

[54] **SUPPORT APPARATUS FOR A BEDSIDE DRAINAGE BAG**
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3,529,598 9/1970 Waldman Jr. et al.128/275
3,537,109 11/1970 Spurrier et al.128/275
3,548,827 12/1970 Abel128/275
3,568,965 3/1971 Clark128/275

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[57] **ABSTRACT**

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A support apparatus for a bedside drainage bag comprising a support member made from a length of wire bent to the desired shape and having a hook portion adapted to be hooked over a support member and a pair of vertical legs which extend through openings in the top portion of the drainage bag and then upwardly for attachment to a semi-rigid portion of the drip chamber assembly for the bag.

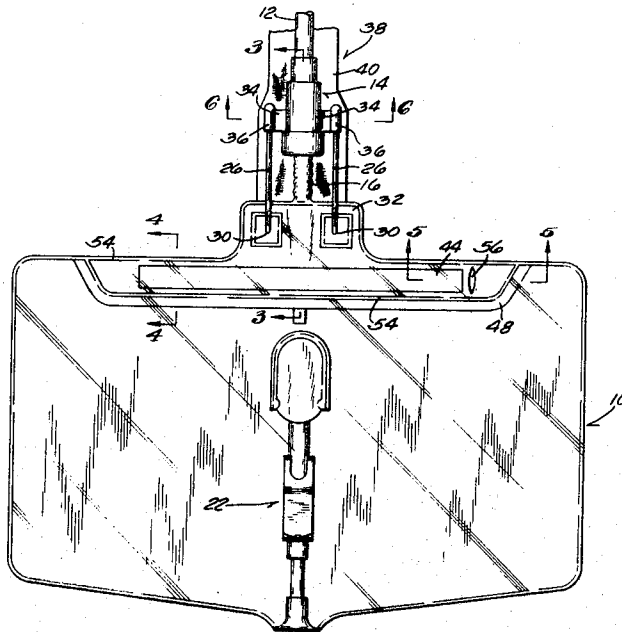
[52] U.S. Cl.128/275
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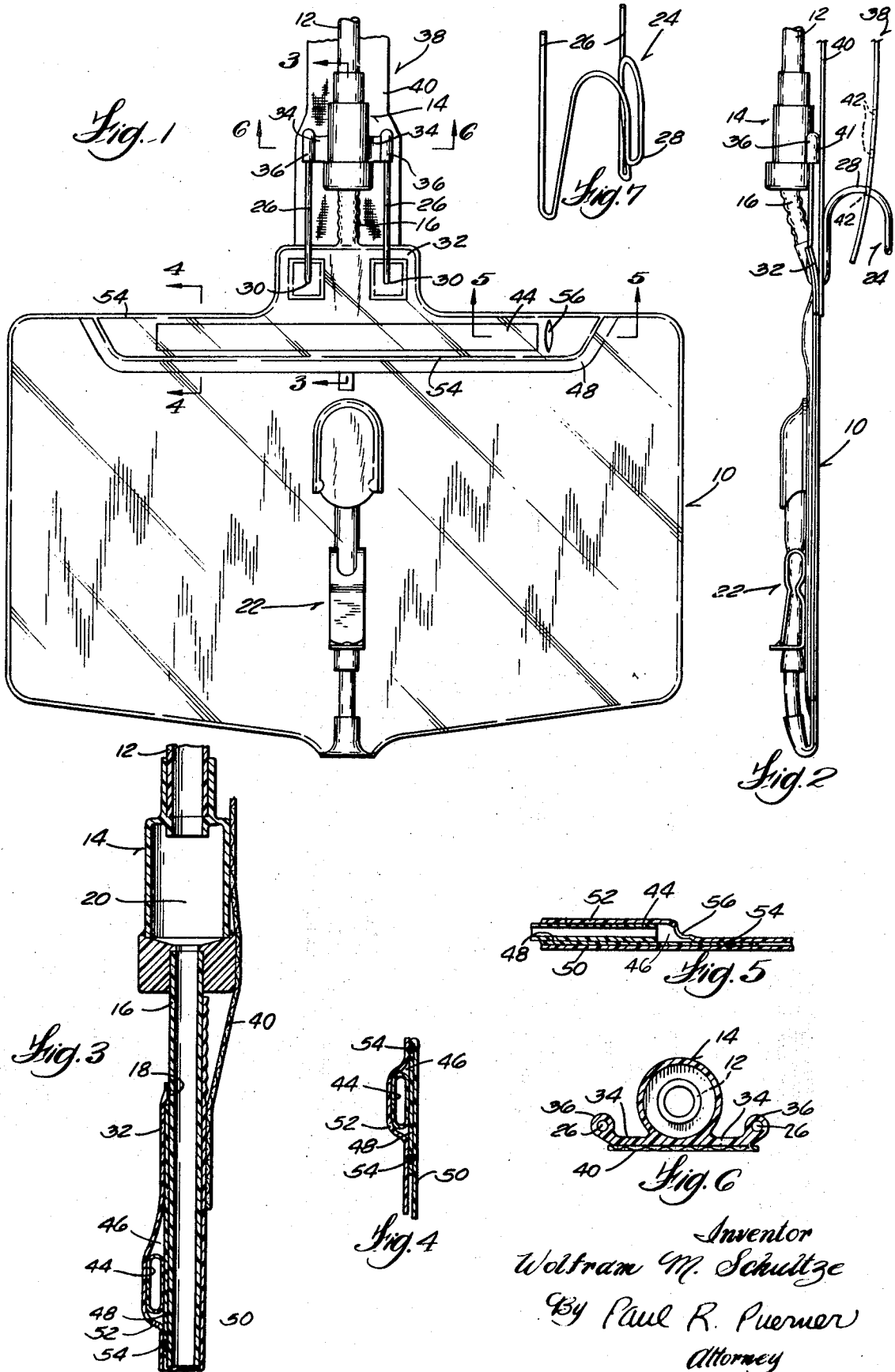
[56] **References Cited**

UNITED STATES PATENTS

3,220,434 11/1965 Garth128/275

8 Claims, 7 Drawing Figures





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SUPPORT APPARATUS FOR A BEDSIDE DRAINAGE BAG

BACKGROUND OF INVENTION

I. Field of Invention. This invention relates to a support apparatus for a bedside drainage bag and more particularly to such an apparatus which provides a higher degree of stabilization for the bag when in use.

II. Description of Prior Art. Various arrangements have been proposed for supporting bedside drainage bags from some kind of a support member generally located at the side of the hospital bed.

The principal object of this invention is to provide an improved arrangement for conveniently supporting a drainage bag at the side of a bed in a stabilized condition wherein the tendency of the bag to become tilted in use will be prevented.

A further object is to provide a support apparatus which is comprised of relatively inexpensive parts which can be easily assembled and which provides a means for preventing any tendency of the inlet tube to kink at the point where it enters the bag.

Other objects and advantages of this invention will be pointed out in, or be apparent from, the description and claims that follow.

SUMMARY OF INVENTION

A bedside drainage bag including a bag portion adapted to retain fluid therein and a drip chamber assembly connected to the bag and adapted to carry fluid into the bag. A support assembly for supporting the bag from a suitable support member is comprised of a substantially rigid hanger member preferably made from a length of wire bent to the desired shape. The hanger member has a hook portion adapted to be hooked over a support member and a pair of vertical legs which extend through openings at the top of the bag and then upwardly for attachment to the sides of the drip chamber assembly. The bag is further provided with a strap member which extends upwardly between the hook portion and the vertical legs of the hanger member. The strap member has a plurality of openings in the free end thereof to facilitate attachment of the strap member to the hook portion of the hanger member to thereby provide an alternate means for supporting the bag at the side of a hospital bed. The bag is further provided with a horizontally extending pocket formed in the upper portion thereof and a stabilizer bar mounted in the pocket to provide additional stabilization for the bag. The strap member also provides carrying means for an ambulatory patient.

DESCRIPTION OF DRAWINGS

FIG. 1 is a front elevation view of a bedside drainage bag incorporating the support and stabilizing means of the present invention;

FIG. 2 is a side elevation view of the bag shown in FIG. 1;

FIG. 3 is a sectional view taken along line 3—3 of FIG. 1;

FIG. 4 is a sectional view taken along line 4—4 of FIG. 1;

FIG. 5 is a sectional view taken along line 5—5 of FIG. 1;

FIG. 6 is a sectional view taken along line 6—6 of FIG. 1; and

FIG. 7 is a perspective view of the bag hanger member used in the present invention.

Referring now to the drawings in detail, FIG. 1 shows a bedside drainage bag 10 preferably made of a plastic material and having an inlet tube 12 for conducting fluid into the bag. Fluid from tube 12 passes through a drip chamber 14 and then into a short intermediate tube 16 which, as shown in FIG. 3, extends into the interior of the bag through an opening 18 in the upper portion thereof. Drip chamber 14 is provided with an internal chamber 20 to which tube 12 connects to thereby prevent bacteria from within the bag from passing up through tube 16 and then back to the patient through tube 12. The bag is also provided with a drain tube assembly 22, the detailed construction of which forms no part of this invention and will thus not be explained in detail herein.

As indicated previously, it is important that drainage bags of the type involved herein be provided with a hanger arrangement which is adapted to support the bag in a stable manner to thereby minimize any tendency of the bag to become tilted in one direction or the other as it is being filled and to also prevent any tendency of the tube 16 to become kinked and thereby cut off flow of fluid therethrough. The support 44 which we call the bag stabilizer has the purpose of preventing the corners of the bag from folding over.

The approved hanger arrangement of the present invention includes a hanger member 24 which in the preferred embodiment is made from a length of steel wire bent to the form shown in FIG. 7 of the drawings. Member 24 is comprised of a pair of vertical legs 26, 26 and a smoothly curved central portion 28 designed to be hooked over a horizontally extending bed member (not shown).

To firmly anchor and position the hanger member 24 with respect to the bag 10, legs 26, 26 are inserted through opening 30, 30 in an upper tab portion 32 of the bag. As most clearly shown in FIG. 6, drip chamber 14 is provided with a pair of integral wing members 34, 34 which in turn are provided with sockets 36, 36 into which the ends of hanger legs 26, 26 are inserted. Wings 34, 34 and sockets 36, 36 are preferably formed integrally with drip chamber 14. The entire drip chamber is preferably made from a semi-rigid plastic material to thus provide a relatively rigid member for anchoring the ends of hanger legs 26, 26. Thus, with the above described arrangement hanger member 24 because of its relatively rigid mounting relationship with the drainage bag 10 will provide a stable hanging device for the bag. It will be appreciated that when the hanger is firmly mounted on a horizontal support, any tendency of the bag structure to become tilted in use will be effectively resisted by the relationship between the upstanding arms 26, 26 of the hanger which are securely anchored in the sockets of the semi-rigid drip chamber 14. As previously indicated, the support arrangement of this invention also prevents any tendency of tube 16 to become kinked in use.

A strap means 38 is provided as an alternative arrangement for supporting the bag while in use. Strap means 38 is comprised of a strap member 40, one end of which is adhered to the rear face of tab portion 32 as best shown in FIG. 2. The front face of the strap is also adhered to the rear faces of wing members 34, 34 on drip chamber 14 as indicated by reference numeral 41

in FIG. 2. In the preferred embodiment strap 40 is adhered to tab 32 and wing members 34,34 by electronic welding. The strap extends from its attachment point to the wings 34,34 for approximately 8 inches and is provided with a plurality of spaced openings 42 in the free end thereof as shown in FIG. 2. The strap means 38 is designed for use where the available bed support members are too bulky for engagement by hanger member 24. In such situations the strap 40 is looped over the bed support member and then attached to hook portion 28 by means of openings 42 in the end of the strap as shown in FIG. 2. The strap support means 38 described above also provides a convenient support for use by an ambulatory patient in which case the patient holds the strap by hand with the strap attached to the hook as shown in FIG. 2.

To provide additional stabilization to the bag a horizontally extending stabilizer bar 44 for the bag 10 is mounted in the upper portion of the bag. As best shown in FIGS. 4 and 5, bar 44 is mounted in a pocket 46 formed in the upper portion of the bag. More specifically, pocket 46 is formed by electronically welding a section of material 48 to the front panel 52 of the bag as best shown in FIG. 4. The front wall 52 of the bag serves as the front wall of the pocket by virtue of the electronic weld area 54 which extends through layers 48 and 52 and completely surrounds pocket 46, to thus seal the pocket from the interior of the bag. An opening 56 in wall 52 is provided at one end of the pocket for insertion of bar 44. In the above construction the rear wall of the pocket 46 is formed by section 48 and the front wall of the pocket is formed by that portion of wall 52 lying within the electronic weld 54.

I claim:

1. A bedside drainage bag comprising:
 - a bag portion adapted to retain fluid therein;
 - a drip chamber means connected to said bag and adapted to carry fluid into said bag; and
 - a support assembly means for supporting the bag from a suitable support member comprising a substantially rigid hanger member having a hook portion adapted to be hooked over a support member and a pair of vertical legs extending upwardly from the base of said hook portion, said support assembly means further including an anchor means for anchoring the upper end of said legs to said

drip chamber means.

2. A bedside drainage bag, according to claim 1, in which said hanger member is made from a length of wire bent to the desired shape.

3. A bedside drainage bag, according to claim 1, in which said anchor means is comprised of a pair of socket members fastened to the sides of said drip chamber means and adapted to receive the upper ends of said vertical legs of said hanger member.

4. A bedside drainage bag, according to claim 3, in which said tube means includes a drip chamber member of semirigid plastic material with said socket members formed integrally with the wall of said drip chamber member.

5. A bedside drainage bag, according to claim 1, in which said support assembly means further includes a strap member fastened to said bag and extending upwardly between said hook portion and said vertical legs of said hanger member, said strap member having at least one opening in the free end thereof to facilitate attachment of the free end of said strap member to said hook portion of said hanger member.

6. A bedside drainage bag, according to claim 5, in which said strap member is adhered to the rear face of said tube means.

7. A bedside drainage bag, according to claim 1, in which said bag portion has a horizontally extending pocket formed in the upper portion thereof and a stabilizer bar member mounted in said pocket to provide additional stabilization for the bag.

8. A bedside drainage bag comprising:

- a bag portion adapted to retain fluid therein;
- a drip chamber means connected to said bag and adapted to carry fluid into said bag; and
- a support assembly means for supporting the bag from a suitable support member comprising a hanger member made from a wire bent to the desired shape, said hanger member having a hook portion adapted to be hooked over a support member and a pair of vertical legs which extend through openings in the upper portion of the bag and then extend upwardly from the base of the hook portion, said support assembly means further including a means for anchoring the upper ends of the vertical legs to the drip chamber means.

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