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HOSPITAL BED STANDARD SUPPORT

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1 Claim. (Cl. 248—228)

The present invention relates to hospital or sick-room equipment, and more particularly to a device for supporting plasma bottles, and the like, adjacent a bed.

The present invention is a continuation-in-part of an application filed by me in the United States Patent Office on May 3, 1956, Serial No. 582,429, for Hospital Bed Standard Support, now abandoned.

When it becomes necessary to give plasma, glucose or other intravenous feedings to a patient, it is desirable that a means be provided for supporting the necessary bottles, tubing, and the like, associated therewith. At the present this is accomplished by means of a vertically disposed rod-like stand having a hooked upper end and supported at its lowermost end by a comparatively large semi-spherical base. This type of standard or bottle support is satisfactory from the standpoint of bottle supporting, but it is very unsatisfactory from the viewpoint of convenience for the following reasons. The base of this type of support must necessarily be large and sufficiently heavy to prevent its being tipped over, and valuable contents wasted, by equipment hung thereon and being upset. Therefore, the size and weight of the base renders the device difficult to move easily. Furthermore, the base, being rather large and necessarily disposed relatively close to the head end of the patient's bed, forms a stumbling block for the nurses or doctors, and is in the way of additional equipment needed in the sick-room. A further disadvantage of this conventional type of support is that it is not readily adjustable vertically to raise or lower the supporting hook as desired.

It is therefore the principal object of this invention to provide a standard or support for a hospital room, or the like, which may be readily connected to and supported vertically by one of the side rail supports of the bed.

An equally important object is to provide a standard of this class which may be selectively positioned longitudinally with respect to the supporting bed side rail.

An additional important object is to provide a device of this character which may be selectively adjusted vertically for positioning the upper end portion of the device at different elevations, or positions.

A further object is to provide a device of this class which features a plurality of hook-shaped hangers at its uppermost end for receiving and holding bottles, tubing, and the like.

Another object is to provide a device of this class which is sturdily constructed, and yet is of relatively light weight and may therefore be easily carried from one room to another.

Still another object is to provide a device of this character which occupies relatively little space and is easily positioned on either side of a bed.

Yet another object is to provide a device of this character which may easily be dismantled for storing and, when thus stored, will occupy a relatively small portion of storage space.

A still further object is to provide a device of this class which is sturdily and simply constructed and will

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not easily get out of order, and which therefore has a comparatively long useful life.

An additional object is to provide a device of this class which comprises a supporting base member and a telescoping vertical adjustable sleeve and rod member, whereby the sleeve and rod members may be removed, thus leaving the base member attached to the bed for future use.

The present invention accomplishes these and other objects by providing an elongated base member adapted to be longitudinally adjustably connected to one supporting side rail of a hospital bed. A support boss is rigidly carried by the base intermediate its ends for forming a tubular clamp which slidably receives a vertically disposed tubular sleeve and rod member. The tubular clamp, carried by the support boss, frictionally holds the sleeve and standard or rod member at the desired elevation. The uppermost end of the rod member is provided with a horizontal head having a plurality of radially projecting prongs each provided with depending hook-shaped members for receiving and holding bottles or the like thereon.

Other objects will be apparent from the following description when taken in conjunction with the accompanying single sheet of drawings, wherein:

Figure 1 is a fragmentary perspective view of the device connected to a fragment of a bed side rail;

Figure 2 is a vertical cross sectional view taken substantially along line 2—2 of Fig. 1;

Figure 3 is a vertical cross sectional view taken substantially along line 3—3 of Fig. 1; and,

Figure 4 is a perspective view of a receptacle used in connection with the device.

Like characters of reference designate like parts in those figures of the drawings in which they occur.

The reference numeral 5 indicates, as a whole, one horizontally disposed side rail of a hospital bed. This side rail is usually formed of metallic material, right angular in cross section, with the free edges of the same disposed inwardly and downwardly, respectively, thus providing an upper horizontal surface 6 and a vertically disposed side 7. The side rail 5 is conventional with hospital beds, and may be formed of other material and in other than right angular shape, and still serve its purpose in supporting the instant invention, as will presently be apparent.

The device, indicated as a whole by the reference numeral 10, essentially comprises a rectangular elongated base member 12 longitudinally disposed edgewise along the rail 5, with the inwardly disposed side surface of the base member in contiguous contact with the vertical side 7 of the rail. The vertical height of the base member 12 is less than the vertical extent of the rail side 7.

A pair of lugs 14 and 15 are integrally joined to the uppermost edge adjacent each respective end of the base member 12 and project inwardly thereof in spaced apart right angular relation. The lugs 14 and 15 each have one edge adapted to contact the upper horizontal surface 6 of the rail. The length of the lugs 14 and 15 is slightly less than the transverse width of the rail upper surface 6. A hook-shaped member 16 is slidably carried horizontally between each respective pair of lugs 14 and 15, with the hook end portion 17 thereof adapted to engage and grip the inwardly disposed edge of the rail 5. A thumb screw 18, extended through a perforated ear 19 on the base member, is threadedly engaged with the hook member 16 for extending and retracting the latter between the lugs to grip the rail.

The base member 12 is further provided with a boss 20 intermediate its ends which extends laterally of the base member in right angular relation. The outer free end portion of the boss is provided with a vertical bore 21 or opening and has a vertical slot 23 through the wall

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of the bore. A hand screw 22 is threadedly engaged within co-operating flanges 25 on opposing sides of the vertical slot in the bore, thus forming a tubular clamp 24 on the outer end of the boss. The lower surface of the boss 20 is provided with a downwardly open recess 26 adjacent the base member. A third hook-shaped member 28 is slidably received by the vertical recess 26 and a vertical slot 30 formed in the base member in co-operation with the recess 26. The hook end portion 32 of the member 28 is adapted to grip the lowermost edge surface of the rail vertical side 7. A hand screw 34 is extended through the upper surface of the boss 20 and is threadedly engaged with the hook-shaped member 28 for extending and retracting the same to grip the rail side 7. Thus, both of the hook-shaped members 16 and the hook-shaped member 28 have one inner surface in contact with the respective upper horizontal or vertical side surface of the bed rail 5 when the latter is gripped by the hook member, and which securely holds the base member in contact with the vertical side 7 for preventing any tilting movement thereof for the reasons which will presently be apparent.

An elongated sleeve member 36 is vertically received by the tubular clamp 24. The upper end portion of the sleeve 36 is provided with a screw-operated clamp 38 having a bore substantially equal with relation to the diameter of the sleeve. An elongated rod or standard 40 is slidably received vertically within the clamp 38 and telescopically extends into the sleeve 36. The upper end of the rod is rigidly connected to a horizontally disposed head 42. Four integral arms or prongs 44 project horizontally outward from the head 42 in substantially 90° relation. Each of the prongs 44 has a depending hook element 46 connected thereto for receiving and holding the bail or handle 48 of a receptacle or container 50, or the like. Thus, the prongs 44 need only be of such length as will permit such a container or plasma bottle to be suspended from any of the hooks 46, without the container contacting the rod 40. The head 42 is further provided with four vertical bores 52 between and adjacent the base end of the respective prongs 44. Each of the bores 52 has a vertical slot 54 through the wall thereof, whereby an intermediate portion of a length of resilient tubing, not shown, may be inserted through the slot, thus permitting the respective bore 52 to frictionally hold the tubing without restricting any flow of fluid therethrough.

The opposing lower end edge of the base member 12 is provided with a pair of enlarged portions 56, each having a threaded bore for receiving a pair of depending hooks 58. The purpose of the hooks 58 is to permit the container 50 to be suspended therefrom in an out of the way position when used to receive the fluid discharged from a patient. The container is preferably indicially marked or scored to record the cubic centimeters of fluid contained therein, and is preferably of a size which will hold 1000 cc.

Operation

The device 10 is connected to either side of the bed by connecting the base member 12 to the side rail, as disclosed hereinabove. The sleeve 36 and standard rod 40 are vertically adjusted to the desired height. Thereafter, conventional hospital room bottles, not shown, may be hung from any one or all of the hooks 46, while tubing, not shown, may be frictionally engaged and held by the head bores 52 as desired. Thus, the vertically disposed hook-shaped member 28, in co-operation with the hook-shaped members 16, securely grips the side rail 5 and precludes any tipping or tilting action of the device 10 rela-

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tive to the bed rail, regardless of the position occupied by any bottles connected to the hooks 46 relative to the center of gravity of the device. The device is particularly adaptable for use with patients requiring drainage tubes, in that the drain tube may be passed over the side of the bed clothing and taped to the sleeve 36, if desired, and extended into an opening in the lid of the receptacle 50 suspended from one of the hooks 58, as is indicated by the short length of tubing 62. The receptacle being suspended from one of the hooks 58 positions the same up off the floor and therefore is not subject to tipping over, or the like. The sleeve 36 and rod 40 are easily adjusted vertically by loosening and retightening the respective hand screws. The entire device is easily moved from one bed to another by simply loosening the screws 18 and 34. However, it is preferred that one of the base members 12 be connected to each bed, and the sleeve 36 and rod 40 inserted into the tubular clamp when needed. Thus, when the device is not being used the base member 12 is in an out of the way position on the beds, and the telescoping sleeve and rod members may be stored for future use within a minimum amount of space.

Obviously the invention is susceptible to some change or alteration without defeating its practicability, and I therefore do not wish to be confined to the preferred embodiment shown in the drawings and described herein, further than I am limited by the scope of the appended claim.

I claim:

30 A support for connecting a standard to a hospital bed having horizontal angular side rails, including: a substantially rectangular base member flatly contacting a longitudinal portion of the outer surface of said side rail; said base member having a width less than the vertical extent of said outer surface of a normal bed side rail; an upstanding ear carried by each end of said base member; a pair of spaced-apart guide lugs connected to each said ear and co-operatively projecting laterally therefrom for limiting downward movement of said base member relative to said side rail; a thumb screw carried by each respective said ear and projecting laterally therefrom between said respective pairs of guide lugs; an elongated hook-shaped clamp slidably disposed between each pair of guide lugs and threadedly engaged with said thumb screw for releasably gripping the inner edge of the upper portion of said side rail; a laterally projecting boss centrally carried by the side of said base member opposite the side rail; said boss having a downwardly open vertical recess adjacent said base member; an elongated hook-shaped member slidably carried by the recess in said boss; a hand screw carried by said boss and threadedly engaged with said hook-shaped member for releasably engaging the latter with the lowermost edge of a bed side rail; a tubular clamp carried by the free end of said boss; and a standard rod rotatably and slidably carried by said tubular clamp.

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