

Jan. 5, 1932.

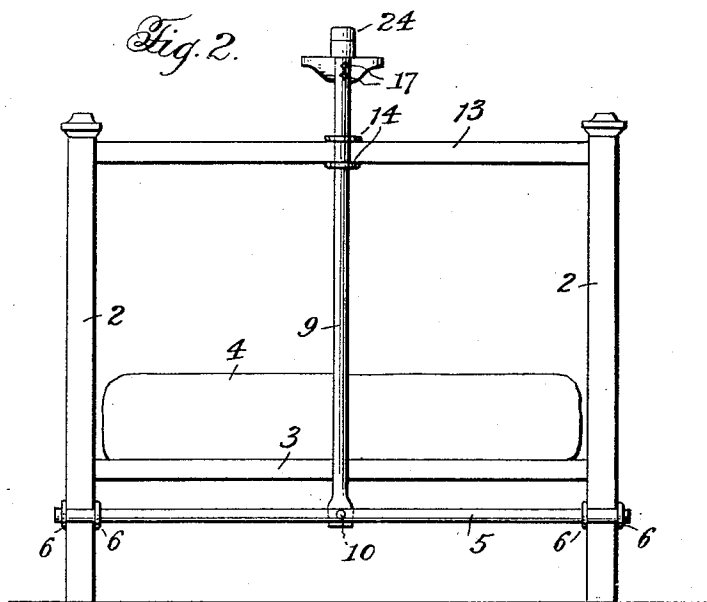
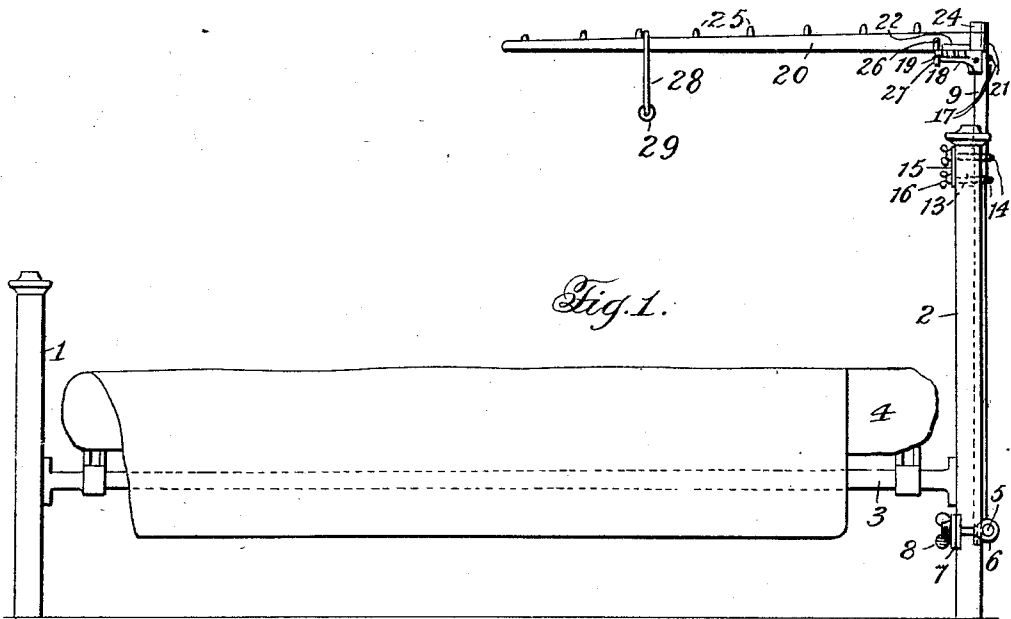
W. D. NEILS

1,840,170

BED ATTACHMENT

Filed Feb. 25, 1927

2 Sheets-Sheet 1



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Witness:

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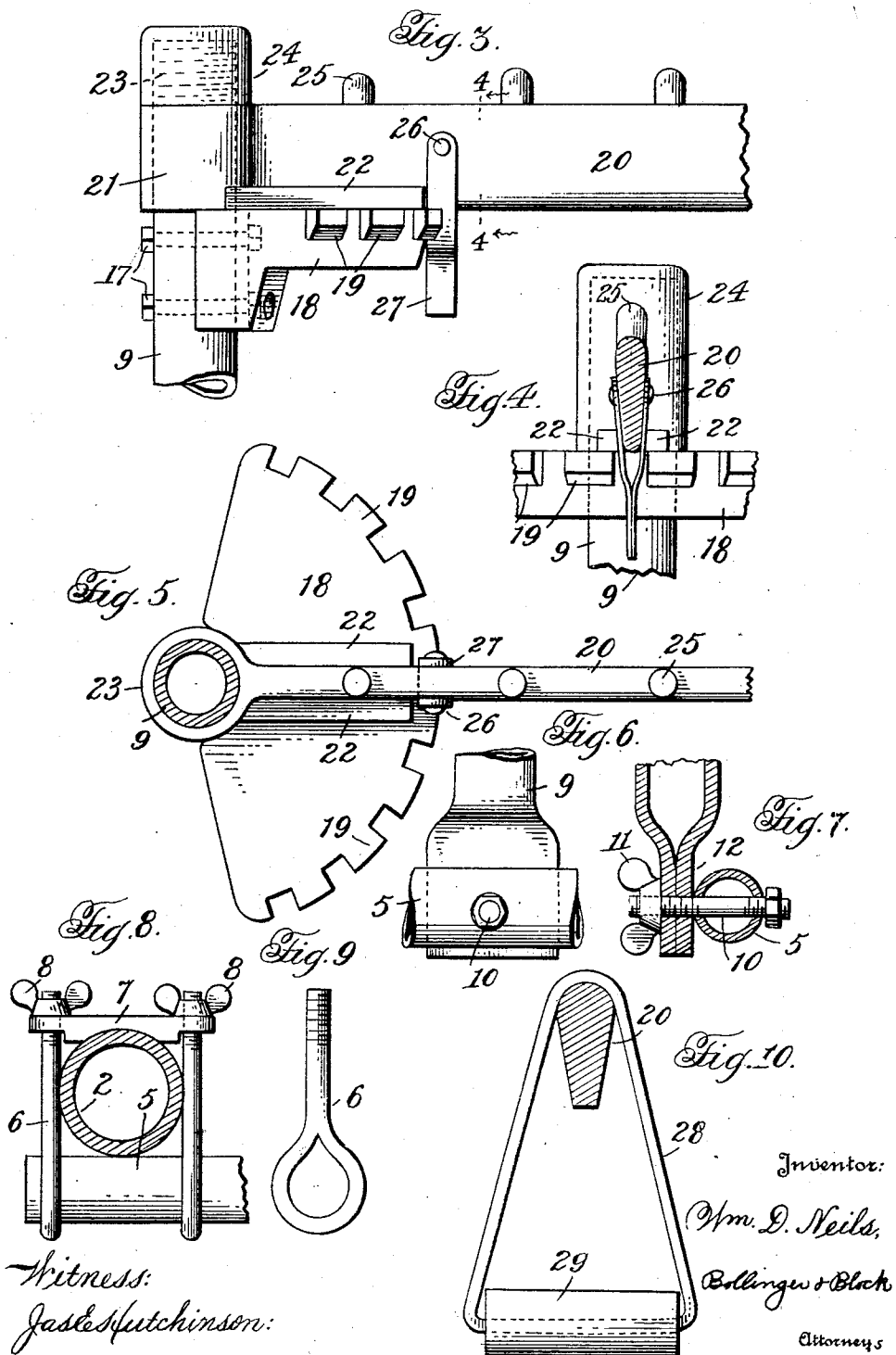
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2 Sheets-Sheet 2



UNITED STATES PATENT OFFICE

WILLIAM D. NEILS, OF DAVENPORT, IOWA; RAYMOND EDWARD NEILS AND FREDERICK WILLIAM NEILS, EXECUTORS OF THE ESTATE OF SAID WILLIAM D. NEILS, DECEASED, ASSIGNORS TO GOLDIE EMMA NEILS PERRY, FREDERICK WILLIAM NEILS, AND RAYMOND EDWARD NEILS

BED ATTACHMENT

Application filed February 25, 1927. Serial No. 170,859.

My invention relates to new and useful improvements in an attachment for beds and more particularly to a device adapted to be attached to an invalid's or hospital bed so that the occupant may move himself or herself, may aid in moving themselves with the assistance of a nurse, and which may be used as an adjustable arm rest to hold the arms in certain positions.

The principal object of the invention resides in the provision of such a device which may be readily attached to or detached from the bed with a portion which overhangs the patient and which is provided with a hand grip or arm rest which is longitudinally adjustable.

Another object of the invention consists in the provision of a device of the character described having an arm which may be swung horizontally and held in its various adjusted positions.

With the above and other objects in view, which will appear as the description proceeds, my invention consists in the novel details of construction and arrangement of parts described in the following specification and illustrated in the accompanying drawings and while I have illustrated and described the preferred embodiments of the invention, as they now appear to me, it will be understood that such changes may be made as will fall within the scope of the appended claims.

In the drawings:

Fig. 1 is a side elevation showing a bed with my attachment in position.

Fig. 2 is an end view of a bed with my attachment in position.

Fig. 3 is a fragmental side elevation of the upper portion of the attachment.

Fig. 4 is a section on the line 4—4 of Fig. 3 looking in the direction of the arrows.

Fig. 5 is a top plan of the construction shown in Fig. 3.

Fig. 6 is a fragmental detail showing the manner of connecting the lower end of the standard to the supporting cross bar.

Fig. 7 is a fragmental vertical section showing the construction disclosed in Fig. 6.

Fig. 8 is a fragmental detail showing partly in plan and partly in horizontal sec-

tion the manner of connecting the supporting cross bar to one of the legs of the bed.

Fig. 9 is a detail of one of the eye bolts used in the construction disclosed in Fig. 8, and

Fig. 10 is an elevation, with parts shown in vertical section, showing the hand grip or arm rest.

In Figs. 1 and 2 of the drawings the usual form of invalid's or hospital bed is illustrated, 1 showing the foot board, 2 the head board, 3 the side rails, and 4 the mattress.

My attachment is adapted to be supported by the head board 2 as is shown more particularly in Figs. 1 and 2. A cross bar 5 is secured adjacent the bottom of the board and extends between the legs thereof. The supporting cross bar is connected to the leg of the board by means of the eye bolts 6, shown more particularly in Figs. 8 and 9, the supporting bar passing through the eyes of the bolts on opposite sides of the head board leg. A plate 7 is received on the eye bolts 6 and engages the opposite face of the leg, being held in close engagement with the leg by means of the wing nuts 8.

A standard 9 has its lower end secured to the cross bar 5 by means of the bolt 10 and the wing nut 11, the bolt passing through the cross bar 5 and through the flattened lower end 12 of the standard as more particularly illustrated in Fig. 7. The standard 9 is secured to the top cross rail 13 of the head board 2 by means of the eye bolts 14, plate 15, and wing nut 16, the standard 9 passing through the eyes of the bolts as more particularly illustrated in Fig. 2 of the drawings.

Secured to the standard 9, adjacent the upper end thereof, by means of the bolts 17, is the semi-circular or arcuate-shaped plate 18 having the projections 19 formed on its outer curved edge, as shown more particularly in Figs. 3, 4 and 5 of the drawings, and spaced apart for the purpose to be presently described.

An arm 20 is connected to the standard 9 for horizontal swinging movement. This arm is provided on one end with an eye 21 through which the standard 9 extends and

the lower edge of the arm normally rests upon the plate 18. An outwardly extending flange 22 is formed on each side of the arm 20 and forms a substantial bearing for the arm upon the plate. The upper end of the standard 9 is screw threaded as shown at 23 and receives the interiorly threaded cap 24 which holds the arm in position upon the standard. A plurality of longitudinally spaced upwardly extending projections 25 are formed on the upper surface of the arm for a purpose which will be presently described. Pivotaly connected at 26 to the arm 20 is the latch 27 of the shape more particularly shown in Fig. 4 of the drawings and adapted when in lowered position, to be received between the projections 19 of the plate 18 so as to hold the arm 20 in its different horizontally adjusted positions.

Carried by the arm 20 is the bale or loop 28 having the handhold 29. The loop or bale is of substantially inverted V-shape, the upper end extending over the top of the arm 20 and being normally positioned between two of the longitudinally spaced projections 25. The bale or loop with its associated handhold may be longitudinally adjusted upon the arm 20 merely by raising the loop or bale and adjusting it along the arm. After being adjusted it may then again be lowered between the desired projections.

From the above it is thought that the detailed construction will be understood as well as the operation. It can be seen that the standard 9 is readily attachable to or detachable from the bed and that the arm 20 which overlies the patient may be swung horizontally to different adjusted positions where it is held by means of the pivoted latch 27. The hand hold 29 may be adjusted longitudinally of the arm 20 by adjusting the bale or loop 28 so that its upper end will be received between different pairs of projections 25. When the patient desires to move himself or herself or to aid the nurse in so doing he or she takes hold of the handhold 29 and may thereby raise themselves. If desired to be used as an arm support the arm may be positioned through the loop or bale 28 and rest upon the member 29.

Having fully described my invention what I claim as new and desire to secure by Letters Patent is:

1. A device of the character described adapted to be connected to a bed including a standard, a horizontally extending member secured to the standard, an arm connected to the standard for swinging movement, outwardly extending flanges formed on the sides of the arm to provide an increased bearing surface at the lower side of said arm and adapted to engage the upper surface of the horizontally extending member, said member forming a substantial bearing for said arm

and its associated flanges, and a hand grip adjustable on said arm.

2. A device of the character described adapted to be connected to a bed, including in combination with a standard having a horizontally extending bearing portion provided with outwardly extending spaced projections on its marginal edge, and an arm connected to the standard for horizontal swinging movement and resting on said bearing, a pivoted latch member adapted to swing into interlocking engagement by gravity with the projections on the bearing member, said latch member having perforations in one of its ends, a pivot pin mounted in the arm directly above the spaced projections with its ends received in the perforations in the end of the latch, the opposite end of said latch member extending downwardly and below the projections and bearing member in position to be readily grasped by an occupant of the bed, and a hand grip adjustable on the arm.

3. A device of the character described adapted to be connected to a bed including in combination with a standard having a horizontally extending bearing member provided with outwardly extending spaced projections on its marginal edge, and an arm connected to the standard for horizontal swinging movement and having outwardly extending flanges formed on its sides and terminating short of the spaced projections of the bearing member to provide an increased bearing surface to engage and ride over the bearing member, a pivoted latch member having a mounting on the arm slightly in advance of the flanges and directly above the spaced projections, said latch member being adapted to swing into interlocking engagement by gravity with the projections on the bearing member to hold the arm in its adjusted position, the lower end of the latch being in position to be readily reached by an occupant of the bed and a hand grip adjustably mounted on said arm.

In testimony whereof I hereunto affix my signature.

WILLIAM D. NEILS.