March 25, 1958 C. A. HUFF 2,827,642

DEVICE FOR MOVING A PATIENT ON A BED

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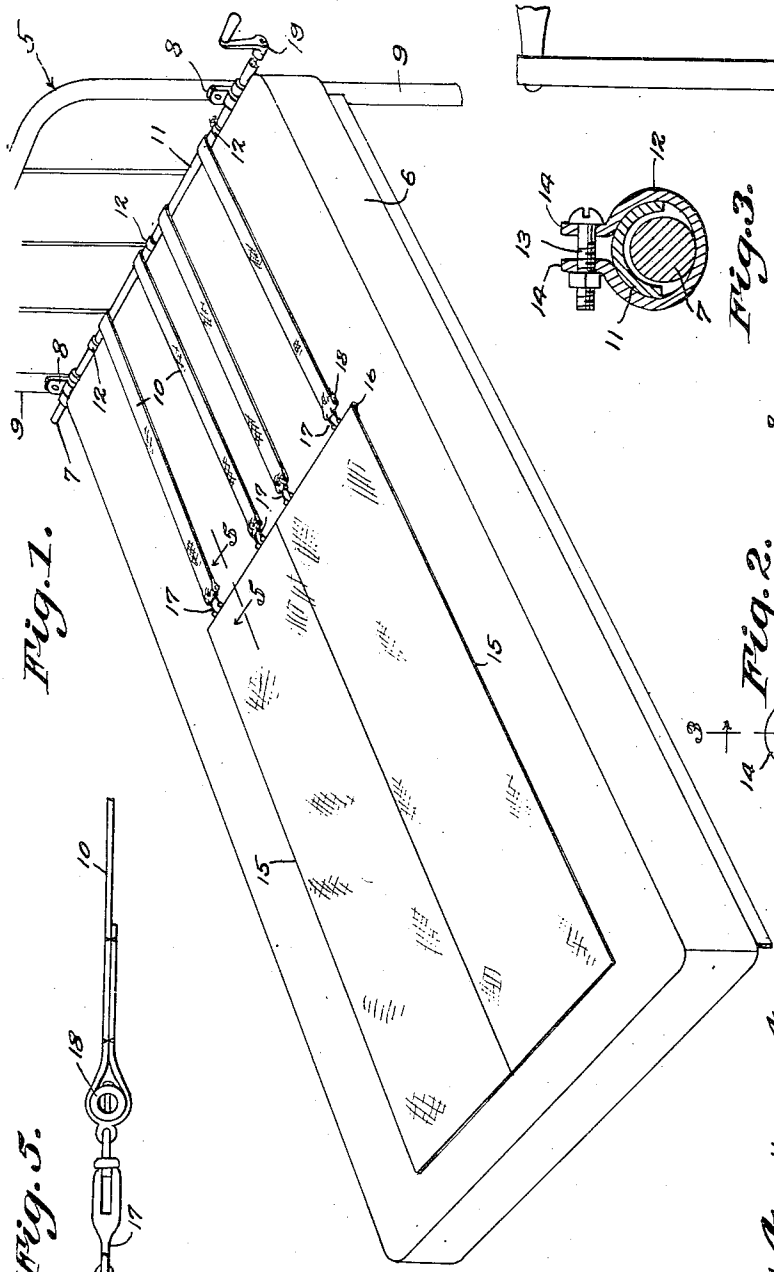

Fig. 1.

Fig. 3.

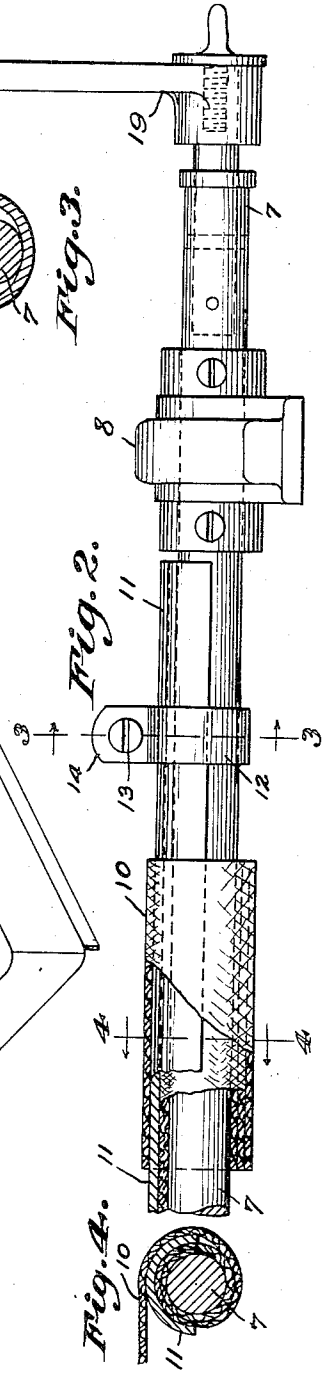

Fig. 2.

Fig. 5.

Fig. 4.

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DEVICE FOR MOVING A PATIENT ON A BED

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1 Claim. (Cl. 5—317)

This invention relates to a device adapted to be secured to the head posts of a bed for convenience in moving the patient from the foot of the bed to a more comfortable position on the bed.

An important object of the invention is to provide a device of this character in the form of fabric strips slidable over a bed surface and on which a person may lie, there being provided means for sliding the fabric straps longitudinally of the bed surface moving the patient lying thereon towards the head of the bed without pain to the patient.

Another important object of the invention is to provide a device of this character wherein the fabric strips are normally maintained in roll form at the head of the bed, to be extended over the bed so that the patient may be rolled thereon and the fabric strips again wound into roll form, moving the patient longitudinally of the bed towards the head of the bed.

A still further object of the invention is the provision of fabric strips divided longitudinally, so that the patient may be rolled onto one extended strip and the other strip or section properly located adjacent thereto, so that the patient may be readily rolled onto the device.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts, hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawing:

Figure 1 is a perspective view illustrating a device constructed in accordance with the invention as secured to the head section of a bed.

Fig. 2 is a fragmental elevational view illustrating the means for moving the fabric sections longitudinally of the bed.

Fig. 3 is a sectional view taken on line 3—3 of Fig. 2.

Fig. 4 is a sectional view taken on line 4—4 of Fig. 2.

Fig. 5 is a view illustrating the connecting means between the fabric strips and tape or webbing connected between the fabric strips and winding shaft of the device.

Referring to the drawing in detail, the reference character 5 indicates the head section of a conventional bed, and the reference character 6 indicates the mattress thereof.

The device forming the subject matter of the present invention comprises a shaft 7 that is mounted in ball bearing brackets 8 which are bolted or otherwise secured to the head posts 9 of the bed, as clearly shown by Fig. 1 of the drawing.

The reference character 10 indicates straps or fabric webbing material, the straps or webbing material 10 being arranged in pairs. These straps are secured at one of their respective ends to the shaft 7 by means of a clamping plate 11 which is curved to conform to the

curvature of the shaft 7, so that the straps or fabric webbing will be maintained against twisting, to insure the proper operation of the device to accomplish its purpose.

The clamping plate 11 is held in place by the bands 12 that encircle the clamping plate and a portion of the shaft 7, to the end that the bands 12 may be readily removed to remove the clamping plate 11, should it become necessary to repair or replace the straps or fabric webbing 10.

The ends of the bands 12 are drawn together by means of bolts 13 that are positioned within the openings formed in the ears 14 of the bands.

The reference character 15 indicates fabric supporting sections which are of lengths to accommodate a person lying thereon, so that when the fabric supporting sections 15 are moved longitudinally of the mattress, the person or patient lying thereon, will be slid towards the head section of the bed to more comfortably locate the person or patient on the bed.

One of the respective ends of each fabric strip section is looped around a rod 16, there being provided one of such rods for each fabric supporting section so that the fabric supporting sections may be moved independently of each other when it is desired to locate the fabric supporting sections with respect to each other, or in a position to support a patient thereon.

Snap hooks 17 are connected to the rods 16, which snap hooks are connected to rods 18 around which the tapes 10 are secured, thereby providing a connection between the sections 15 and strips or fabric webbing 10, which will insure against the strain directed to the strips and sections 15, tearing the fabric material of which the strips and sections 15 are constructed.

It might be here stated that the fabric supporting sections 15 are constructed of fabric material wherein one surface thereof, or the surface that contacts with the bed, is smooth or glazed, to reduce friction between the supporting sections and bed surface so that the fabric supporting sections may be slid over the bed surface with the minimum amount of effort.

A crank handle 19 is removably secured to one end of the shaft 7 and affords means for effecting rotation of the shaft 7 to wind the strips or fabric webbing on the shaft 7 and consequently slide the fabric supporting sections 15 towards the head section of the bed.

In the use of the device should it be desired to move a patient to a position nearer the head section of the bed, it is only necessary to extend one of the fabric supporting sections 15 to a position where it may be spread over the bed adjacent to the one side of the person or patient. The person or patient may now be moved onto this section 15. The other section 15 is now moved to a position in parallel relation with the first fabric supporting section 15, or to a position as shown by Fig. 1 of the drawing. The patient may now be moved so that he will lie on both sections of the device.

It is obvious that with the patient in this position, the fabric supporting sections, together with the patient resting thereon, may be moved towards the head section, by merely operating the crank handle 19 to wind the straps or fabric webbing members 10 on the shaft 7.

When the patient has been properly located on the bed, the patient may be moved onto one section while the other section is being removed. The patient may now be moved onto the bed surface from the section 15 on which he is lying, and this section then removed.

The sections 15 may now be wound on the shaft where they will be out of the way and conveniently located for further use when desired.

While I have shown and described a clamping plate 11 for clamping the strips or fabric webbing members to the

shaft 7, to be wound thereon, it is to be understood that it is within the scope of the invention to connect the strips or fabric webbing members to the shaft by means of hooks and eyes or other suitable fastening means, as desired.

While I have shown the device as attached to the head of a bed, it is to be understood that it is within the scope of the invention to support the device at any convenient place adjacent to a bed to accomplish the purpose of the invention.

The connection between the rods 16 and 18 may also be changed to meet various requirements of use without departing from the spirit of the invention.

Having thus described the invention, what is claimed is:

A patient moving attachment for securing to the head of a bed, comprising a pair of bearings, means securing said bearings to the head of the bed, a winding shaft rotatably engaging said bearings, a pair of elongated flexible strips engageable on the upper surface of the bed, a plurality of straps secured at one end to said shaft and extending over the upper surface of the bed, means detachably securing said straps to said strips, a crank fixed to one end of said shaft, said detachable securing means providing a means for independent movement of either of said strips.

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