

E. K. DAY.
BODY ELEVATING DEVICE.
APPLICATION FILED JUNE 26, 1916.

1,229,240.

Patented June 12, 1917.

Fig. 1

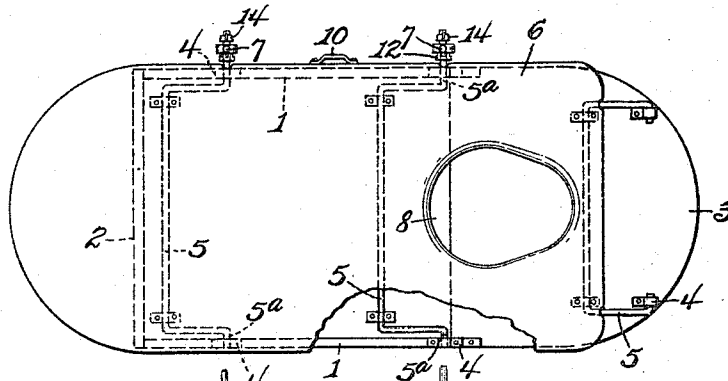


Fig. 2

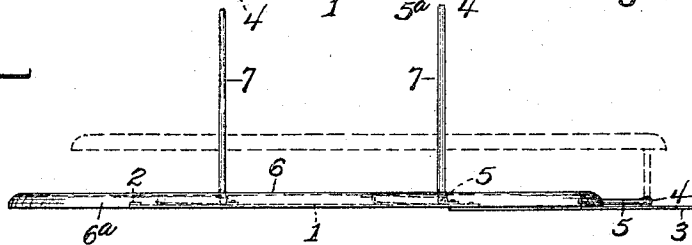


Fig. 3

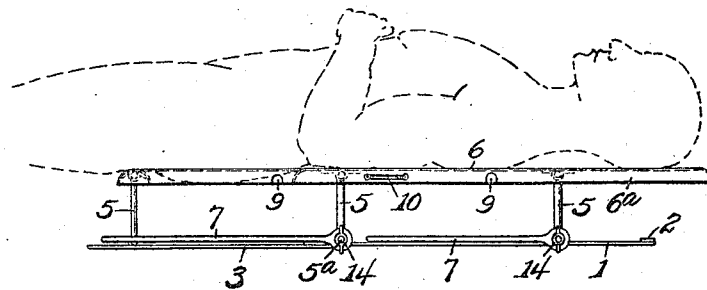


Fig. 4

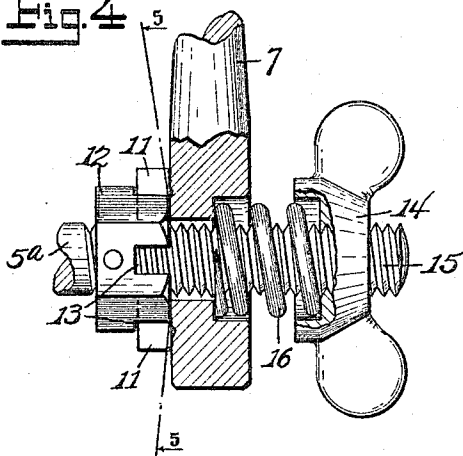
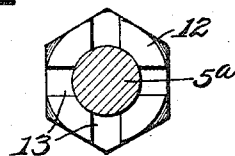


Fig. 5



INVENTOR
Edgar K. Day
BY *N. E. Dunlap*
ATTORNEY

UNITED STATES PATENT OFFICE.

EDGAR K. DAY, OF WHEELING, WEST VIRGINIA, ASSIGNOR OF ONE-HALF TO
ALEXANDER BOLTON, OF WHEELING, WEST VIRGINIA.

BODY-ELEVATING DEVICE.

1,229,240.

Specification of Letters Patent.

Patented June 12, 1917.

Application filed June 26, 1916. Serial No. 105,811.

To all whom it may concern:

Be it known that I, EDGAR K. DAY, a citizen of the United States of America, and resident of Wheeling, county of Ohio, and State of West Virginia, have invented certain new and useful Improvements in Body-Elevating Devices, of which the following is a specification.

This invention relates broadly to sick room accessories, and more specifically to an apparatus for elevating the body of a patient above the surface of a bed, as for use of a bed-pan; and it has for its primary object to provide a device, designed particularly for hospital use, whereby a patient may be readily elevated and supported in a position suited for convenient use of a bed-pan or other vessel.

A further object is to provide a device of the character mentioned adapted to rest upon a bed and upon which the patient may be placed by rolling or sliding, instead of lifting, thereby preventing undue disturbance of such patient and avoiding the raising of the patient from a recumbent posture.

A still further object is to provide a device upon which a prostrate patient may rest in a natural reclining position without the discomfort usually attendant upon the use of a bed-pan.

With these and other objects in view, the invention resides in the features of construction, arrangement of parts and combinations of elements which will hereinafter be described, reference being had to the accompanying drawings, in which—

Figure 1 is a top plan view of the invention with the body rest in lowered position;

Fig. 2 is an edge view of the same;

Fig. 3 is a side elevation of the invention with the body rest elevated;

Fig. 4 is an enlarged detail section of an operating lever and the locking clutch; and

Fig. 5 is a section on line 5—5, Fig. 4.

Referring to said drawings, in which like designating characters distinguish like parts throughout the several views—

1 indicates the side members and 2 an end member of a substantially rectangular frame, said members being composed of flat bars, preferably of metal. The front ends of said bars or members 1 are rigidly attached to the rear end of a flat metal plate 3 the front end of which is preferably of curved form, as shown in Fig. 1.

Pivotally mounted in bearings, as 4, provided on opposite sides of the frame are the ends or terminals 5^a of a plurality of transversely disposed crank-rods 5; and mounted upon the transverse body portions of said crank-rods is a plate or body rest 6 which is preferably composed of sheet-metal, the same being designed to receive a patient thereof in substantially the position indicated in dotted lines in Fig. 3. As is obvious, the body-rest 6 when in its normal or lowered position closely overlies the frame, as shown in full lines in Fig. 2, and is adapted to be swung by partial rotation of the crank-rods 5, to the elevated position shown in dotted lines in said figure and in full lines in Fig. 3. For effecting the elevation of said body-rest a lever or levers 7 may be mounted upon one or more of the terminals 5^a of said crank-rods, the same being designed for movement from the upright positions shown in Figs. 1 and 2 to the horizontal positions shown in Fig. 3 to impart a partial rotation to said crank-rods.

The plate 3 serves as a seat or rest upon which a bed-pan or other suitable receptacle may be supported when the body-rest 6 occupies its elevated position. Provided in said body-rest is a suitable opening 8 which is positioned to suit the position assumed by the body of the patient and to overlie the receptacle stationed under the plate 3.

The lateral edges of the body-rest are turned downward to form curved or roll-like flanges 6^a which embrace or inclose the side members or bars 1 of the frame when said rest is lowered. Thus, no sharp edges or projecting portions are presented at one side edge of the device which can interfere with the sliding of a patient to a position thereon. At the side at which the levers 7 are mounted notches 9 are provided in the flange 6^a for the reception of the projecting ends or terminals 5^a of the crank-rods.

A suitable handle 10 is preferably mounted on the flange 6^a substantially midway between the ends of the device for facilitating the carrying thereof.

The lever or levers 7 are mounted in such manner that, when the device is not in use, they may be folded back to positions in parallelism with the frame. The construction which permits of such folding embodies a clutch mechanism which comprises a nut or collar 12 fixed upon each of the terminals 5^a

which carry said levers. Said collar has its outer face dentated or cross-grooved, as shown at 13 in Figs. 4 and 5. The end of the lever 7 is loosely received on said terminal against said dentated face and has a pair of alined lugs 11 formed thereon adapted to seat in one or the other of the cross-grooves 13 according to the position assumed thereby. A wing nut 14 is adjustably mounted upon threads 15 formed on the end of the terminal, and interposed between said nut and the lever is a spiral compression spring 16 the tension of which is regulated by adjustment of said nut. Said spring is designed to exert a yielding pressure for maintaining the lever in interlocked relation to the nut or collar 12. When it is desired to dispose the lever in out-of-the-way position when the device occupies lowered, or collapsed, position, the wing nut is loosened to an extent which permits the withdrawal of the lugs 11 from the vertical groove 13, and following such withdrawal the lever is moved to a horizontal position wherein said lugs seat in the other of the cross-grooves 13.

In practice, the device may be disposed flat upon the bed and the patient drawn thereupon by sliding the underlying bed linen; or, the patient may be preliminarily placed on his side and the device stood substantially on its edge close against the patient's back, after which the device is swung back and the patient is at the same time rolled back so that when the device has reached seating position, the patient will lie thereon.

What is claimed is—

1. A body-elevating device of the character described, comprising a member adapted to rest upon a bed, a body-rest normally disposed in close overlying relation to said member and having downturned curved flanges for embracing and shielding the edges of said member, said body-rest having

a suitably located opening therethrough, and manually operated means connected to said member and to said body-rest whereby the latter may be elevated and lowered with respect to the former.

2. A body-elevating bed accessory, comprising a member adapted to rest upon a bed and embodying a receptacle support, a body-rest normally disposed in close overlying relation to said member, said body-rest having an opening adjacent to one end thereof located over said support, a plurality of transversely disposed crank-rods interposed between said body rest and said member and having pivotal relation to both thereof, levers for imparting a partial rotation to said rods for elevating and lowering said body rest, and means for adjusting the positions of said levers, said means including clutch elements and adjustable resilient means for holding said levers in engagement with said elements.

3. A body-elevating device of the character described, comprising a member adapted to rest upon a bed, a body-rest normally disposed in close overlying relation to said member and having downturned curved flanges for embracing and shielding the edges of said member, said body-rest having a suitably located opening therethrough, a plurality of transversely disposed crank-rods interposed between said body rest and said member and having pivotal relation to both thereof, levers loosely mounted upon said rods whereby the latter may be partially rotated for elevating and lowering said body-rest, and clutch-like means for interlocking said levers with said rods.

In testimony whereof I affix my signature in presence of two subscribing witnesses.

EDGAR K. DAY.

Witnesses:

H. E. DUNLAP,
W. F. KEEFER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."