

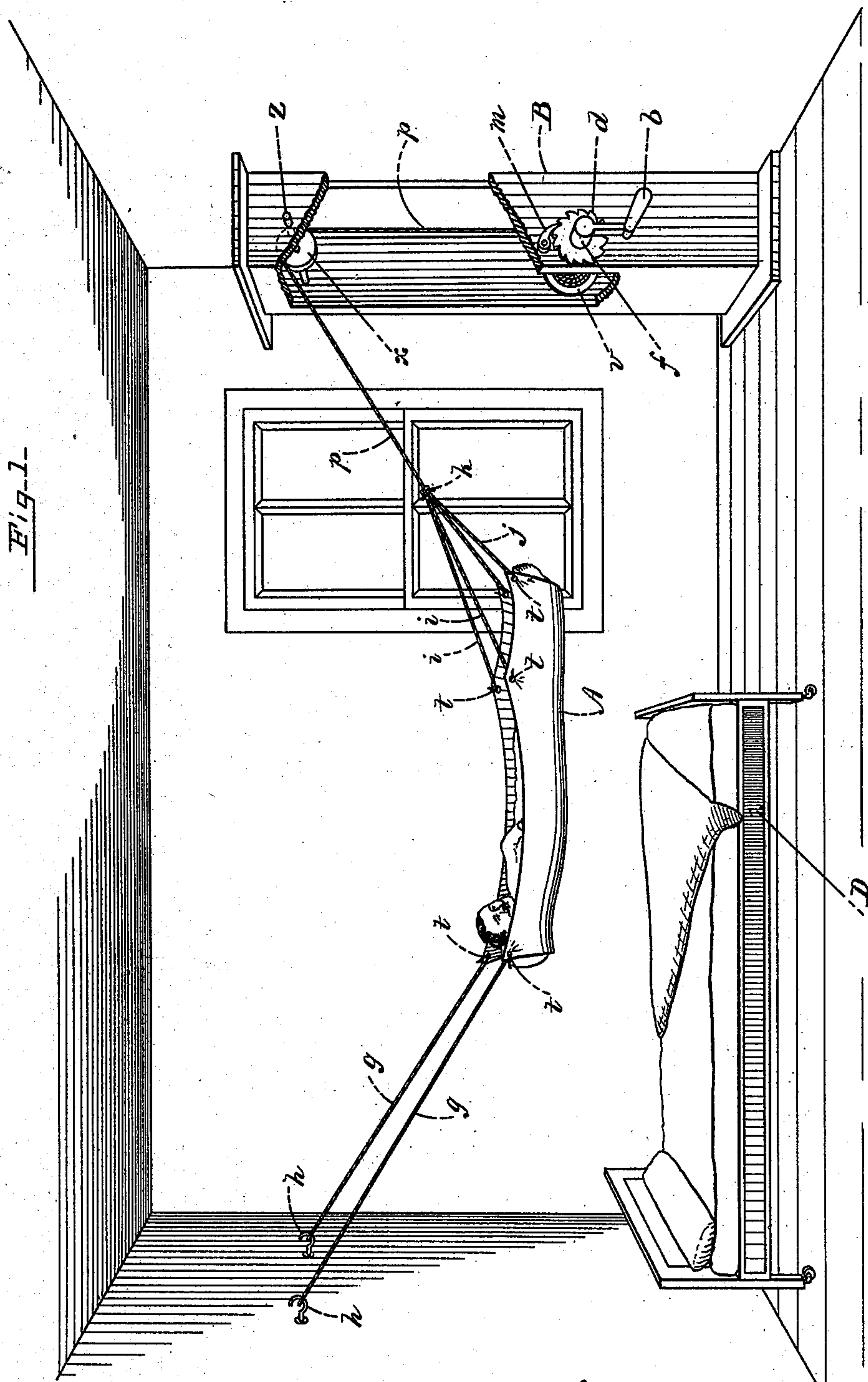
(No Model.)

J. H. MURDOCK.
INVALID LIFTER.

No. 402,180.

Patented Apr. 30, 1889.

Fig. 1-



WITNESSES:
J. F. Hubbard.
E. W. Primery.

INVENTOR
James H. Murdock,
PER C. A. Shawler,
ATTY.

UNITED STATES PATENT OFFICE.

JAMES H. MURDOCK, OF WOODSTOCK, VERMONT.

INVALID-LIFTER.

SPECIFICATION forming part of Letters Patent No. 402,180, dated April 30, 1889.

Application filed September 29, 1888. Serial No. 286,768. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. MURDOCK, of Woodstock, in the county of Windsor, State of Vermont, have invented a certain new and
5 useful Improvement in Invalid-Lifters, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the
10 same, reference being had to the accompanying drawings, forming part of this specification, in which the figure is a perspective view representing my apparatus in use, a portion of the cabinet being shown as broken away.

15 My invention relates especially to apparatus for lifting and supporting invalids from the beds while changing the bedclothing, &c.; and it consists in certain novel features, as hereinafter fully set forth and claimed, the
20 object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following
25 explanation.

In the drawing, A represents the hammock, and B the cabinet.

30 The cabinet B consists of a vertically-arranged rectangular box disposed against the partition of the room, preferably opposite the foot of the bed D. A pulley, *x*, is journaled centrally in the top of the cabinet on a transversely-arranged rod, *z*. In the lower portion
35 of the cabinet, and at a convenient height from the floor, is journaled a shaft, *f*, carrying a drum, *v*, said shaft being provided at one end outside said cabinet with a crank, *b*, and ratchet-wheel *d*. A retaining-pawl, *m*, is
40 pivoted to the side of the cabinet in position to engage the teeth of said ratchet.

The hammock A is composed of canvas or similar material sufficiently strong to support the weight of a person. Ropes *g* are
45 secured to adjacent corners of the hammock by means of hooks *t* passing through eyes formed in said hammock to receive them, the opposite ends of said ropes being provided with loops adapted to receive hooks *h*, secured
50 in the partition of the room opposite the cabinet and preferably disposed about four feet

apart. Ropes *i j* are knotted together at *k*, and have their free ends provided with hooks *t*. The hooks *t* of the ropes *j* are inserted in eyes formed in the corners of the foot of the
55 hammock, and the hooks of the ropes *i* in similar eyes formed in the edges of said hammock at a suitable distance from the foot to sustain it in a horizontal position when in use. A rope, *p*, is secured by one end to the
60 knot *k* and passes into the top of the cabinet over the pulley *x*, and thence downward onto the drum *v*, to which it is secured.

In the use of my improvement the hammock is disconnected from the ropes *g i j* and
65 placed under the patient, it preferably being disposed below the under sheet of the bed and designed to remain there permanently. The bed being placed in a direct line between the hooks *h* and cabinet B, when it is desired
70 to raise the patient, the hooks *t* of the ropes *g i j* are inserted in the proper eyes of the hammock and the crank *b* turned, thereby winding the rope *p* onto the drum *v* and steadily raising the hammock to any required height,
75 the pawl *m* sustaining it in position in a manner that will be readily understood by all conversant with such matters without a more explicit description. The bed can be readily
80 moved from under the hammock for the purpose of airing the same or changing the clothing. By disconnecting the hooks *t* of the ropes *j* from their eyes at the foot of the hammock the feet of the patient may be al-
85 lowed to drop, the leg bending at the knee, when, by lowering the hammock by means of the crank *b*, the patient may be easily deposited in a chair placed to receive him.

Having thus explained my invention, what I claim is—

90 1. The combination, with a hammock provided with a set of eyes at its head end, of a set of eyes at its foot end, and an intermediate set of eyes at its opposite edges disposed about a chair height distance from the foot
95 end, supporting-ropes engaging the eyes at the head end, four supporting-ropes united at their outer ends, one pair thereof being connected at their inner ends with said intermediate eyes and the other pair being detach-
100 ably connected at their inner ends with the foot-eyes, a winding-rope connected to the

four supporting - ropes, and a windlass on which the winding-rope is wound for raising or lowering the hammock, substantially as described.

5 2. In an apparatus of the character described, the combination of the cabinet B, provided with the pulley *x*, the shaft *f*, journaled in said cabinet and provided with the drum *v*, handle *b*, and ratchet *d*, the retaining-pawl *m*, the hammock A, the hooks *h*, the
10 ropes *g*, having the hooks *t*, and adapted to

connect the head of said hammock with the hooks *h*, the foot-ropes *i j*, provided with hooks *t*, and knotted at *k*, and the rope *p*, connecting said foot-ropes with the drum *v*, all
15 being arranged to operate substantially as specified.

JAMES H. MURDOCK.

Witnesses:

J. R. MURDOCK,
W. D. HEATH.