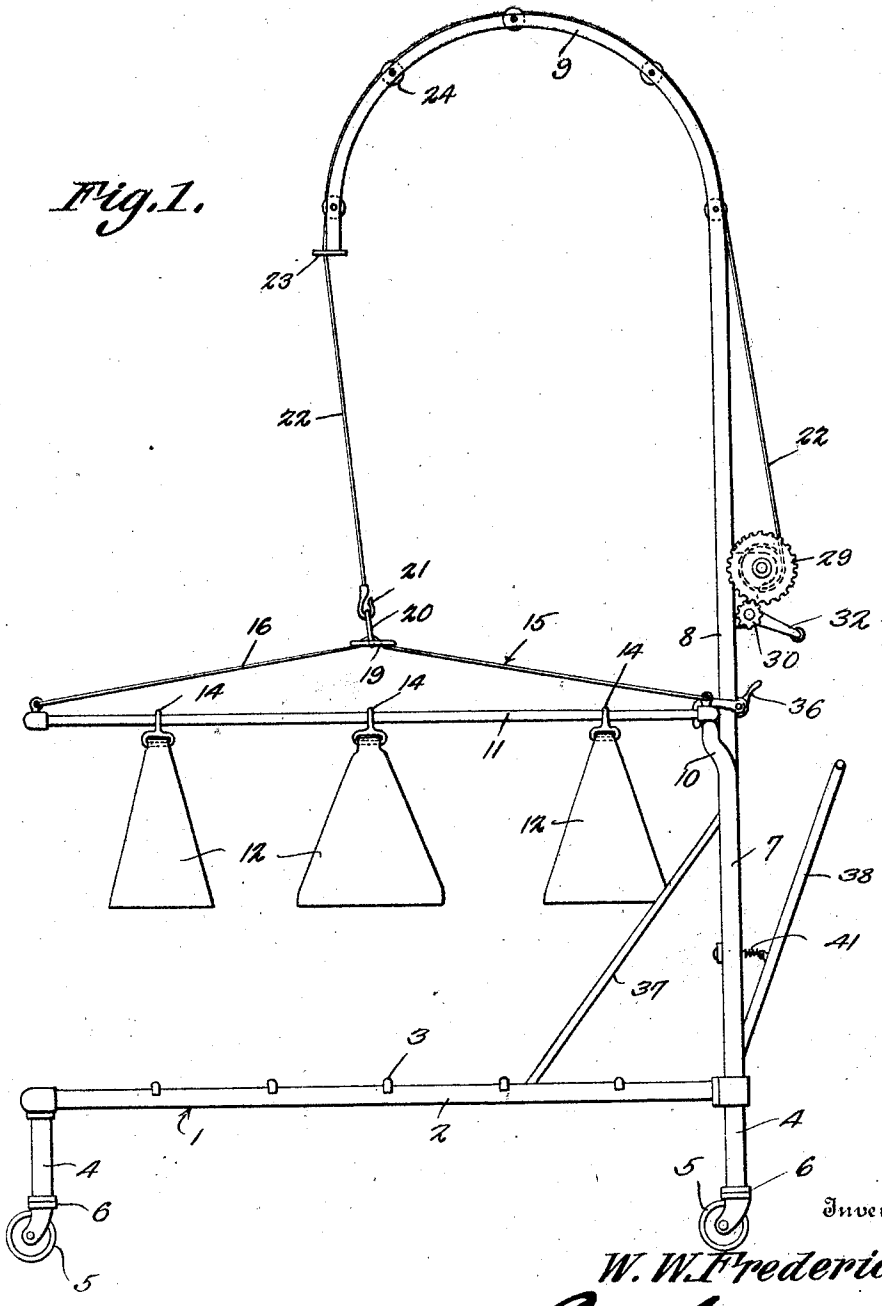
June 16, 1925. 1,541,938

W. W. FREDERICK

HOSPITAL TRUCK

Filed June 12, 1924 3 Sheets-Sheet 1

Fig. 1.



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June 16, 1925.

1,541,938

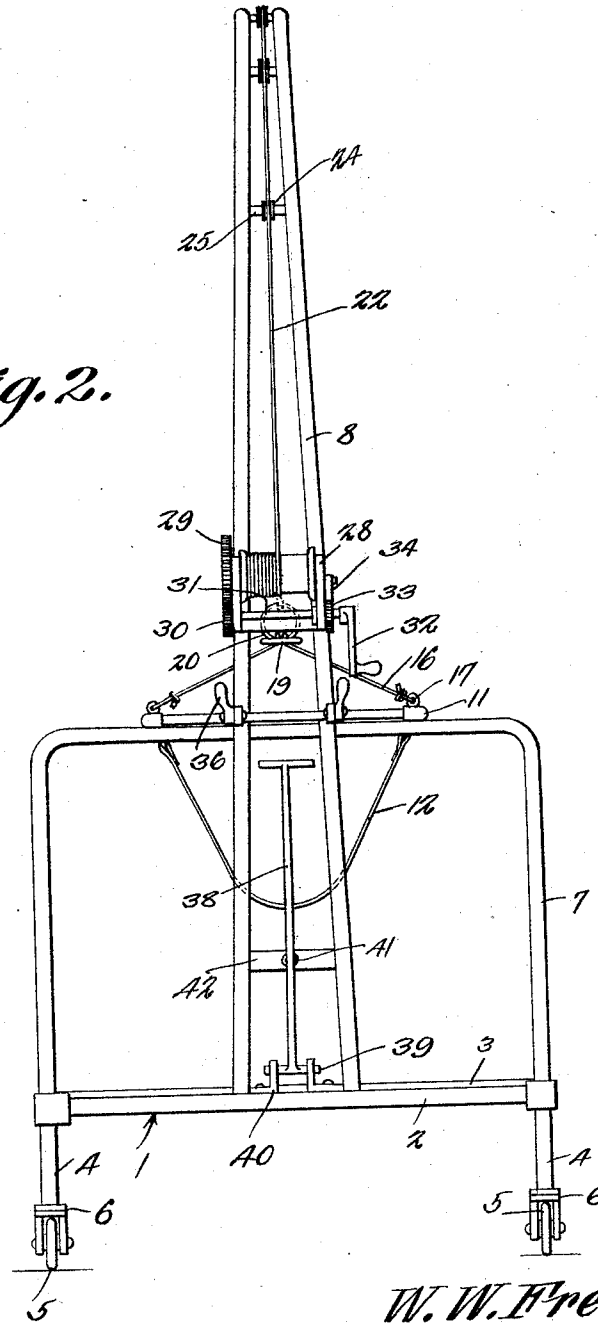
W. W. FREDERICK

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Fig. 2.



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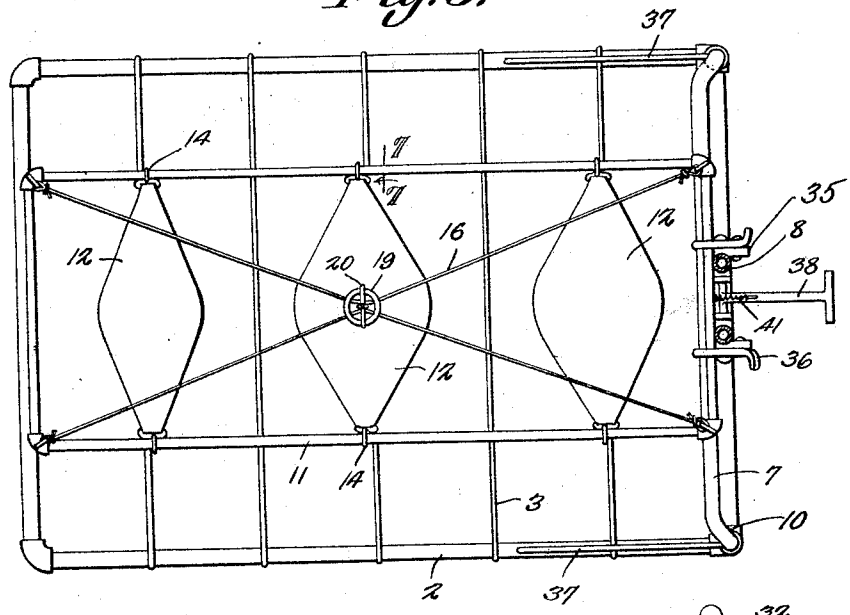
June 16, 1925. 1,541,938

W. W. FREDERICK

HOSPITAL TRUCK

Filed June 12, 1924 3 Sheets-Sheet 3

Fig. 3.



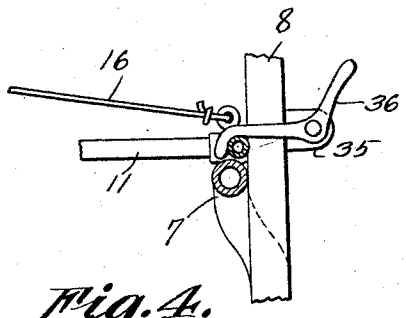


Fig. 4.

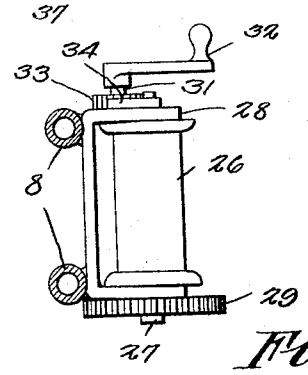


Fig. 5.

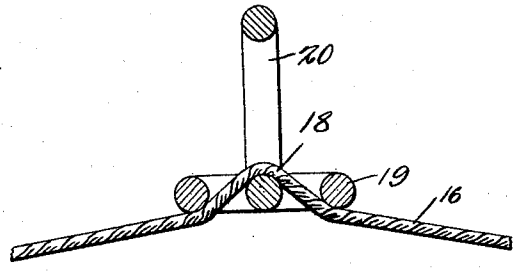


Fig. 6.

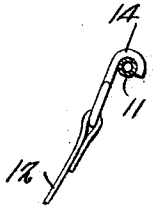


Fig. 7.

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Patented June 16, 1925. 1,541,938

UNITED STATES PATENT OFFICE.

WILLIAM W. FREDERICK, OF COSHOCTON, OHIO.

HOSPITAL TRUCK.

Application filed June 12, 1924. Serial No. 719,596.

To all whom it may concern:

Be it known that I, WILLIAM W. FREDERICK, a citizen of the United States, residing at Coshocton, in the county of Coshocton and State of Ohio, have invented a new and useful Hospital Truck, of which the following is a specification.

This invention aims to provide novel means whereby a sick person, and the bedding on which the sick person has laid, may be moved about readily from place to place, as, for instance, when it is desired to move a patient from one bed to another, or from a bed to an operating table.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that sort to which the invention appertains.

Although a preferred form of the invention has been shown, it will be understood that a mechanic, working within the scope of what is claimed, may make changes without departing from the spirit of the invention.

In the drawings:—Figure 1 shows in side elevation, a device constructed in accordance with the invention; Figure 2 is an end elevation; Figure 3 is a top plan wherein parts are broken away; Figure 4 is a vertical section showing the means whereby the stretcher is held against swinging movement; Figure 5 is a plan showing the drum and its mounting; Figure 6 is a sectional view illustrating the means whereby the sling is assembled adjustably with the suspension member; Figure 7 is a fragmental section taken on the line 7—7 of Figure 3.

The device comprises a truck 1 including a base 2 of rectangular outline, supporting a platform 3 which may be made of wire or any other suitable material. At its four corners, the base 2 has legs 4 whereon ballbearing castors 5 are journaled, and swivelled as indicated at 6. An end member 7 projects upwardly from one extremity of the base 2. A two-part derrick 8 extends upwardly from said extremity of the base 2 and has an end 9 which is curved to overhang the base 2. For the sake of stability, the constituent parts of the derrick 8 diverge downwardly, as shown in Figure 2, the sides of the end member 7 being offset as at 10, so that the upper bar of the end member 7 may bear against the derrick 8 and sustain it.

A stretcher 11, in the form of a rectangular frame, is provided, and across the stretcher extend flexible supports 12, connected detachably with the side portions of the stretcher 11 by hooks 14. The stretcher 11 is carried by a sling 15, made up of flexible elements 16, connected at 17 to the corners of the stretcher 11, the flexible elements 16 slanting upwardly and inwardly toward the center of the stretcher 11. The flexible elements 16 are formed into a loop 18 extended into a horizontal ring 19 and through a vertical ring 20 resting on the ring 19. The ring 20 is connected by a hook 21, or otherwise, with a flexible element 22 extended through a guide 23 on the lower extremity of the end 9 of the derrick 8, the flexible element 22 traversing guide pulleys 24 journaled on axles 25 connecting the constituent members of the two-part derrick 8, the flexible element being extended downwardly and being wound about a drum 26 carried by a shaft 27 journaled in a frame 28 on the derrick 8, the shaft 27 being provided with a gear wheel 29 meshing with a pinion 30 on a shaft 31 carried by the frame 28 and provided with a crank 32, there being a ratchet wheel 33 on the shaft 31, the frame 28 carrying a pivoted pawl 34 adapted to cooperate with the ratchet wheel. The derrick 8 has ears 35 whereon latches 36 are pivoted intermediate their ends. The end members 7 may be sustained from the base 2 by braces 37. A tongue 38 is pivoted at 39 to brackets 40 on one end of the base 2 and is held in the upturned position of Figure 1 by a retractile spring 41 extended between the tongue 38 and a cross piece 42 on the derrick 8.

In practical operation, the truck 1 is rolled along until the base 2 passes beneath the bedstead on which the patient is reclining. The supports 12 are unhooked at one or both ends from the stretcher 11 and are worked underneath the patient, the hooks 14 being assembled with the sides of the stretcher 11. Then the stretcher may be raised by means of the crank 32, the shaft 31, the pinion 30, the gear wheel 29, the shaft 27, the drum 26 and the flexible element 22, and the stretcher 11 may be shifted endwise until the stretcher, carrying the patient, is balanced, the flexible elements 16 sliding through the rings 19 and 20, under the application of considerable force, but the rings having so much frictional engagement with the flexible elements 16, that the flexible elements will not slide readily through

the rings and destroy the counterpoise which has been secured. The pawl and ratchet mechanism 33—24 prevent retrograde rotation of the drum 26 and hold the stretcher 11 suspended as in Figure 1, with one end of the stretcher resting on the upper end of the part 7 of the truck, the latches 36 being engaged with one end of the stretcher to hold the stretcher against the derrick 8 and to prevent the stretcher from swinging horizontally. The bedding may be placed on the platform 3, and both patient and bedding may be moved, the truck being drawn along by the tongue 38 which may be swung downwardly to accommodate the person towing the truck, the spring 41 yielding to permit the tongue to be lowered, and reacting to restore the tongue to the upwardly inclined position depicted in Figure 1. The truck base 2 may be slid under a bed, and by reversing the operation described, the patient may be lowered upon the bed. Although the device is intended to be used for handling a sick person, it may be employed for handling a corpse with equal advantage.

What is claimed is:—

1. In a device of the class described, a truck including an upstanding derrick and an upstanding end member, the upper portion of the end member extending across the derrick to form a shoulder, a stretcher supported at one end on the shoulder against downward swinging movement and abutting against the derrick to prevent horizontal movement of the stretcher, latch means for holding the stretcher detachably engaged with the shoulder and the derrick, and means assembled with the derrick for raising and lowering the stretcher.

2. In a device of the class described, a truck comprising a derrick, a stretcher, means on the derrick for raising and lowering the stretcher, a substantially horizontal ring, a substantially vertical ring extended into and bearing on the first specified ring and connected to said means, and slings extended between the ends of the stretcher, the sling having loops extended into the first specified ring and extended through the second specified ring, the rings cooperating with the loops frictionally, to prevent the slings from shifting endwise saving under the application of considerable force.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM W. FREDERICK.

Witnesses:
M. O. Bretzins,
E. L. Foot.