

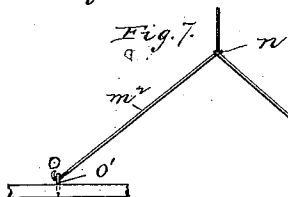
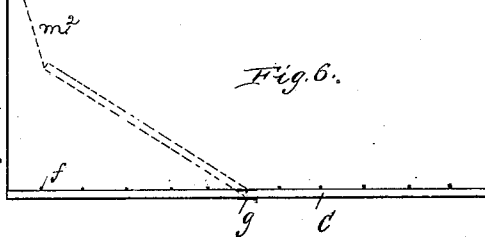
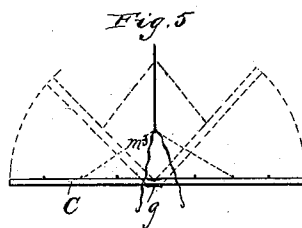
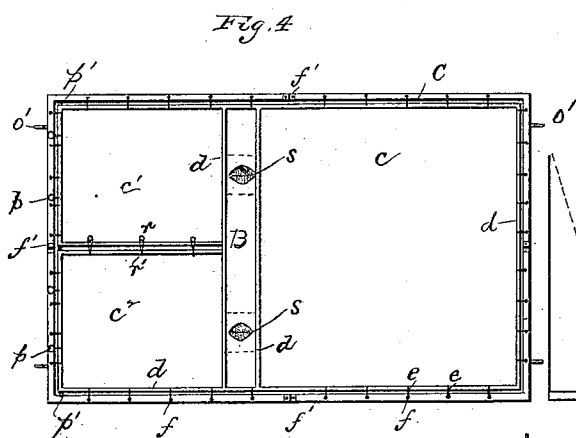
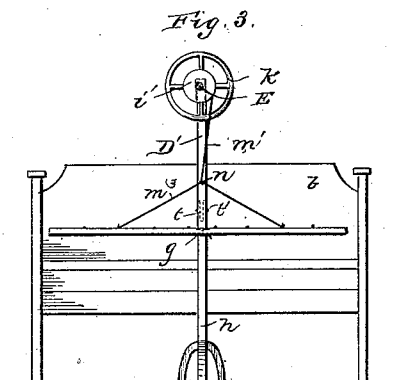
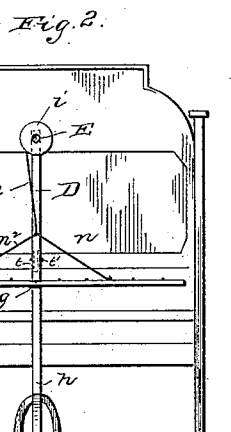
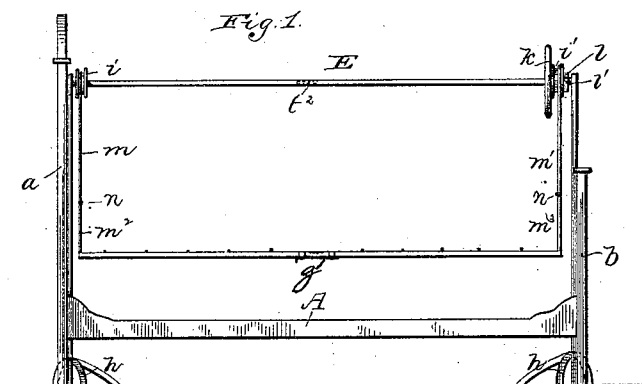
(No Model.)

C. DRAKE.

HOSPITAL BEDSTEAD ATTACHMENT.

No. 356,352.

Patented Jan. 18, 1887.



Witnesses:-
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UNITED STATES PATENT OFFICE.

CAROLINE DRAKE, OF AVON, ILLINOIS.

HOSPITAL BEDSTEAD ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 356,352, dated January 18, 1887.

Application filed June 10, 1886. Serial No. 204,818. (No model.)

To all whom it may concern:

Be it known that I, CAROLINE DRAKE, a citizen of the United States, residing at Avon, in the county of Fulton and State of Illinois, have invented a Machine for Handling Sick People and Invalids while in Bed, of which the following is a specification.

The object of my invention is to provide an attachment which may be applied to an ordinary bed for the purpose of lifting sick persons when desirable to remove them or change the bed-clothing, said attachment also being adapted to bring the body to a sitting position or to shift it to either side.

My invention consists in details of construction described below, and pointed out in the claims.

In the drawings, Figure 1 is a side elevation showing my improvement arranged in connection with a bed and the means of operating it. Fig. 2 is a front elevation looking toward the head-board, the foot-board being removed. Fig. 3 is a like view looking toward the foot-board, the head-board being removed. Fig. 4 is a detached plan view of the sectional canvas sheet and its hinged frame. Fig. 5 is a detached end view of the sheet and frame, looking from the foot and showing how either side may be lifted up. Fig. 6 is a detached side view of the sheet and frame, showing the head sections both lifted up together. Fig. 7 is a detail view showing the manner of attaching removably the operating-cords to the sheet-frame.

Like letters refer to like parts.

A is a bed, in which *a b* are the head and foot boards.

B (see Fig. 4) is a sheet of canvas or suitable material, made in three sections, *c c' c''*, the smaller being for the upper portion of the body and the larger one for the lower. It is important to have the head-section in two parts, so that if a person is lying on one side of the sheet the body may be raised without changing its position or interfering with the pillow under the head. Each section has turned-under or corded edges *d d*, and are removably fastened to a surrounding frame, C, by cord-loops *e e* passing over pins *f f* on the frame; but any suitable means of attachment, such as short straps and buckles, will answer. The head-sections are held together by buttons

r and detachable loops *r'*, and have respectively two eyes, *p p*, and a short stiffening-rod, *p'*, the latter being surrounded by the turned-under canvas and extending entirely along the upper edge of section *c' c''*, whereby, by means of operating-cords, described below, one or both of said sections may be raised independently of the frame C. Between the head and foot sections are suitably arranged pieces of rubber sheeting, *s s*, to prevent soiling when a bedpan is used.

The frame C is divided into four sections by the hinges *f' f'*, so that it will allow the sheet to come into varying positions when they are operated together; but the side hinges are not often used, and their purpose is mainly to allow the frame to be packed away in small compass or to allow the foot-section of the sheet to be raised alone. Any of the hinges may be locked open by a pin, *g*, used in connection with them.

Inside the head and foot boards of the bed standards D D' are placed, braced on the floor by the U-shaped feet or tripods *h h*, which should be of sufficient extension to prevent the standards from moving inwardly or laterally. The standards are also vertically extensible by means of a tongue-and-socket joint, *t*, and an adjusting-pin, *t'*. (See Figs. 2 and 3.) Between the standards runs a shaft, E, provided, near the standard D, with a pulley, *i*, and near D' with a turn-wheel, *k*, pulley *i'*, and a ratchet and pawl, *l l'*, (see Fig. 1,) holding the sheet or its sections at any desired height.

To fit different-sized beds the shaft is made extensible by a joint, *t''*, (see Fig. 1,) similar to that in the standards. From either pulley cords *m m'* extend down, and a triangular cord, *m'' m'''*, is fastened or knotted at *n* to the cords *m m'*, and extend, respectively, to the head and foot of frame C, or the cord *m''* may engage with the eyes *p p* on the head-sections of the sheet to raise one or both of them, as desired, prior to which said sections must be properly disengaged from frame C. The lower ends of the cords *m'' m'''* may have hooks *o*, detachably engaging with eyebolts *o'* on the ends of said frame, or with the eyes *p p* on the sections *c' c''* of the sheet.

Now it will be seen that by releasing cord *m''* at the foot and properly disengaging the head-

sections of the sheet from frame C the cord m^2 can engage with the eyes $p p$ and raise the head-sections to a position similar to Fig. 6, when a person will be in a sitting position, or this could be accomplished without disengaging the head-sections by unlocking the side frame-hinges and attaching the cords to the eyebolts at the head of the frame, and it will also be seen that one of the head-sections of the sheet could be easily raised by releasing the loops r' and attaching cord m^2 to the eyes $p p$. By releasing one end of cords $m^2 m^3$ from loops o' , as the case may be, and unlocking the end frame-hinges, the frame and sheet united may be turned to either side to shift the person, as in Fig. 5; or this may, perhaps, be sufficiently done by releasing cord m^3 entirely and one end of cord m^2 . When the side hinges of the frame are locked, the end hinges unlocked, and both ends of cords $m^2 m^3$ attached, the person may be raised entirely from the bed and kept from falling out by the inclined sides of the sheet, which will be in a similar position to the dotted lines of Fig. 5, and if all the hinges are locked the person will be raised on a substantially flat sheet. By releasing the cord m^2 and unlocking the side hinges the foot-section c may be alone raised by attaching the cord m^3 to eyebolts o' at the foot of the frame C.

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

1. The combination, with the frame C, of the head-sections $c' c^2$ of the sheet, said sections being detachable from the frame and from each

other, and having, respectively, eyes $p p$ and stiffening-rods $p' p'$, the hooked operating-cord m^2 , the turn-shaft, and the standards for supporting the turn-shaft, whereby said head-sections may be raised singly or together independently of the frame, as set forth.

2. The combination, with a bed, of a frame, C, hinged together at the sides and ends, as shown, and provided with hinge-locks g and eyebolts o' , a removably-attached sheet, B, having a foot-section and two head-sections, the latter adapted to be united or separated, and having, respectively, eyes p and stiffening-rods p' , the hooked operating-cords, and the turn-shaft, whereby the head-sections of the sheet may be lifted singly or together independently of the frame, or, by properly locking or unlocking the hinges, the whole sheet, either longitudinal half, or the foot-section may be raised in connection with the frame, as set forth.

3. The sheet B, composed of section c , rubber portions s , and sections $c' c^2$, the latter detachable from the frame and each other, and having eyes p and stiffening-rods p' , combined with the lock-hinged frame C, having screw-eyes o' , the hooked cords $m^2 m^3$, the longitudinally-extensible shaft having a turn-wheel, pulleys, a ratchet and pawl, the tripods $h h$, and the vertically-extensible standards $D D'$, braced by the said tripods $h h$, as set forth.

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