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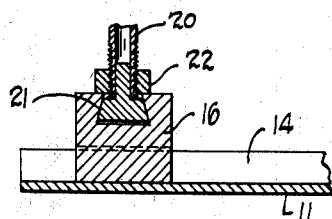
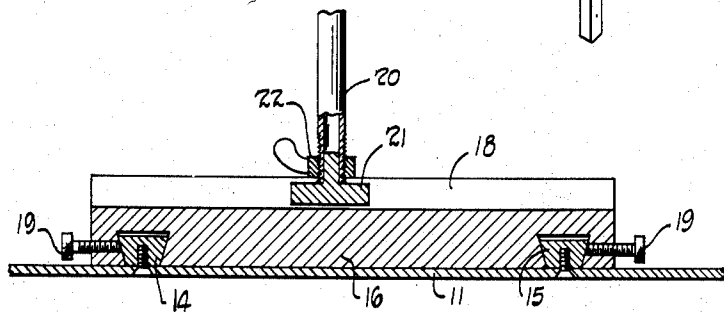
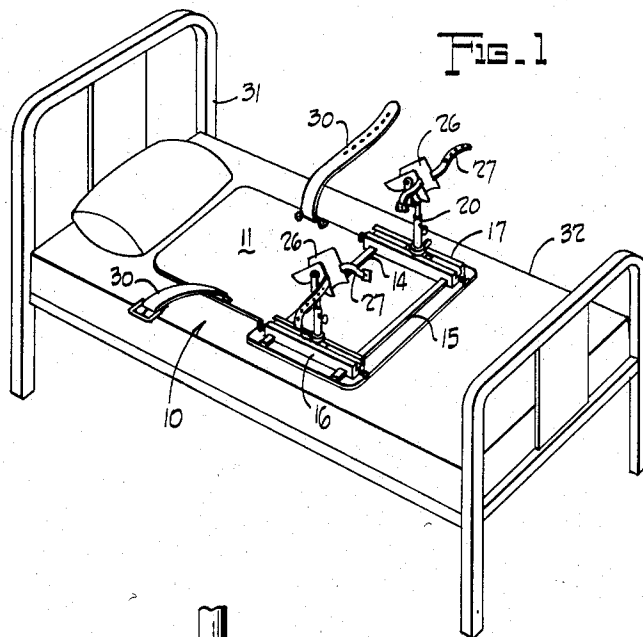
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BODY POSITIONING APPARATUS FOR BLADDER CATHETERIZATION

Filed June 6, 1958

2 Sheets-Sheet 1



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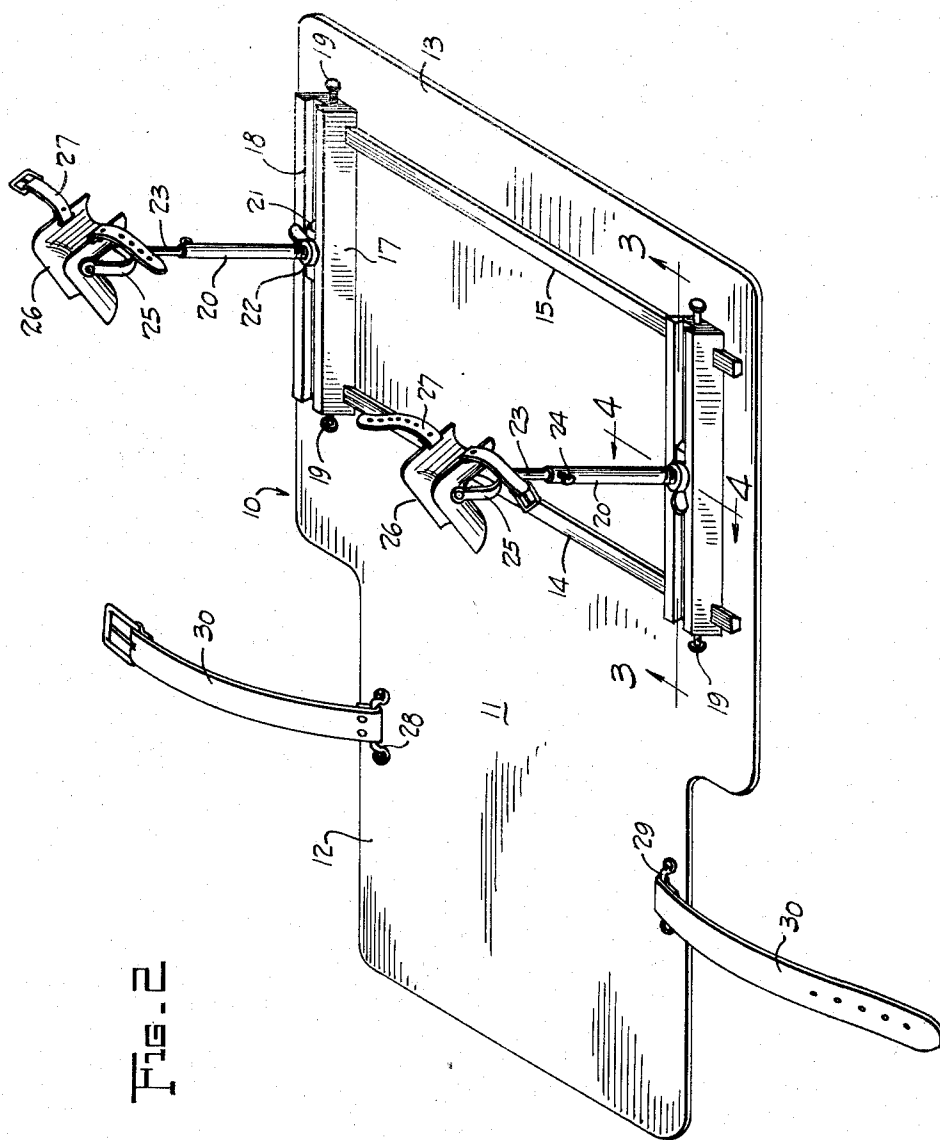
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BODY POSITIONING APPARATUS FOR BLADDER CATHETERIZATION

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1 Claim. (Cl. 311—6)

This invention relates to surgical devices and particularly to apparatus for positioning the human body for bladder catheterization.

Conducive to a better understanding of this invention it may be well to point out that the catheterization of the bladder requires that the lower limbs be held in a certain spread-apart and raised position to facilitate the insertion of a so-called "catheter" tube through the urethra into the bladder for purposes of drainage and for irrigation of the same.

This is a very simple procedure, but at best it is awkward, and may be uncomfortable for the patient.

In some cases it is actually painful and it is difficult for the patient to hold the required position. In other cases the patient is not only in pain but is emotionally disturbed by the procedure, so that it is necessary to have several attendants to hold the patient's limbs in the required position.

The primary object of this invention, therefore, is to provide apparatus for positioning and maintaining a patient in the proper attitude for catheterization of the bladder.

Another object is to provide a device of the type stated that is portable and that can be quickly and easily set up on the mattress of any conventional bed.

A further object is to provide such a device that is fully adjustable for use with persons of varied bodily dimensions.

Still another object is to provide a device of the type stated that can be easily dismantled for compact storage when not in use.

These and other objects of the invention will become apparent from a reading of the following specification and claims together with the accompanying drawings, wherein:

Figure 1 is a perspective view of the body positioning apparatus of a bladder catheterization that is the subject of this invention positioned on a conventional hospital bed;

Figure 2 is an enlarged perspective view of the body positioning apparatus;

Figure 3 is sectional view taken along the line and in the direction of the arrows 3—3 of Figure 2; and

Figure 4 is a sectional view taken along the line and in the direction of the arrows 4—4 of Figure 2.

Referring more particularly to the drawings there is seen in Figure 1 the body positioning apparatus that is the subject of this invention broadly indicated by reference numeral 10 as it is used on top of the mattress 32 of a conventional hospital bed 31.

Reference numeral 11 indicates a base plate having a leg end 13 and a back supporting portion or head end 12.

The base plate is substantially rectangular in shape and is fabricated from a suitable rigid sheet material, such as metal or ply-wood. If metal is used, aluminum is preferred for the sake of lightness.

The length and width of the base 11 is such that it will accommodate the prone body of the average adult

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person, with the head and feet extended beyond the ends thereof, when the device is positioned on a conventional bed mattress 32, as illustrated in Figure 1.

Reference numerals 14 and 15 indicate two spaced rails mounted cross-wise of the base 11 on the leg end 13 in fixed positions.

Reference numerals 16 and 17 indicate two carriage members slidably mounted across the two rails 14 and 15 in interlocked dove-tailed engagement.

The carriages extend length-wise of the base 11 and are free to be moved toward or away from one another. While the carriage and rail engagement is illustrated as being dove-tailed in configuration, any suitable interlocking shape may be used that will allow free sliding movement of the carriage length-wise of the rails. The carriage may be locked in adjusted position on the rails by means of set screws 19 which can be brought to bear against the rails as shown most clearly in Figure 3.

Each carriage 16 and 17 has a dove-tail slot 18 extending the length of the upper face thereof.

A vertically extending tube 20 is slidably mounted in each carriage slot 18 through a dove-tailed block 21. A thumb nut 22 is threadably mounted on the tube 20 immediately above the block 21 and acts as a lock nut to hold the tube 20 in adjusted positions when screwed down against the upper face of the carriage, as seen most clearly in Figures 3 and 4.

A rod 23 is mounted in each tube 20 and is slidable vertically thereof between adjusted vertical positions which may be retained by means of a set screw 24.

When the set screw 24 is released the rod 23 may be rotated in the tube 20 as well as being movable vertically thereof.

A leg rest 26 is mounted at the top end of each rod 23 through a yoke 25 which permits the leg rest 26 to be tilted on a horizontal axis between adjusted positions.

The leg rests 26 are U-shaped elements adapted to fit the underneath parts of the knee joints or calves of the legs, the forward and rearward portions of the rests 26 being appropriately splayed to avoid cutting the flesh.

Reference numeral 27 indicate a restraining strap and buckle positioned on the forward portion of each leg rest 26, as seen most clearly in Figure 2.

Two anchor bolts 29 are mounted in the base plate 11 in the back supporting area 12 thereof. The two halves of a torso restraining strap and buckle 30 are anchored on the bolts 29. The strap 30 is so positioned that it can be drawn across the lower abdomen of a person lying on the base plate 11.

In use the patient is positioned on the base plate 11 with his back and buttocks supported on the section 12, upwardly of the rail 14.

The carriages 16 and 17 are adjusted lengthwise of the rails 14 and 15 to positions close to the outside of each leg, and locked in place by the set screws 19. The leg rests 26 are adjusted vertically and moved lengthwise of the carriage slots 18 to locations wherein the rests 26 will be beneath the knees when the lower limbs are spaced apart and bent to the required catheterizing position.

When properly positioned the lower limbs of a patient lying on the plate 11 will hang down from the forward edges if the leg rests 26, while the thighs rest on the rearward portion. Thus the rest 26 acts as a support on the underside of each knee. The strap and buckle 27 is then adjusted and secured across the leg immediately below the knee, thus preventing upward movement of the lower limb.

The strap 30 is positioned across the lower abdomen of the prone patient, keeping the hips from moving.

The so restrained patient is thus firmly held in place by the straps 27 and 30 while his legs are in the particular raised and spread position required for catheterization.

A single person can catheterize the most unruly patient since the patient is held comfortably immovable by the device.

When not in use the device can be easily dismantled for compact storage by sliding the carriage members 16 and 17 off the ends of the rails 14 and 15 after loosening the set screws 19. The leg rest tubes 20 can be similarly disengaged from the carriage by sliding them off the ends of the slots 18 after loosening the thumb lock nuts 22.

It will now be clear that there is provided a device which accomplishes the objectives heretofore set forth. While the invention has been disclosed in its preferred form, it is to be understood that the specific embodiment thereof as described and illustrated herein is not to be considered in a limited sense as there may be other forms or modifications of the invention which should also be construed to come within the scope of the appended claim.

I claim:

A portable body positioning apparatus for bladder catheterization, comprising in combination, a rigid sheet material T-shaped base, having plane upper and lower faces, of lesser width and length than the mattress of the hospital bed upon which it rests and including head and leg ends, the leg end being the wide end of the T, a pair of spaced parallel rails mounted on the leg end of the base, cross-wise thereof, a pair of opposed strap

anchors mounted proximate the side edges of the head end and spaced from said rails, a pair of carriage members slidably mounted cross-wise of the rails and moveable toward and away from each other, lock means on the carriages engageable with the rails, to hold same in adjusted positions, a leg rest mounted on each carriage, movable lengthwise thereof toward and away from the strap anchors, lock means on each leg rest engageable with its associated carriage to lock same in adjusted positions with reference to the strap anchors, said leg rests being shaped to support the lower limbs, at the knees, in raised and bent position with the feet resting on the leg end of the base, a pair of straps mounted in the strap anchors of a length to cross each other above the trunk of a body positioned on the head end of the base, said straps having interlocking means at the free ends thereof, said leg rests being adjustable on their associated rails and carriages relative to the strap anchors, whereby they may be positioned beneath the knee joint of the body held by the aforesaid anchor straps.

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