arm *v*, when constructed, arranged, and operating substantially as specified.

In testimony that I claim the above, I have hereunto subscribed my name, in the presence of two witnesses.

SMITH S. BROWN.

Witnesses:

GEORGE A. WILBUR,
ALBERT HAKES.