

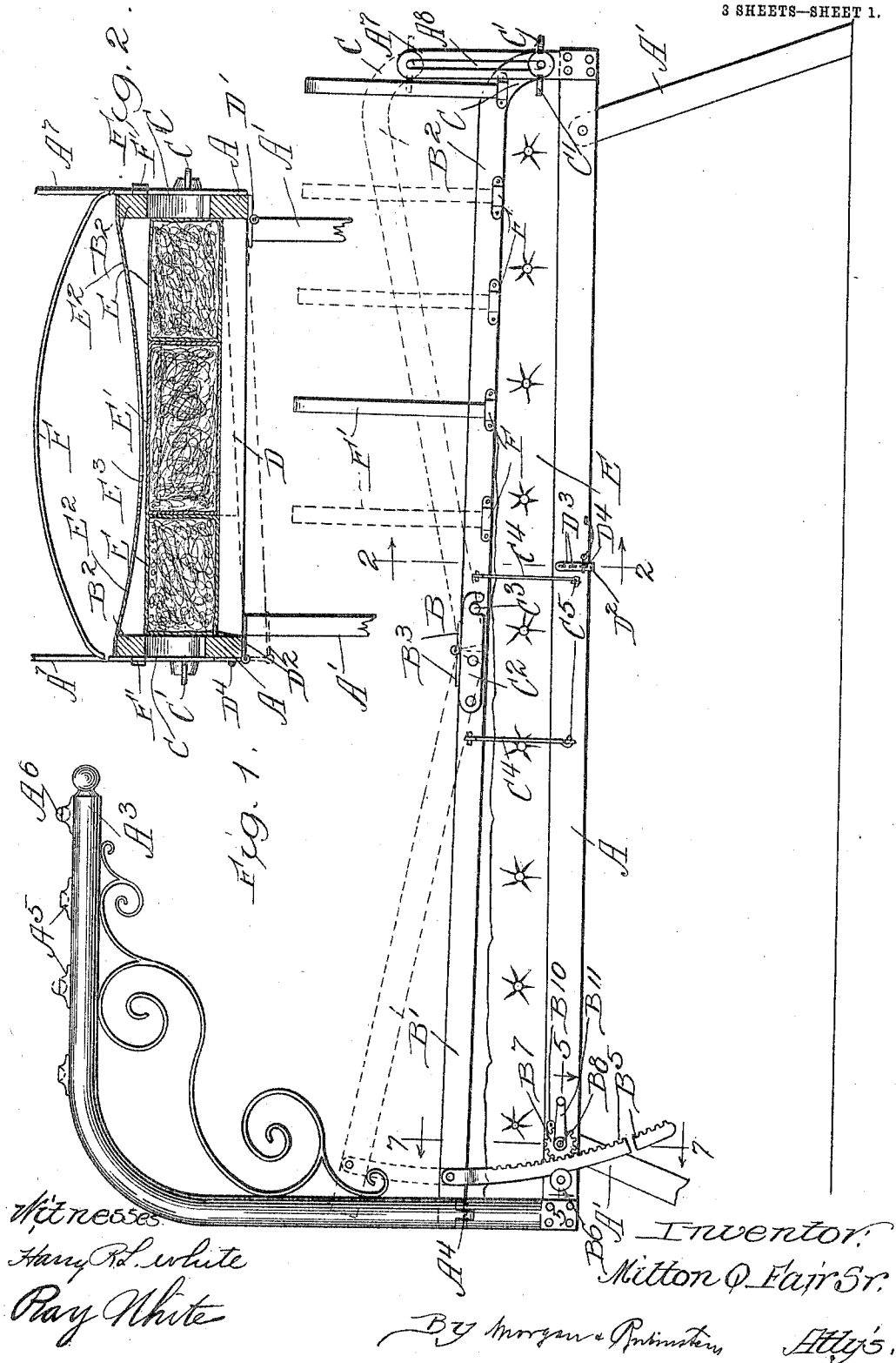
No. 811,492.

PATENTED JAN. 30, 1906.

M. Q. FAIR, SR.
COT FOR INVALIDS.

APPLICATION FILED APR. 17, 1905.

3 SHEETS—SHEET 1.



Witnesses
Harry R. White
Ray White

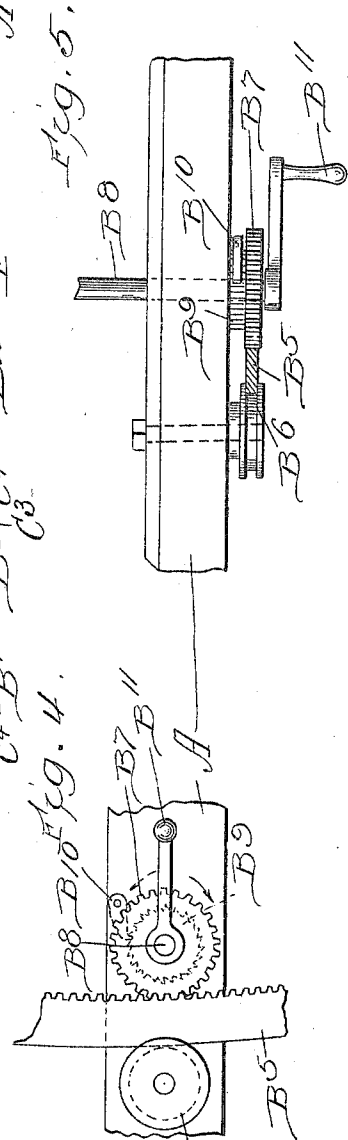
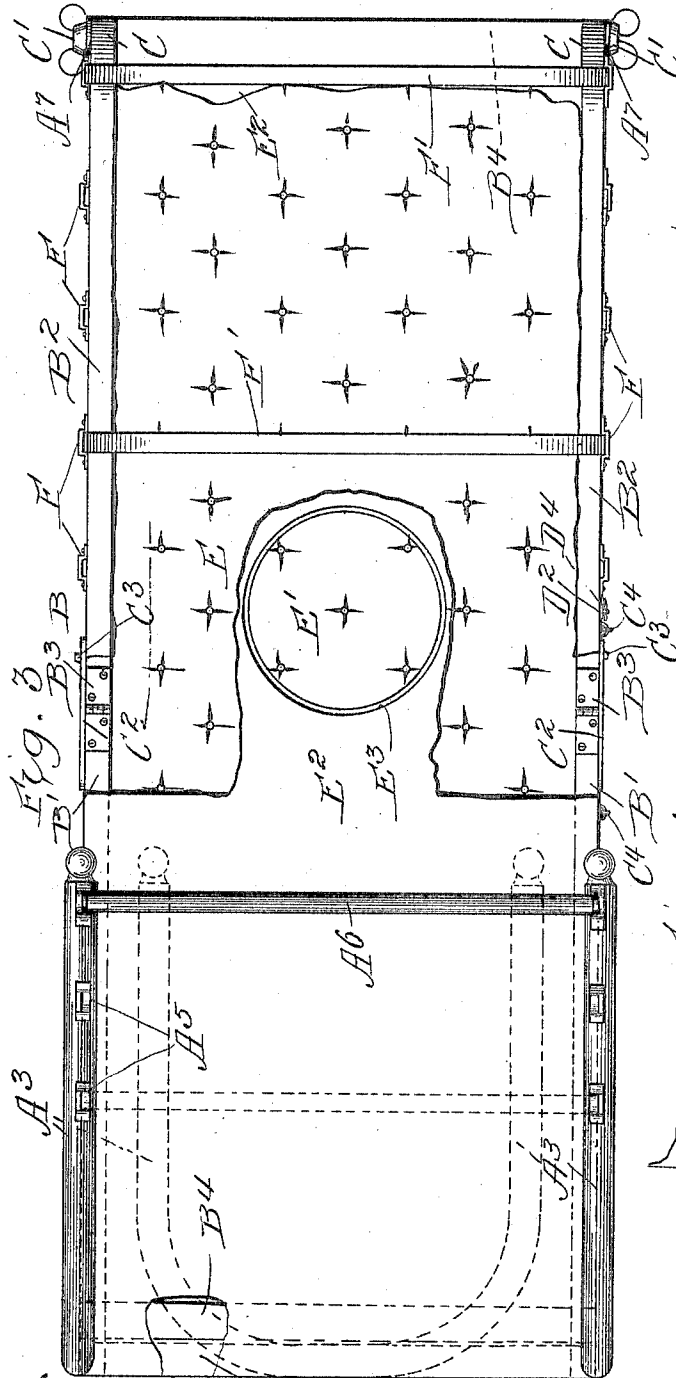
Inventor:
Milton Q. Fair Sr.
By Morgan & Robinson Attys.

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3 SHEETS—SHEET 2.



Witnesses:
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3 SHEETS—SHEET 3.

Fig. 6.

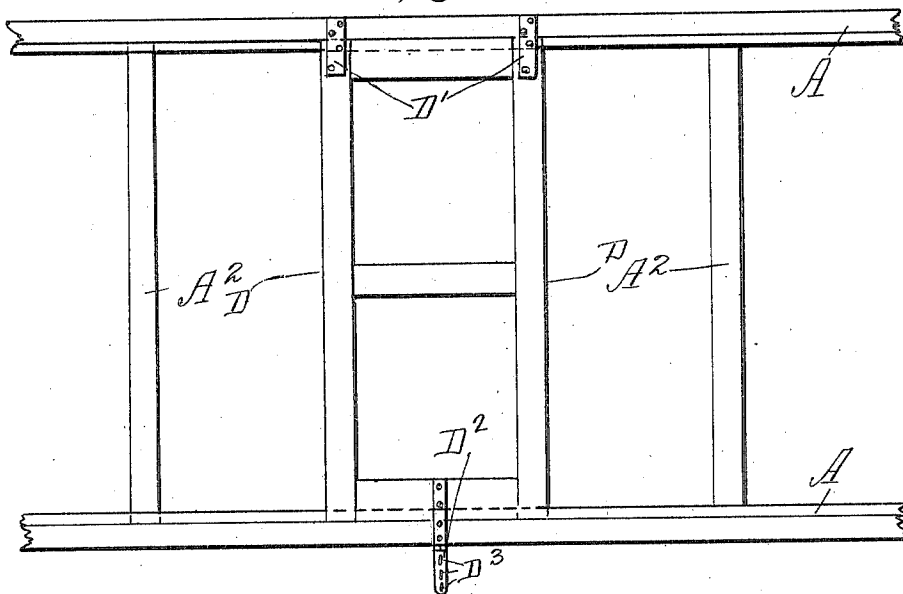
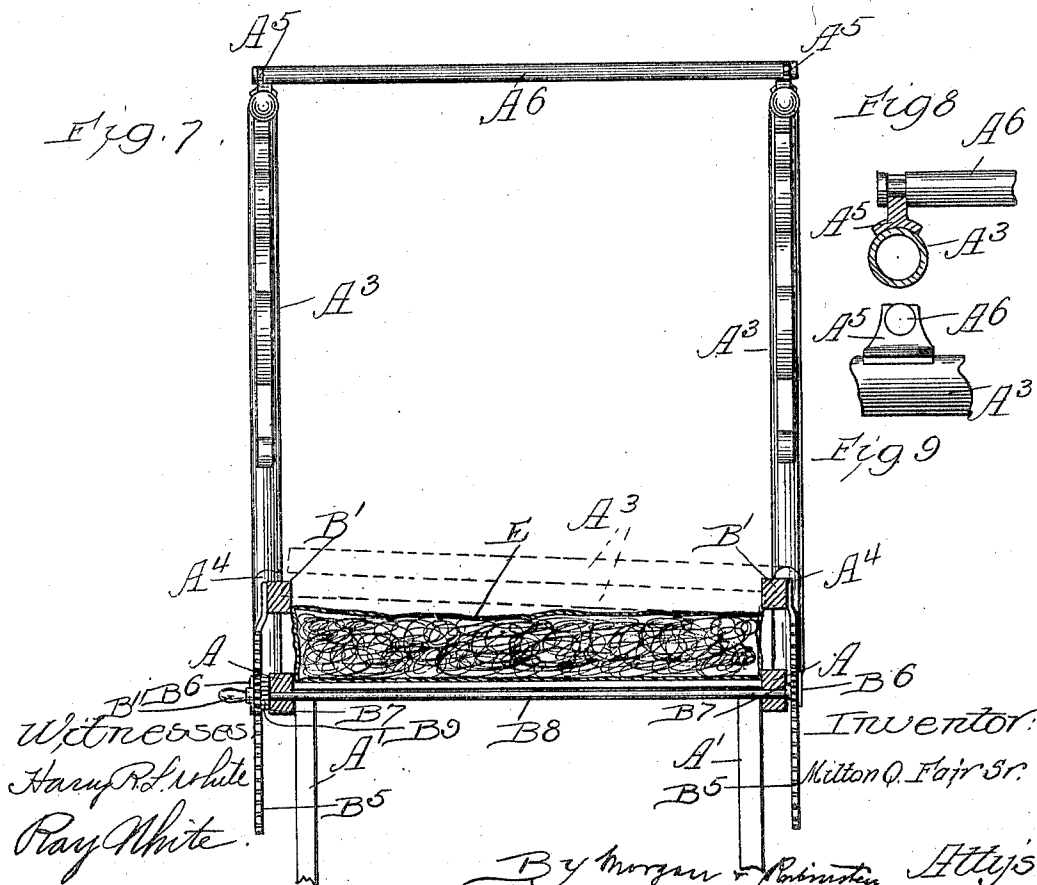


Fig. 7.



UNITED STATES PATENT OFFICE.

MILTON Q. FAIR, SR., OF CHICAGO, ILLINOIS.

COT FOR INVALIDS.

No. 811,492.

Specification of Letters Patent.

Patented Jan. 30, 1906.

Application filed April 17, 1905. Serial No. 256,048.

To all whom it may concern:

Be it known that I, MILTON Q. FAIR, Sr., a citizen of the United States, residing at 5326 Wabash avenue, in the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Cots for Invalids, of which the following is a specification.

My invention relates to that class of cots specially designed for the use of sick persons.

The object of my invention is to provide a cot that is adjustable to the several positions adapted to meet the wants, ease, and convenience of the invalid; that can be adjusted so that the invalid is raised from the horizontal to the sitting position and back to the horizontal; that can be raised in a straight incline with the head or foot high or low, as desired; that can be raised at the head and the foot above the center; that can be raised at either end independent of the others that can be raised and lowered in the horizontal position, all changes being made without disturbing the occupant; that enables the occupant to respond to nature's requirements without inconvenience, and that can be taken apart and folded together for storage and transportation.

The manner in which I accomplish these objects is described in the following specification and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation showing the general construction and changes in position of the several parts of the cot. Fig. 2 is a cross-sectional view on the line 2 2, Fig. 1, showing the removable part of the mattress and its supporting-frame. Fig. 3 is a top view showing the construction of the frame and position of the brackets when raised and folded. Fig. 4 is a detail side view of the mechanism for raising and lowering the head of the bed. Fig. 5 is a detail view of the top of Fig. 4. Fig. 6 is a plan view of part of the cot looking upward underneath the cot. Fig. 7 is a cross-sectional view on the line 7 7, Fig. 1, showing the shaft and mechanism for raising and lowering the bed. Figs. 8 and 9 are detail views showing part of the bracket, bar-holder, and bar.

In the drawings, A is the main part of the cot, supported on the legs A' and having suitable cross-bars A² to support a mattress. At the head of this frame and affixed thereto are two brackets A³, which are hinged at A⁴ and are thereby adapted to be folded over upon

the cot when not in use, as shown by the dotted lines in Figs. 3 and 7. The tops of these brackets extend forward over the cot when raised and have a series of bar-holders A⁵ and bars A⁶, the bars being adjustably secured in said holders, as shown in Figs. 3, 7, 8, and 9. These bars are arranged so the occupant of the cot can reach and grasp one or the other, and thereby change the positions of the body while in the recumbent position. Affixed at the foot of the frame A are two vertical arms A⁷, having vertical slots A⁸.

Above the frame A is a second frame B, formed of two main parts B' and B². These parts are joined by hinged joints B³ and are provided with suitable cross-bars B⁴. The end of the part B' is supported by a pair of racks B⁵, which are pivotally attached to the frame B. These racks extend down outside the frame A and are engaged and supported by rollers B⁶ and by the gear-wheels B⁷. The rollers are supported on suitable stud-bearings in the frame A, and the gears are affixed on the shaft B⁸, which extends through and is supported in the frame A, as shown in Fig. 7. Between one of these gear-wheels and the frame A on the shaft B⁸ is a ratchet-wheel B⁹, engaged by a pawl B¹⁰, which is pivotally attached to the frame A. On the end of the shaft B⁸ is a crank B¹¹, by which the gears and racks are operated and the frame B raised and lowered. The ends C of the part B² of the frame B are curved down, as shown in Fig. 1, and are provided with loose pivotal studs which extend through and slide freely in the slots A⁸ in the arms A⁷. These studs are adjustably secured to the arms A⁷ by suitable thumb-screws C'.

Affixed to the part B' of the frame B are two locking-plates C², one on each side. Each of these plates is adapted to be engaged by a lock-pin C³, which is adapted to be inserted into suitable holes in the part B² of the frame B. When these pins are inserted, the parts B' and B² are locked together as a solid frame and can then be raised horizontally or raised at either end to form a straight incline from head to foot or foot to head, the ends of the frame B when raised at the foot pivoting on the racks B⁵ and when raised at the head pivoting on the studs in the ends C.

On each side of the frame B are two hooks C⁴, one on each side of the hinge-joint B³. These hooks are adapted to be held by staples C⁵, affixed to the frame A, and are adapted to hold the part B' or the part B² when either

part is raised at the head or foot above the hinged joint B³. When all hooks are released and the lock-pin C³ is removed, then both ends of the frame B can be raised above the hinged joint B³.

Attached to the under side of the frame A is a small drop-frame D, one end of which is secured by the hinges D¹ to the frame A and is thereby adapted to be lowered at the free end down to the floor. This free end is provided with a hinged clasp D², which is pierced with several holes D³, and is thus adapted to be engaged by a suitable staple D⁴. By this means the frame D can be slightly lowered, as shown in Fig. 2, or dropped to the floor. Supported on this frame in the mattress E is a removable part E', as shown in Figs. 2 and 3. By releasing the clasp D² and lowering the frame D this part of the mattress can be removed and a suitable vessel inserted in its place for the convenience of the occupant of the cot. Around this aperture the mattress is protected by suitable waterproof material.

The frame B supports a suitable canvas E², which is secured to the sides and ends of said frame by suitable means. This canvas also has an aperture E³ corresponding with the aperture in the mattress. On this canvas the invalid lies with such bedding as may be required. When the body of the occupant is lying horizontally and the frame B is not raised, the weight is on the mattress.

Attached to the part B² of the frame B are a series of holders F, adapted to support a series of hoops F', arranged to carry the weight of the bedclothing and prevent the bedclothes from touching the invalid.

When my improved cot is constructed as described, and illustrated in the several drawings, the frame B may be removed from the frame A and the parts B' and B² folded together, the racks B⁵ being withdrawn from engagement with the rollers B⁶ and gears B⁷ and placed along the sides of the part B'. The brackets A³ may by the removal of the bars A⁶ be folded one over the other on the frame A and the legs A' be closed up under the frame. With the parts so arranged the cot is adapted for storage and transportation. When in use, the several parts are adjusted as described, and shown in the several drawings. The brackets A³ are raised and fixed in position by the bars A⁶. The mattress E is laid on the frame A with the movable part E' adjusted over the frame D. The frame B is then laid on the mattress, the racks B⁵ inserted between the rollers B⁶ and gears B⁷. The ends C are then adjusted in the arms A⁷ and secured by the thumb-screw C'. The pins C³ are inserted in the part B² of the frame B and into engagement with the locking-plates C². The hooks C⁴ are fastened to the staples C⁵ in the frame A. Suitable bedding is placed on the canvas E² on the frame

B, and the cot is then ready for occupancy. The occupant, lying with the head between the brackets A³, can reach the bars A⁶ and use them for slightly changing the position of the body. The pins C³ and hooks C⁴ can be adjusted at pleasure and the positions of the frame B be changed by operating the crank B¹¹. To raise the foot, that part is lifted and the thumb-screws C' adjusted. To adjust or remove the part E' of the mattress and to insert suitable vessels in its place, the clasp D² is released and the frame D is lowered and raised and made secure. By the insertion of the pins C³ in part B² of the frame B and releasing the hooks C⁴ the frame B can be raised horizontally or on an incline above the mattress and the mattress be then removed or supplemented with such padding or additional supports as the condition of the occupant may require.

What I claim as new, and desire to secure by Letters Patent, is—

1. A cot of the kind described, composed of the several parts forming the combination consisting of a main body A having supports A'; a movable transverse frame D secured to said main body; a pair of brackets A³ affixed to said main frame, having movable cross-bars; a pair of slotted arms A⁷ affixed to said main frame; a shaft B⁸ supported transversely in said main body; a pair of gear-wheels and a ratchet-wheel affixed on said shaft; a pawl pivotally attached to said main frame adapted to engage said ratchet-wheel; a pair of grooved wheels supported on said main body; a frame B formed of two parts hinged together; a pair of racks pivotally attached to the frame B and supported by said gears and grooved wheels; a pair of pivot-studs and thumb-screws, said studs being affixed in the frame B and adjustable in the arms A⁷; a pair of locking plates and pins adapted to lock the two parts of the frame B; a canvas secured to the frame B, having a central aperture; and a mattress having a removable part E'; substantially as described and for the purposes specified.

2. A cot of the kind described, constructed and composed of the several parts and mechanism, forming the combination consisting of a main body, A, having suitable supports; and a drop-frame, D; a pair of brackets, A³, affixed to the head of said main body; a pair of vertical arms, A⁷, affixed to the foot of said main body; a shaft, B⁸, supported transversely in the head of said body; a pair of gear-wheels and a ratchet affixed on said shaft, and means for operating said gear wheels, a frame, B, formed of two parts, B' and B², pivotally connected and adapted to be folded together; means for locking said parts in the open position and thereby making the two parts, B' and B², one rigid frame, B; a pair of racks, B⁵, secured to the head of the part, B', said racks being adapted to be en-

gaged, supported and operated by the gear-
wheels, B¹; means for adjustably connecting
the end of the part, B², to the vertical arms,
A⁷; a canvas attached to the frame, B, ex-
tending from end to end and side to side
thereof and having a central aperture; a mat-
tress, E, supported on the main body, A, said
mattress having a removable part, E'; sub-
stantially as described, and for the purposes
specified.

3. A cot of the kind described, constructed
and composed of the several parts and mech-
anism forming the combination, consisting of
a main body, A, and drop-frame, D; a frame
B, formed of two parts, B' and B², pivotally
connected; means for supporting said frame
on said main body; suitable mechanism for
raising and lowering said frame above said
main body and for moving each of the parts,
B' or B², independently of the other; a can-
vas, E², supported by said frame, B, said can-
vas having an aperture, E³; a mattress, E,
supported on said main body, said mattress
having a removable part, E', and means for

supporting said part in said mattress; sub-
stantially as described, and for the purposes
specified.

4. In a cot of the kind described, the com-
bination of a main body, A, having a drop-
frame, D, and a mattress, E, said mattress
having a removable part, E', supported by
said main body and said frame, D, with a
frame, B, formed of two parts hinged to-
gether near the center of the length of said
frame, said frame being provided with a can-
vas, E², stretched from side to side and end
to end of said frame and secured thereto, said
canvas having a central aperture, E³, corre-
sponding in position to the removable part,
E', of the mattress, E; mechanism for sup-
porting said frame on said main body and
for adjusting said frame above said mattress;
substantially as described, and for the pur-
poses specified.

MILTON Q. FAIR, SR.

Witnesses:

THOMAS J. MORGAN,
JOSEPH STAAB.