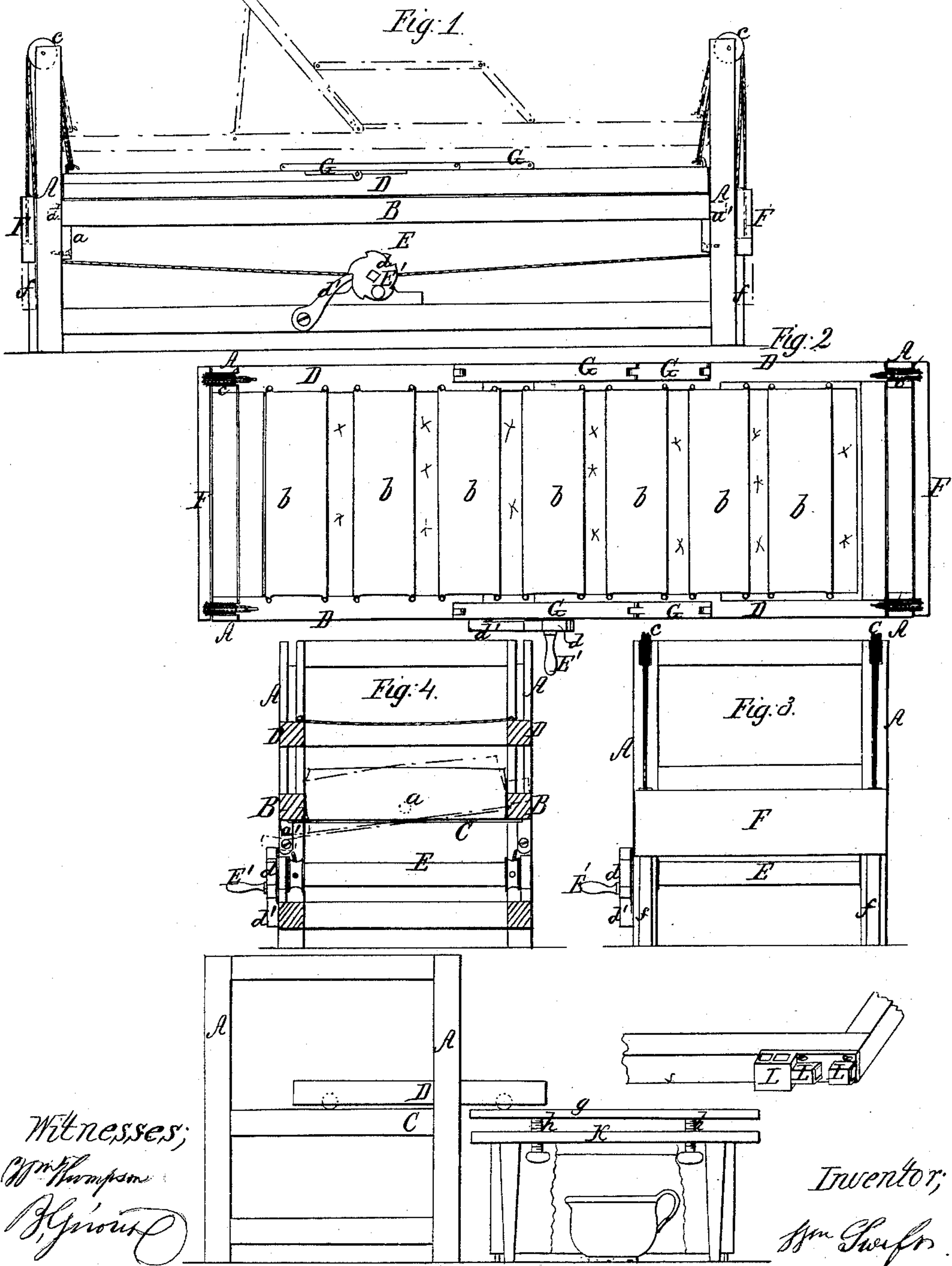


W. Swift,

Invalid Bedstead,

No. 27,169,

Patented Feb. 14, 1860.



Witnesses;
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UNITED STATES PATENT OFFICE.

WILLIAM SWIFT, OF BROOKLYN, NEW YORK.

INVALID-BEDSTEAD.

Specification of Letters Patent No. 27,169, dated February 14, 1860.

To all whom it may concern:

Be it known that I, WILLIAM SWIFT, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Invalid-Bedsteads; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, represents a side elevation of my improved bedstead with the several parts arranged in their respective positions for use: The elevating frame in this figure is shown in red lines with those parts forming the chair raised in their position for sitting the patient up in bed. Fig. 2, is a plan or top view of Fig. 1. Fig. 3, is an end view of the bedstead of Figs. 1 and 2. Fig. 4, is a cross section of Fig. 1.

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

My inventions and improvements in bedsteads refers especially to invalid bedsteads, and it is adapted to every want and requirement for assisting, comforting, and applying remedial agents to persons prostrated by disease. Therefore it will be particularly useful for hospitals and where help or nurses are few.

In my improvements I have consulted every want of those lying sick in hospitals, or suffering from fractures or other severe injuries, and applied to my bedstead such devices as will supply these wants, and render the patient as comfortable as the circumstances of his case will admit. I have constructed the mattress frame so as to be tilted or inclined, to allow the more ready escape of blood or pus from wounds, for the flowing off of washes or douches; for giving greater freedom in the examination of the body and to relieve pressure from bed sores or inflamed parts. It also provides for raising the patient from the mattress, and for showing from time to time the loss or gain in the weight of a patient. It provides for sitting the patient up either in bed or when he is removed to a suitable cushion for going to stool. It also provides for removing the patient from his bed to a movable couch or cushion by which he is enabled to move about the room or from one room or ward to another for fresh air and exercise.

In case of a very heavy and badly injured person requiring to be removed to the mov-

able couch, I will hereinafter show how it can be done with no effort on the part of the patient, and with the assistance of only one person. Should it be found necessary to remove a clinic to the operating room, or to and from a hospital, I have made special provision for doing this without any effort on the part of the person and without disturbing his rest, all of which will be hereinafter described.

Therefore to enable those skilled in the art to fully understand my invention, I will proceed to describe its construction and use.

In the drawings, A represents the head and foot posts for supporting the several parts constituting the invalid bedstead.

B is a mattress frame with slatted bottom, as usual which is pivoted at the head and foot to the cross bars, or rails C, C, about the middle of their length as shown by Fig. 4, at *a* so that by moving a piece *a* this frame may be inclined or tilted up so as to obtain a more ready access to the patient for examination, or for administering douches to wounds, so that the water will readily flow off, and not be liable to wet the bed clothes. This feature of my invention will be found useful and advantageous in many cases of sickness.

On top of the jointed or hinged mattress frame B rests a secondary frame D, which has attached to it strips, *b*, of suitable material extending across said frame and placed at suitable distances apart; these strips *b*, are buttoned or looped to the side bars of the frame D, in such a way that they may be readily attached or detached if found necessary. Said frame is attached by four suitable cords which proceed up and pass over pulleys *c* on the tops of posts A; then down, and are all connected to a roller E which has a winch E' on its end or ends, and by which the frame D can be elevated, the cords being wound upon the roller simultaneously and the frame elevated horizontally; a ratchet wheel *d* and pawl *d'* serve to keep the frame in its elevated position. The object of thus raising the frame and keeping it in this position is to enable the attendant to make up the bed without moving the patient from the bedstead or in any way incommoding him. This frame D has also attached to it at each corner another cord which passes over the same pulleys *c*, and are attached to weight racks F which work up and down in dovetail guides

f f, so as to keep them steady and prevent their being in the way. The racks are composed of flat pieces and so also are the weights which they hold so that they will
 5 be compact and out of the way of attendants. The object of these weights is to ascertain the loss or gain in weight of the invalid which in many cases of disease is very important to know. This is effected
 10 without pain or exertion to the patient by my plan.

G is a frame work hinged together in such a manner, and attached to elevating frame D, that a chain can be formed for sitting
 15 the patient up for change of position, either while in bed or out of it, or any degree of inclination may be given to the person when an erect sitting position would be injurious, and should the patient feel faint while sit-
 20 ting up he may be laid down gently by removing the prop sticks from behind the chair.

The ends of elevating frame D have tenons on its ends which are mortised or half-
 25 mortised into the posts A A so that this frame will keep in a steady position while raising or depressing it.

In the case of a very heavy and badly injured person, requiring to be moved from
 30 the bed entirely, I have provided a movable stool shown by Fig. 5, in which a bed pan or chamber may be placed. On this stool the frame D is to be placed while the patient is on it in a horizontal position. To do this
 35 with no effort on the part of the patient, and with the assistance of only one person, I use two trestles or horses K K each provided with a piece *g* and elevating screws *h h*. These are placed alongside of the bed-
 40 stead, and the frame D elevated until it is free from the mattress; pieces of timber are then placed under it for it to rest on, and the pieces *g* of the trestles are raised by screws *h, h* until they are level with the
 45 pieces supporting the frame D. The frame D may now be gently rolled off on to the upper blocks of the horses K K when it may be let down upon the couch or stool

and the horses removed. The patient may, while in this situation be raised in a sitting
 50 posture and rolled about the room, or from one room to the other. The horses K K are again used for removing the patient back on the bed.

The frame D may also be used for carry-
 55 ing patients to and from the operating rooms, or it may be used for carrying a sick or injured person from a distance to a hospital or to his home. For this purpose the frame D is converted into a litter or
 60 sedan by securing staples L to the four corners of this frame, which will receive handles, legs, and upright pieces for supporting a canopy or covering to protect the patient
 65 from the sun or rain. This litter has the advantage over those in general use in, that the patient may sit or recline, and when the legs or handles are in the way on entering
 a room, they can readily be removed.

It will be seen from the above description
 70 that my bedstead is gotten up with a view to supply every emergency in cases of sickness or badly injured persons, and that the manipulations may be conducted with only
 75 one assistant where nurses are scarce as in public hospitals. The patient may receive that care and attention which under other
 circumstances he would be denied, and which is exceedingly important to his
 80 speedy restoration.

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

1. The combination of movable frame D with mattress frame B, jointed pieces G and
 85 weights F all arranged and operating in the manner and for the purposes herein set forth.

2. I claim the frame B, when the same is pivoted to the head and foot rails as, and
 90 for the purposes described.

WM. SWIFT.

Witnesses:

WM. THOMPSON,
 B. GIROUX.