

(No Model.)

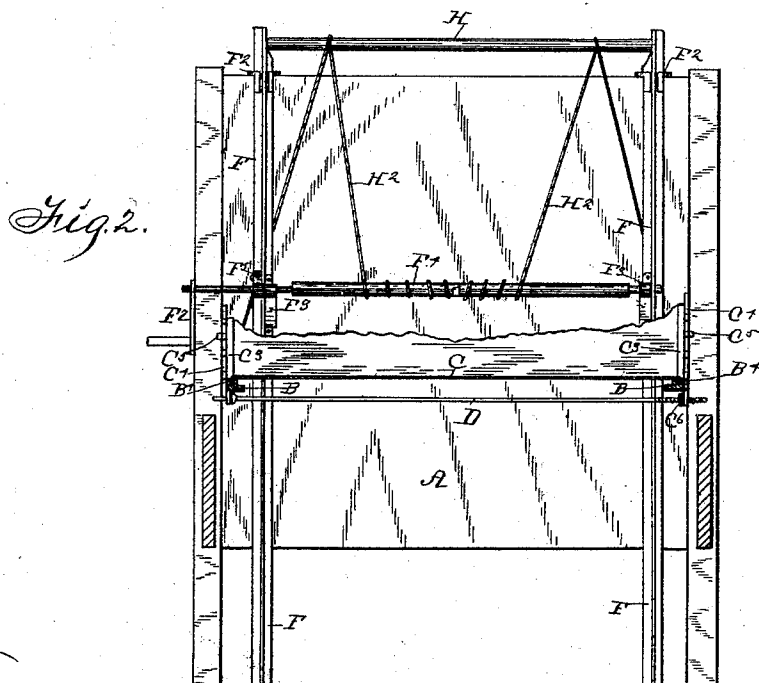
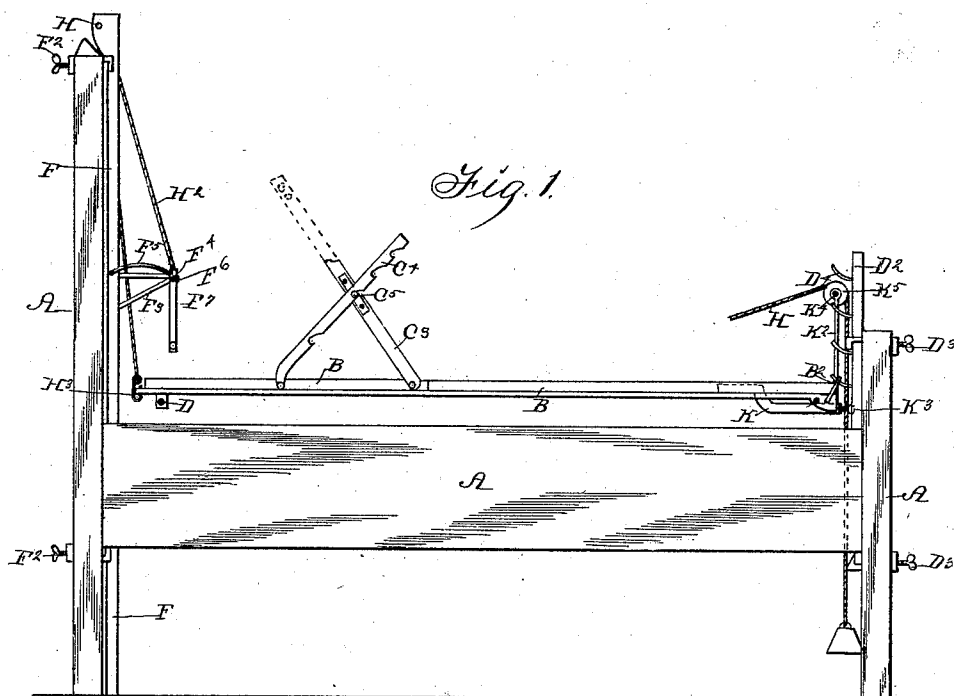
2 Sheets—Sheet 1.

S. DRUET.

BED ATTACHMENT FOR HANDLING INVALIDS.

No. 505,821.

Patented Oct. 3, 1893.



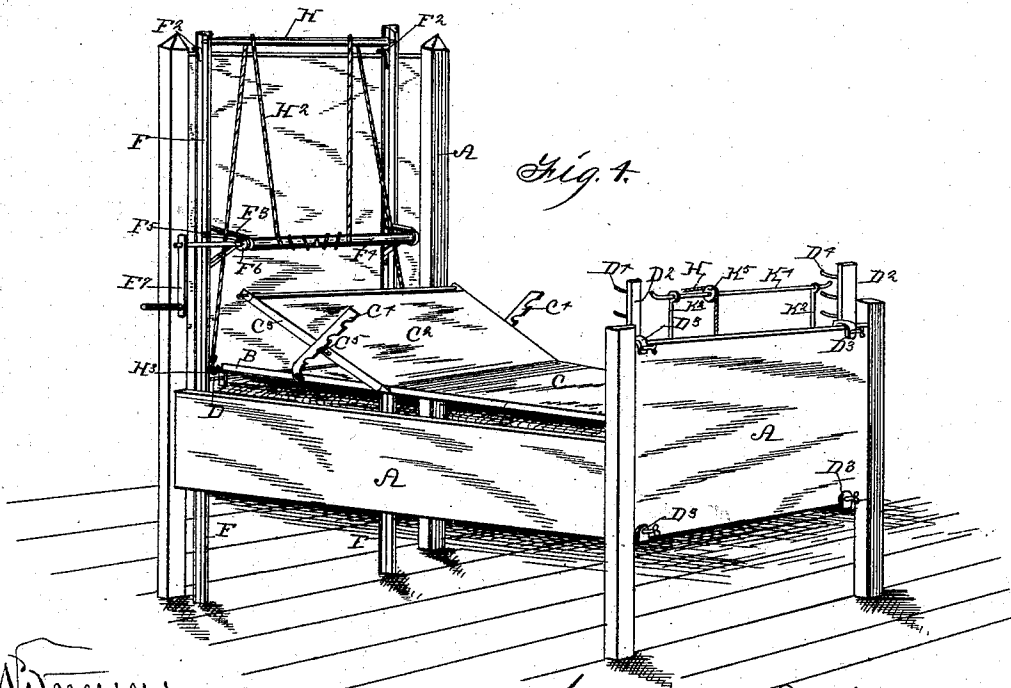
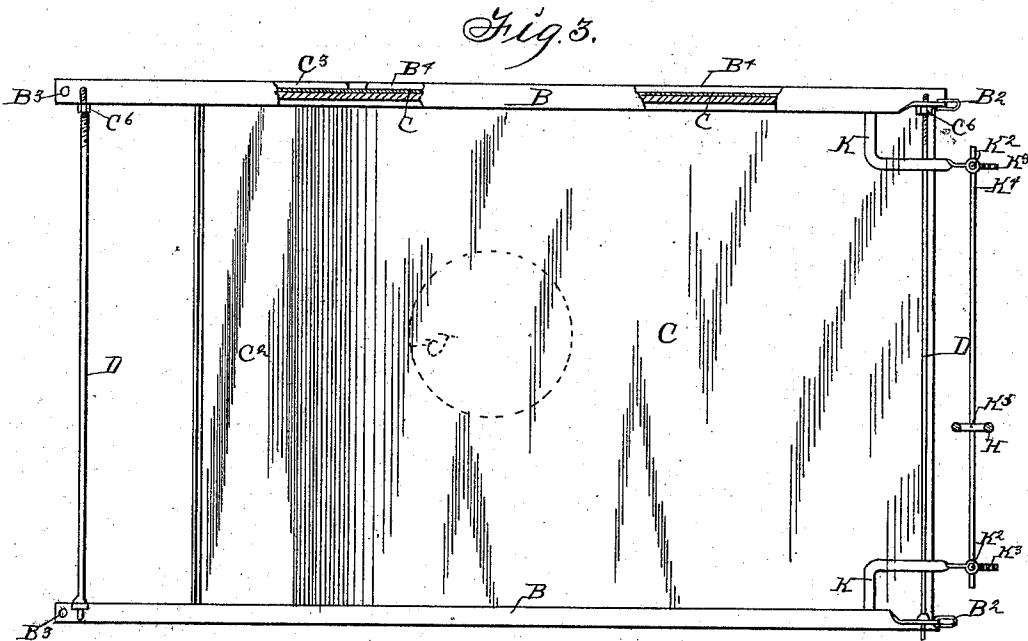
Witnesses: J. Ralph Orwig, R. W. Orwig, { Inventor: Samuel Druet, By Thomas G. Orwig, Attorney.

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UNITED STATES PATENT OFFICE.

SAMUEL DRUET, OF MARYSVILLE, IOWA.

BED ATTACHMENT FOR HANDLING INVALIDS.

SPECIFICATION forming part of Letters Patent No. 505,821, dated October 3, 1893.

Application filed May 22, 1893. Serial No. 475,179. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL DRUET, a citizen of the United States of America, residing at Marysville, in the county of Marion and State of Iowa, have invented a new and useful Bed Attachment for Handling Invalids, of which the following is a specification.

The objects of my invention are, to provide a simple, strong and durable auxiliary bed consisting of a frame with a fabric bottom adapted to be suspended above a common bed and be vertically adjustable relative thereto and arranged to be readily stretched or lowered so that when the auxiliary bed is resting upon the bed proper the occupant is practically reclining upon the main bed, and when desired the auxiliary bed may be readily stretched and raised or adjusted to handle the invalid.

A further object is to construct the said auxiliary bed so that it may be readily attached to or detached from a bed and may be packed into a small space for shipping and handling.

To this end my invention consists in the construction, arrangement and combination of the various parts of the device as hereinafter set forth, pointed out in my claims and illustrated in the accompanying drawings in which—

Figure 1 is a side elevation of a bedstead with the attachment applied thereto. Fig. 2 is a transverse sectional view through the line *xx* of Fig. 1. Fig. 3 is a bottom view of the frame of the auxiliary bed and the bed bottom therein parts being broken away to show the construction of the device. Fig. 4 is a perspective view of the complete device applied to a bed as in practical use.

Referring to the accompanying drawings the reference letter A is used to designate a bedstead of the ordinary kind.

B designates the frame of an auxiliary bed composed of two straight pieces of T or angle iron each having a link B² attached to one end and an opening B³ formed in the other end for purposes hereinafter specified.

C designates a bed bottom of canvas or other fabric of the same length as the side pieces B and of a width approximating that

of the bedstead A. It is secured to the pieces B up to its approximate central portion by being clamped thereto by a strip B⁴ which is detachably connected with the parts B so that a clean bottom may be readily substituted. I prefer to accomplish this, when a patient is occupying the bed, by first detaching the canvas from the parts B then basting the soiled and clean bottoms together at their edges and drawing them jointly beneath the patient then securing the clean bottom to the parts B and C³. The upper end portion C² of the bottom is supported by the pieces C³ which have a hinged connection with the side pieces B.

C⁴ are racks pivotally connected with the side pieces B and C⁵ are projections from the sides of the parts C³ to be engaged by the said rack so as to support the head portion of the bed at any desirable angle relative to the body thereof. The said upper portion C² of the canvas bottom is secured to the parts C³ in the same manner as to the parts B.

The cross pieces of the frame are straight rods D having a shoulder on one end and screw threaded on the other end. Said rods are extended through bores in the ends of the parts B and C³ with a nut C⁶ on said screw threaded end to engage the under face of the parts B and C³ so that they may be readily detachable and the bed bottom rolled up or the bottom of the auxiliary bed stretched as required.

D² designate uprights secured to the foot of the bedstead by means of the clamps D³, and provided with a number of hooks D⁴ upon which the auxiliary bed frame may be suspended by means of the links B².

F designates uprights made of T or angle irons clasped to the head of the bedstead A by means of the clamps F². F³ are brackets secured thereto and adapted to support a roller F⁴, F⁵ being a pawl pivotally connected with one of the uprights F to engage a ratchet F⁶ formed on said roller and F⁷ is a crank attached to one end thereof.

H designates a roller mounted in the top portions of the uprights F and H² is a rope or wire with the central portion attached to the roller F⁴ passed over the roller H (to give increased power), and having the end portions connected with the side pieces of the frame B

by means of hooks H³. The said hooks may also be connected with the parts C⁸ so as to raise the head of the bed.

J designates an opening formed in the auxiliary bed bottom.

K designates brackets secured to the inner faces of the side pieces B, near the foot of the bed, curved downwardly to pass beneath the cross piece D and inwardly to clear the up-
rights D². In their rear ends openings are
formed to receive the uprights K² which are
adjustably secured there by means of the set
screws K³.

K⁴ is a rod supported by the upper end por-
tions of these uprights and K⁵ a pulley loosely
and adjustably mounted thereupon. H des-
ignates a rope adapted to be secured to a pa-
tient's limb, and passed over the said pulley
and provided with a weight H² attached to its
lower end to apply tension to the patient's
limb.

In practical operation the patient is placed
upon the auxiliary bed which normally rests
upon the bed proper with the bottom loosened.
When it is desirable to elevate the head of
the auxiliary bed the hooks H³ may be at-
tached thereto, the crank F⁷ operated to ele-
vate it and the racks C⁴ will automatically
engage it and hold it in position. To elevate
the whole body of the occupant the bed bot-
tom is first tightened by means of the nuts C⁶.
The foot of the auxiliary bed may be raised
and hung upon one of the hooks D⁴, the hooks
H³ connected with the parts B³ and an oper-
ation of the crank F⁷ will raise the forward
end portion thereof and the patient be con-
veniently handled.

By reason of all of the parts being readily
detachable the device may readily be taken
apart and packed in a small space for ship-
ment, storage, &c.

I claim as my invention—

1. An improved invalid bed, comprising the
following elements in combination, to wit;
side pieces B held separated by the detach-
able rods D and having means at both of its
ends whereby it may be vertically adjusted
relative to a bedstead, short side pieces hinged
to said sides B as shown and also held sepa-
rated at their outer ends by a rod, a contin-
uous, fabric, bed-bottom extended from the up-
per ends of said hinged side pieces to the foot
of the parts B, and detachably secured thereto
and racks pivotally attached to the side pieces
B, near their upper ends, and pins fixed to

said hinged, side, pieces to engage said racks
and thereby provide for the vertical adjust-
ment of the hinged side pieces relative to the
parts B, for the purposes stated.

2. In combination with a bedstead a device
for handling invalids comprising the frame
B having the links B² at its foot portion, the
rods D at its ends, the flexible bottom C de-
tachably secured thereto and the hinged head
portion C³, the racks C⁴ and projection C⁵ to
provide for the adjustment of said hinged
portion, the uprights D² the clamps D³ for
securing it to the foot of the bedstead, the
hooks D⁴ fixed thereto, the uprights F clamped
to the head of the bedstead by the clamps F²,
the brackets F³ fixed thereto, the roller F⁴
mounted in said brackets, the pawl F⁵ and
ratchet F⁶ to hold said roller, the crank F⁷
fixed to one end thereof, a roller H in the tops
of said upright and a rope H² fixed to the roller
F⁴, passed over the roller H and secured to the
frame B by means of the hooks H³ all ar-
ranged and combined substantially in the
manner set forth for the purposes stated.

3. In combination with a bedstead, a device
for handling invalids comprising the frame
B having the links B² at its foot portion, the
rods D at the ends, the flexible bottom C de-
tachably secured thereto and the hinged head
portion C³, the racks C⁴ and projections C⁵ to
provide for the adjustment of said hinged
portion, the uprights D², the clamps D³ for se-
curing it to the foot of the bedstead, the hooks
D⁴ fixed thereto, the uprights F clamped to
the head of the bedstead by the clamps F²,
the brackets F³ fixed thereto, the roller F⁴
mounted in said brackets, the pawls F⁵ and
ratchet F⁶ to hold said roller, the crank F⁷
fixed to one end thereof, a roller H in the tops
of said upright and a rope H² fixed to the
roller F⁴ passed over the roller H and secured
to the frame B by means of the hooks H³ and
the brackets K adapted to support the up-
rights K², the set screws K³ for providing for
the vertical adjustment of said uprights, the
rod K⁴ mounted in said uprights, the pulley
K⁵ loosely mounted on said rod and the rope
H, having a weight H² attached to its end, and
passed over said pulley for the purposes
stated.

SAMUEL DRUET.

Witnesses:

W. E. FOSHIER,
W. G. MUDDY.