Feb. 22, 1938. J. A. BÄWER 2,108,913

HOSPITAL BED OR THE LIKE

Filed March 28, 1935

Fig. 1

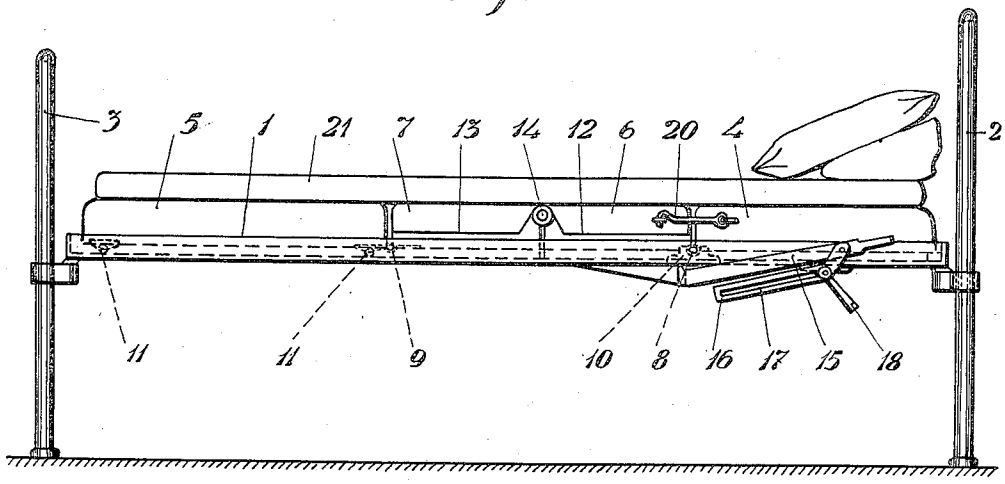
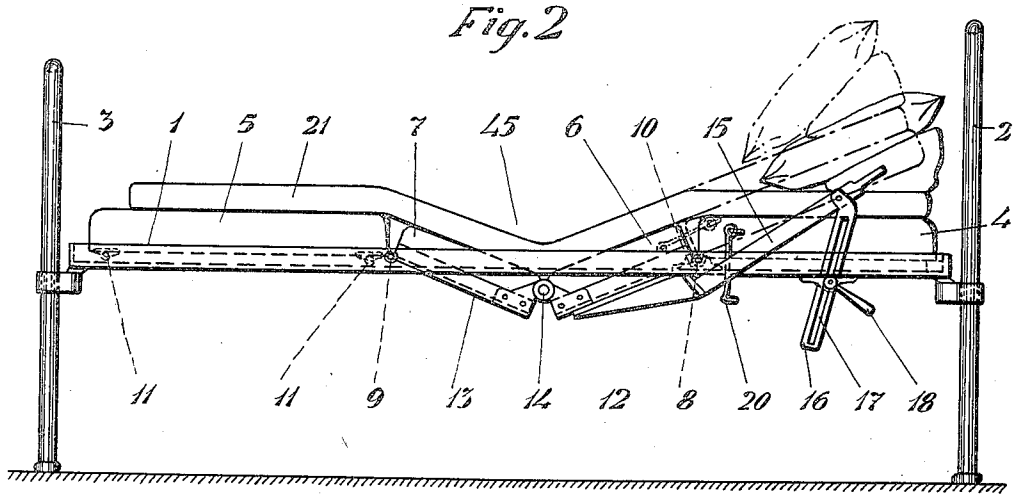


Fig. 2



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HOSPITAL BED OR THE LIKE

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4 Claims. (Cl. 5—66)

This invention relates to hospital beds and the like, and has for its object to facilitate uncovering of portions of the back of a patient lying in the bed, and to make such portions accessible, without the patient having to be turned or subjected to painful changes of position. This is of great advantage in cases where a patient suffers from such diseases as sciatica, dorsal diseases, neuroses, and the like, where every movement of the patient causes great pain.

According to the invention, one or both end portions of the bed bottom may slide along a plane or along different planes, and are pivotally connected to two intermediate mid-portions of said bed bottom, which are pivotally connected to each other and may be lowered by means of an operating device provided at the bed without causing any change of position of the one or both end portions other than a comparatively unimportant movement along the bed plane.

In order that the invention may be clearly understood, an embodiment comprising a bed provided with a spring mattress is described below by way of example, reference being had to the accompanying drawing, wherein

Fig. 1 is a side view of a bed illustrating one embodiment of the invention;

Fig. 2 is a side view of the bed according to Fig. 1 with its parts in other positions.

The embodiment illustrated in Figs. 1 and 2 is particularly adapted for use in a bed having a spring mattress. The bedstead 1 comprises a rigid rectangular frame preferably composed of angle-irons, which by means of corner pins or the like is disengageably connected to corner posts or head members 2, 3. The spring mattress forming the bottom of the bedstead is positioned within said frame 1. In the longitudinal direction the mattress is divided into four parts, viz. the head end 4 and the foot end 5 of the bed, which parts are supported by the bedstead 1 and two intermediate parts 6 and 7 forming the mid-portion of the mattress and being arranged freely between the side members of the bedstead while not resting upon the latter. The head end 4 is pivotally connected to one of the central parts 6 by means of one or more hinges 8 provided at the lower adjoining transverse edges of said parts, and the foot end 5 is in a similar manner connected to the other central part 7 by means of hinges 9. The hinges 8 are either extended in such a manner as to project somewhat outside the longitudinal sides of the mattress, or are replaced here by projecting trunnions or the like mounted in forks 10, bearings or the like secured to the bedstead 1, so that displacement of the mattress part 4 in the longitudinal direction of the bed is prevented. As to the part 5 of the mattress the same is arranged so as to permit of being displaced in the longitudinal direction of the bed, and is for this purpose mounted on the bedstead, preferably supported by rollers 11 or the like.

The two central parts 6 and 7 of the mattress are each mounted on supports 12 and 13, respectively, formed by angle-irons or the like. These supports preferably form fastening means for the hinges 8 and 9, respectively, at the mattress parts. The two supports are pivotally connected to each other by means of hinges 14, preferably provided at the adjacent transverse edges of the mattress parts 6 and 7. A hand lever 15 is secured to the support 12, and, when the bed is in normal position, Fig. 1, said hand lever extends on the outside of the bedstead 1 along one side of the head end of the bed. Provided close to the handle of said lever, which is directed toward the head member 2, is a link mechanism having one end of the guide link 16 pivotally connected to the lever. A clamping lever 18 or the like extends transversely through the long guide opening 17 of the guide link and is threaded into the bedstead, and by tightening this lever the link mechanism and the hand lever 15 may be secured in different positions of adjustment.

The mattress parts 4 and 6 are furthermore connected to each other, preferably by means of two disengageable hooks 20 provided at each long side of the mattress. In their operative position said hooks prevent swinging of the mattress parts 4 and 6 relatively to each other at the hinge 8. A horsehair mattress 21 or the like of common design may be placed upon the spring mattress.

In the bed according to Figs. 1 and 2, the lowering of the central parts is effected by loosening of the clamping lever 18 and raising the hand lever 15 for instance into the position illustrated in Fig. 2, in which it is secured by tightening the clamping lever. Thus an angular free space 45 is formed under the patient, making the back portion of the patient easily accessible without changing the position of the patient. If the hooks 20 are loosened, the head end will maintain its horizontal position, but if on the contrary the hooks are engaged, the head end will be carried along in the adjusting movement into an inclined position, as indicated by chain-dotted lines in Fig. 2. This position may also be the normal position of a patient, if, as is often the case, he is to be kept resting in a somewhat

raised position, the lowered part then forming a perfect support for the strong upper thighs.

What I claim is:—

1. A hospital bed comprising a bedstead, a bed bottom including a spring mattress resting upon the bedstead and divided into a head end portion, a foot end portion, and two lowerable intermediate portions pivotally connected to each other and to the end portions, one of the end portions being slidable in its longitudinal direction, an operating device connected to one of the intermediate portions and pivotally mounted on the bedstead, and adapted to swing the intermediate portions downwardly, so as to make accessible a part of a patient resting on the bed, while only a comparatively unimportant movement of the slidable end portion in its longitudinal direction is caused.

2. A hospital bed comprising a bedstead, a bed bottom including a spring mattress resting upon the bedstead and divided into a head end portion, a foot end portion, and two lowerable intermediate portions pivotally connected to each other and to the end portions, one of said end portions being slidable in its longitudinal direction, a hand lever adapted to be secured in different positions of adjustment and connected to one of the intermediate portions and pivotally mounted on the bedstead, and adapted to swing the intermediate portions downwardly, so as to make accessible a part of a patient resting on the bed, while only a comparatively unimportant movement of the slidable end portion in its longitudinal direction is caused.

3. A hospital bed comprising a bedstead, a bed bottom including a spring mattress resting upon the bedstead and divided into a head end portion, a foot end portion, and two lowerable intermediate portions pivotally connected to each other and to the end portions, one of said end portions being slidable in its longitudinal direction, a connecting means in the form of a hook adapted for rigidly connecting one of said end portions to the adjacent intermediate portion, and an operating device adapted for lowering the intermediate portions and for simultaneously swinging said end portion upwards and the adjacent intermediate portion downwards, when the end portion and said intermediate portion are connected.

4. A hospital bed comprising a bedstead, a bed bottom resting upon the bedstead and divided into a head end portion, a foot end portion, and two lowerable intermediate portions pivotally connected to each other and to the end portions, one of the end portions being slidable in its longitudinal direction, an operating device connected to one of the intermediate portions and pivotally mounted on the bedstead, and adapted to swing the intermediate portions downwardly, so as to make accessible a part of a patient resting on the bed, while only a comparatively unimportant movement of the slidable end portion in its longitudinal direction is caused.

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