

No. 785,855.

PATENTED MAR. 28, 1905.

H. P. CAMP.
INVALID LIFTER.
APPLICATION FILED JAN. 30, 1904.

Fig. 1.

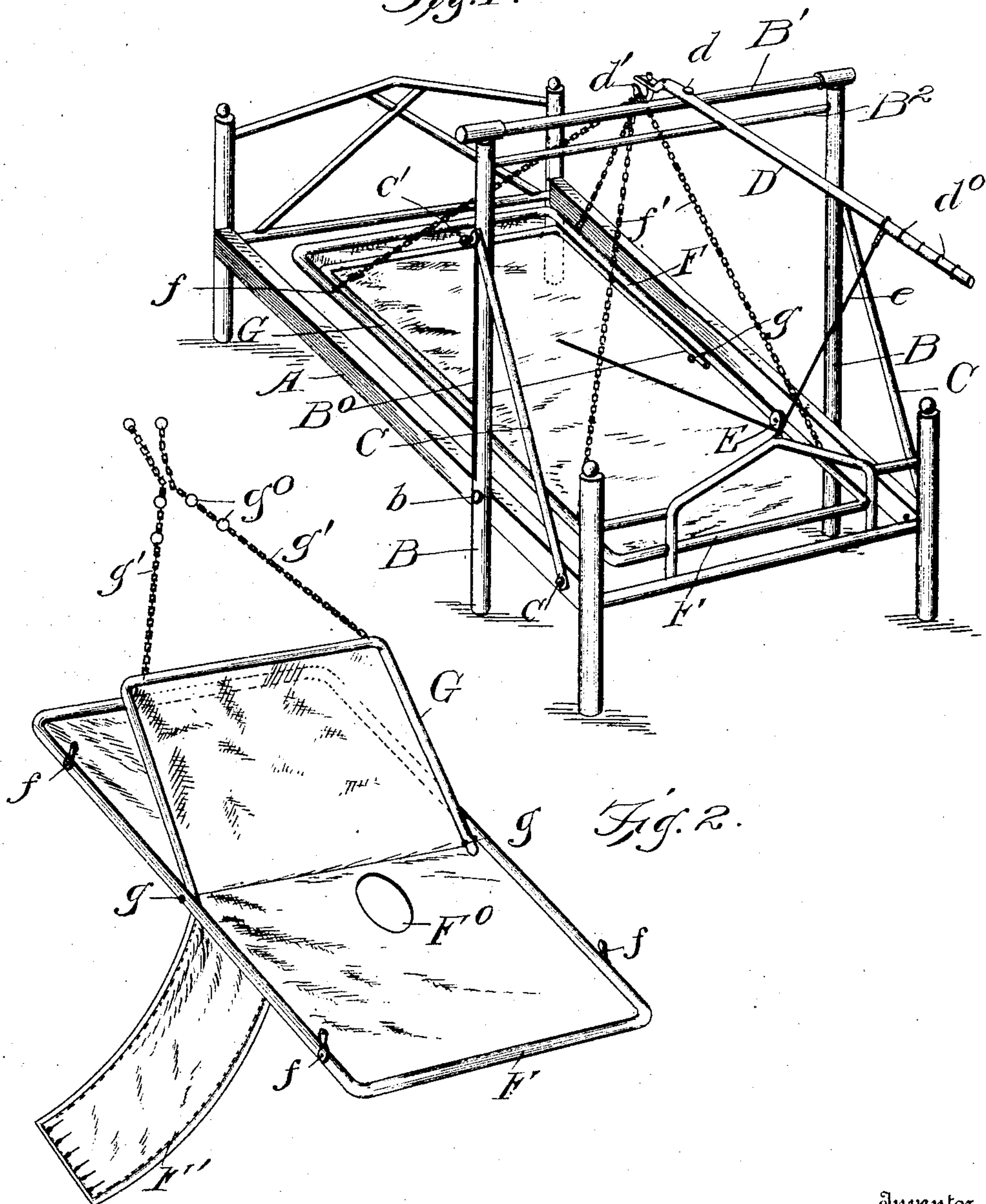


Fig. 2.

Witnesses

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INVALID-LIFTER.

SPECIFICATION forming part of Letters Patent No. 785,855, dated March 28, 1905.

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To all whom it may concern:

Be it known that I, HENRY PIERCE CAMP, a citizen of the United States, residing at Maysville, in the county of Jackson and State of Georgia, have invented certain new and useful Improvements in Invalid-Lifters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in bed attachments, and is especially applicable for use with patients or invalids confined to their beds.

It is well understood that great irritation and annoyance is caused to one confined to his bed owing to the fact that the mattress becomes disarranged, hardened, and oppressively warm from constant use; and one of the objects of my invention is to provide a simple means for lifting the patient out of bed for the purpose of arranging or airing the mattress and sheets.

Another object of my invention is to provide a means whereby the use of the ordinary bed-pan may be dispensed with—another source of great irritation and annoyance to the patient.

Another object of the invention is to provide a means enabling the patient to be readily raised to a sitting posture.

In order to more fully understand the invention, reference is had to the accompanying drawings, illustrating the same, in which like letters designate corresponding parts in both views, in which—

Figure 1 represents a perspective view of an ordinary bedstead with my improvements attached; and Fig. 2, a perspective view of the removable stretcher, the pivoted head-frame being shown in its inclined position.

A is a bed-frame adapted to receive the usual bed-spring and mattress. (Not shown.)

B represents a pair of uprights pivotally secured by the pins *b* to the side of the bed-frame and provided at their upper ends with the transverse bar *B'*, secured thereto in any suitable manner. The upper portion of the frame formed by the uprights *B* and the cross-bar *B'* may be further braced by the tie-rod *B²*.

C represents a pair of angle-braces for holding the upright frame in position. These are preferably arranged as shown, the lower ends being pivotally secured at *c* to the side pieces of the bed-frame and their upper ends adapted to be adjustably secured to the uprights *B*. I prefer the means shown in the drawings for adjustably securing the upper ends of the angle-braces *C* to the uprights, wherein *c'* represents a clamping-pin engaging the uprights and movably mounted longitudinally thereon in the slots *B⁰*.

D is a lever fulcrumed at *d* to the transverse bar *B'*, the weight-arm extending over the bed. The weight-arm is provided with any suitable means (represented in the drawings by the hook *d'*) for suspending the stretcher, hereinafter described, and the power-arm is likewise provided with suitable means (represented by the notches *d⁰*) for adjustably securing the end of a rope *e*, adapted to reeve through a locking-pulley *E*, suitably secured to a support.

F is the frame of a stretcher member adapted to be suspended from the weight-arm of the lever and normally rest on the bed proper. For this purpose the frame *F* is preferably provided with a plurality of hooks *f*, and to these hooks are adapted to be attached a plurality of flexible cords or chains *f'*, which may be detachably secured at their upper ends to the lever, as by the hook *d'*. The stretcher-frame proper is also preferably provided with the auxiliary head-frame member *G*, pivotally secured to the main frame, as *g*. This head-frame member *G* is also provided with suitably-attached flexible cords or chains *g'*, the free ends of which are adapted to be attached to the hook *d'* of the lever when desired. The chains *g'* are provided with a plurality of eyelet members *g⁰*, which enable the head-frame member *G* to be adjustably secured in an inclined position, if desired, when the main frame or stretcher *F* is elevated, and it will be obvious that the chains *f'* also may be provided with similar eyelets, if desired. It will be understood, of course, that the frames *F* and *G* contain a stretched canvas or other suitable fabric, and the fabric of the frame *F* is provided with an aperture

F⁰ for obvious reasons. This aperture F⁰ is normally kept closed by the flap F', affixed to the frame at one end in any suitable manner and adapted at its other free end to be detachably secured to the other side of the frame by lacing or otherwise.

Referring to Fig. 1, when it is desired to elevate the patient for the purpose of arranging the mattress and sheets beneath the stretcher member by a downward pull of the power-arm of the lever the weight is readily lifted owing to the leverage. While in the elevated position it is obvious that a suitable receptacle may be placed beneath the aperture F⁰ between the stretcher and the mattress to receive fecal discharges, the flap F' having been unfastened at its free end. The head-frame G may also be raised to an inclined position and secured through the medium of the eyelets g⁰ to the hook d' or other suitable support in its adjusted position, which will bring the patient to a substantially sitting position—a more natural and comfortable position when stooling. It will also be obvious that the chains f' may be detached from the hook d', if desired, and the chains g' attached instead. When thus disposed, the main frame or stretcher rests always on the mattress; but the head-frame G may be inclined to raise the patient to a sitting-posture, as desired, and this may be done by the patient himself with the assistance of the cord e, reeving through the latch-pulley E.

When not in use, the whole apparatus may be detached from the bed-frame, or owing to the slotted uprights and pivotal connections may be folded down alongside the bed-frame.

I do not wish to limit myself to the exact details of construction, as it is obvious modifications might be made without departing from the spirit of my invention.

What I claim is—

1. In a bed attachment, the combination with suitable uprights and a support carried thereby adapted to extend transversely of the bed, of a lever fulcrumed on said transverse support adapted to be operated in a vertical plane disposed substantially longitudinal of the bed, and a stretcher adapted to be suspended from said lever and to normally rest on the made-up bed.

2. In a bed attachment, the combination with a suitable support, of a lever fulcrumed on said support, and adapted to be operated in a vertical plane extending longitudinally of the bed, a stretcher adapted to be detachably suspended from said lever, an independent movable back-supporting member adapted to be connected to said lever, and means connected to the power-arm of the lever and extending

in proximity to the occupant of the bed, whereby the back-rest may be operated by the occupant.

3. In a bed attachment, the combination with the uprights and cross-piece connecting said uprights, the whole forming a support adapted to straddle the bed with said cross-piece extending transversely thereof, of a lever of the first class fulcrumed on said cross-piece operative in a vertical plane substantially longitudinal of the bed, an independently-movable back-supporting member adapted to be detachably connected to the weight-arm of said lever, a locking-pulley mounted on a suitable support at the power end of said lever, and flexible means secured to the power end of said lever, reeving through said pulley and extending in proximity to the occupant of the bed.

4. In a folding attachment for beds, the combination with the uprights pivotally secured to the sides of the bed, brace-rods therefor, and a cross-piece connecting said uprights, the whole forming a support adapted to straddle the bed, of a lever fulcrumed on said cross-piece, a stretcher adapted to rest normally on the made-up bed, and flexible means on said stretcher adapted to be attached to said lever for suspending said stretcher therefrom.

5. In a folding attachment for beds, the combination with the uprights pivotally secured to the sides of the bed, pivoted brace-rods secured at one end thereto and a cross-piece connecting said uprights the whole forming a support adapted to straddle the bed, a lever fulcrumed on said cross-piece, a stretcher adapted to rest normally on the made-up bed, and flexible means on said stretcher adapted to be attached to said lever for suspending said stretcher therefrom.

6. In a folding attachment for beds, the combination with the uprights pivotally secured to the sides of the bed and provided with a slotted guideway, brace-rods pivotally secured at one end to the bed and adjustably connected at their other end to said uprights through said slotted guideways, cross-pieces connecting said uprights, said uprights and cross-pieces forming a support adapted to straddle the bed, of a lever fulcrumed on said cross-piece and normally disposed longitudinally of the bed, and a stretcher adapted to be suspended from said lever.

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

HENRY PIERCE CAMP.

Witnesses:

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FRANK H. BOYD.