Oct. 3, 1939. A. J. DANIELS 2,174,870

HOSPITAL EQUIPMENT

Original Filed Nov. 6, 1936

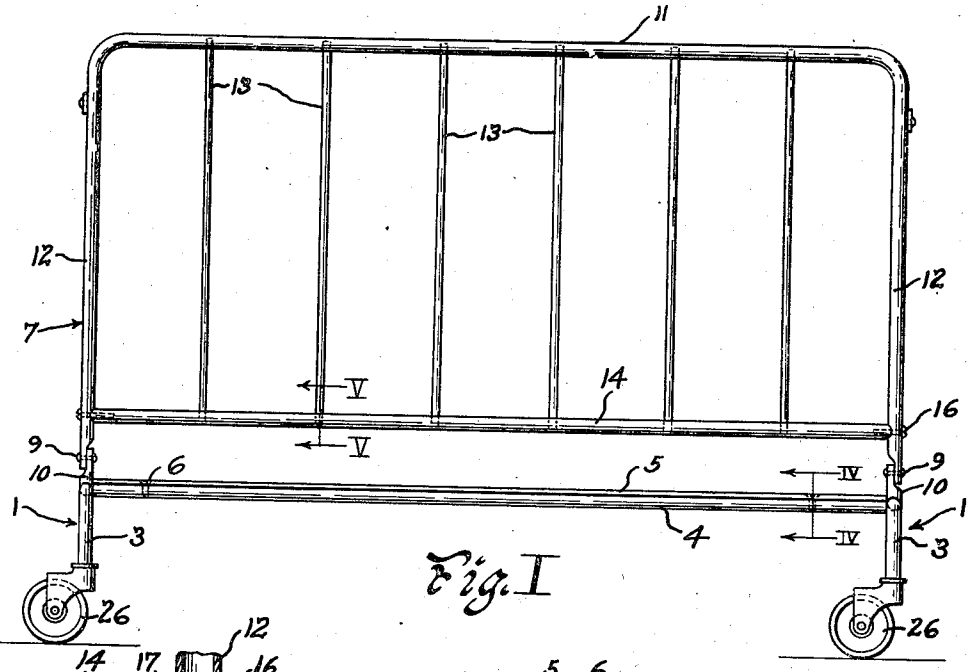


Fig. I

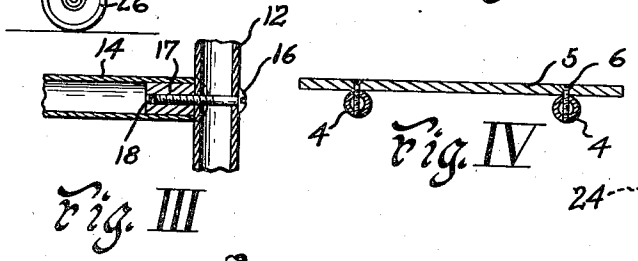


Fig. III

Fig. IV

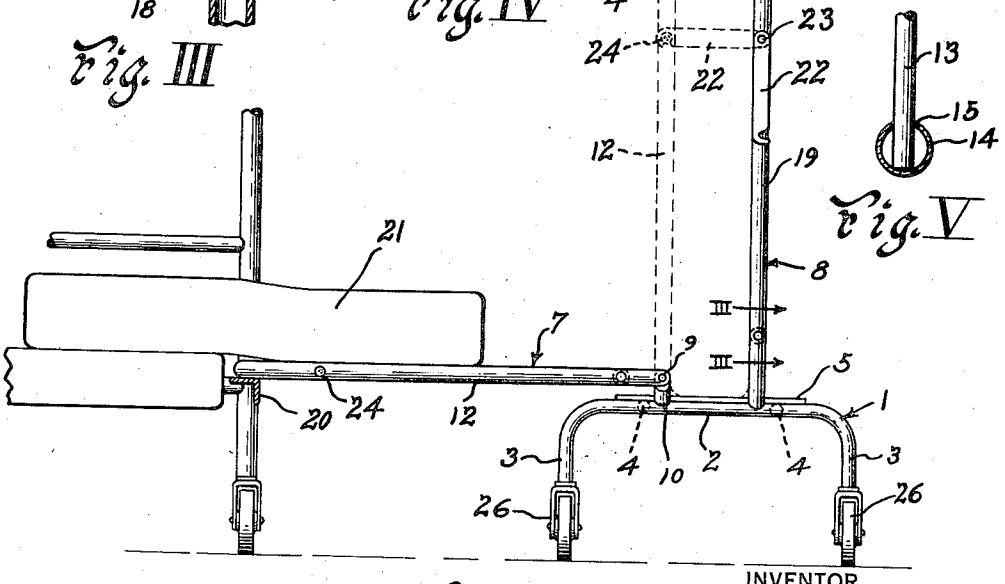


Fig. II

Fig. V

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HOSPITAL EQUIPMENT

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3 Claims. (Cl. 211—28)

This invention relates to improvements in hospital equipment and has particular reference to a new and novel conveyor and method of making the same.

One of the principal objects of the invention is to provide a mattress conveyor whereby the mattresses may be quickly and easily removed from the sick bed and conveyed to be exposed to the sunshine and fresh air.

Another object is to provide a conveyor of the character described having one of its side portions which may be lowered so that the mattress may be slid from the bed on to the lowered side portion where it may be easily raised and held in an upright position in the conveyor.

Another object is to provide means for use in airing mattresses whereby the mattress will be supported so that it will have full exposure to the sunshine and fresh air and so that it may be easily brushed and cleaned.

Another object is to provide simple, efficient and economical means and method of forming mattress conveyors.

Further objects and advantages of the invention will become apparent from the following description taken in connection with the accompanying drawing and it will be apparent that many changes may be made in the details of construction, arrangement of parts and method shown and described without departing from the spirit of the invention as illustrated in the accompanying claims. I, therefore, do not wish to be limited to the exact details of construction, arrangement of parts, and method shown and described as the preferred form only has been set forth by way of illustration.

Referring to the drawing:

Fig. I is a side elevation of the device embodying the invention;

Fig. II is an end view of the device embodying the invention illustrating its use at the bed-side;

Fig. III is a sectional view taken in line III—III of Fig. II;

Fig. IV is a sectional view taken on line IV—IV of Fig. I; and

Fig. V is a sectional view taken on line V—V of Fig. I.

It is common practice in hospitals, after a patient leaves the sick bed, to expose the mattress to fresh air and sunshine prior to assigning the bed to the next patient. No particular means, as far as has been known in the past, has been provided whereby the mattresses may be conveyed and supported during their exposure to fresh air and sunshine. In many instances in the past, it has been the duty of the nurses of the hospitals to carry the mattresses out on to the sun porches where they were either laid on the flooring of the porches or over the porch banisters. This procedure did not only fail to properly expose the mattresses to fresh air and sunshine but in many instances they became dusty and dirty due to dust collections, etc., on said banisters or porch flooring.

One of the prime objects, therefore, of the present invention is to provide means for avoiding the undesirable defects in handling and airing mattresses whereby the mattresses may be conveyed from the bedside to the sun porches or location of exposure of the mattresses to air and sunshine by a single individual.

Referring more particularly to the drawing wherein like characters of reference designate like parts throughout the several views the device embodying the invention comprises a pair of end members 1 having a central transverse portion 2 and depending end caster supports 3. The central transverse portions are connected by a pair of brace bars 4 which extend from one end to the other and which are secured adjacent their ends to said transverse portions 2 by threaded connections, welding, brazing or other suitable means. A suitable flooring 5 is attached to the brace bars 4 by screws or other suitable connecting means 6 as illustrated in Figs. I to IV.

In this particular instance the end members 1 are preferably formed of hollow pipe material bent adjacent its ends to form the hollow depending members 3 in which the shank of the casters 26 are adapted to be fitted. The central transverse portion 2 also provides a support for the side members 7 and 8. The side member 7 is hingedly attached at 9 to upstanding lugs 10 welded or otherwise secured to the transverse portions 2 of the end members 1. This side member comprises a main frame formed of hollow pipe material which is so bent as to form a central transverse portion 11 and depending side portions 12. The central transverse portion 11 is provided with a plurality of openings in which the ends of the vertically extending intermediate bar members 13 are fitted. The openings are formed only in the lower side of the intermediate portion so that when the ends of the vertically extending bar members 13 are fitted in said openings, they will engage the upper solid wall of said intermediate portion.

A suitable brace rod 14 formed of hollow pipe material is adapted to extend from one depending side portion 12 to the other adjacent the hinge

connections 9. This portion 14 is also formed with a plurality of spaced openings 15 in which the lower ends of the vertically extending bar members 13 are adapted to be fitted. (See Fig. V.) The brace rod 14 when secured to the depending side portions 12 is adapted to hold the vertical bar members 13 in place in the various openings in said member 14 and in the transversely extending portion 11. The brace rod 14 is secured to the side portions 12 by suitable connecting bolts 16 or by welding, brazing or other suitable means. In instances wherein connecting bolts are used the end of the brace rod 14, as shown in Fig. III, is preferably provided with a plug 17 having a threaded bore 18 for receiving the connecting bolt.

To form the hinge connection the end of the depending side portions 12 are preferably flattened, as illustrated in Fig. I, and are provided with an opening adapted to be aligned with a suitable pivot opening in the lugs 10 to receive a suitable pivot pin, bolt, or other means to complete the hinge connection.

The side member 8 is formed in a manner similar to the side member 7 except that it is rigidly attached adjacent the lower ends of its depending side members 19 to the transversely extending portions 2 so that it will be rigidly supported in an upright position. The only difference between the side members 7 and 8 is that the side member 7 is hinged so that it may be folded downwardly, see Fig. II. This is so that it may be rested on the side 20 of the hospital bed, whereby the mattress, such as illustrated at 21, may be slid from the bed on to the side member 7, whereby it may be swung upwardly to an upright position with said side member, as illustrated by the dotted lines in Fig. II, so that its lower end will rest on the floor portion 5.

A suitable latch member 22 pivoted at 23 to one of said side members 7 or 8 so that it may be hooked over a suitable connecting lug 24 formed on the other side member, is adapted to hold said side members in definite spaced relation with the mattress therebetween. In this manner, the mattress may be rolled from the bedside for exposure to fresh air and sunshine. It is to be noted that the mattress is held in a flat upright position whereby the entire sides of the mattress may be exposed to the sunshine and fresh air. By supporting the mattress in an upright position it may be easily brushed and cleaned prior to assignment to the next patient.

The device is very simple and light in weight so that it may be handled by a single individual and is so constructed that the mattress may be easily placed in the conveyor or be removed therefrom.

From the foregoing description it will be seen that simple, efficient and economical means have been provided for accomplishing all of the objects and advantages of the invention.

Having described my invention, I claim:

1. In a device of the character described, a pair of end members each having hollow downwardly extending, floor engaging caster supports, means connecting said end members, a floor member secured to said means, a pair of side frame members attached adjacent their opposed ends to said end members in spaced relation with each other, one of said side frame members being rigidly attached and supported in an upright position and the other of said side frame members having a hinge connection to said end members whereby it may be moved from a position substantially parallel to the other of said side members outwardly to substantially a horizontal position, and each of said frame members being formed of rod-like means bent to form the top and sides of said frames, a brace bar connecting the sides adjacent the free ends thereof and a plurality of spaced bars secured adjacent one end thereof to the top of the frame and adjacent their opposite ends to the brace bar, means connecting said side frame members for normally holding them in an upright spaced parallel relation with each other.

2. In a device of the character described, a base comprising a pair of end members each having downwardly extending floor engaging supports and floor-like means intermediate said end members, a pair of side frame members attached adjacent their opposite ends to said base in spaced relation with each other, one of said side frame members being rigidly attached and suported in an up-right position and the other of said side frame members having a hinged connection to said base whereby it may be moved from a position substantially parallel to the other of said side members outwardly to substantially a horizontal position, each of said side frame members being formed of bar-like means constituting a transversely extending top bar-like portion and substantially vertically extending side portions, a brace bar connecting the side portions at points substantially spaced from the transversely extending top bar-like portion and a plurality of spaced bars secured adjacent one end thereof to the top bar-like portion and adjacent their opposite ends to the brace bar, and means connecting said side frame members for normally holding them in an upright spaced substantially parallel relation with each other.

3. In a device of the character described, a base comprising a pair of end members each having downwardly extending floor engaging portions with supporting means intermediate said end members, a pair of side frame members attached adjacent their opposite ends to said base in spaced relation with each other, one of said side frame members being rigidly supported in an upright position and the other of said frame members having a hinged connection to said base whereby it may be moved from a position substantially parallel to the other of said side members outwardly to substantially a horizontal position, each of said side frame members being formed of bar-like means constituting a transversely extending top bar-like portion and substantially vertically extending side portions, a brace bar connecting the said portions at points substantially spaced from the transversely extending top bar-like portion and a plurality of spaced bars secured adjacent one end thereof to the top bar-like portion and adjacent their opposite ends to the brace and means connecting said side frame members for normally holding them in an upright spaced substantially parallel relation with each other.

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