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JACKET FOR TRANSFUSION, INFUSION, AND INJECTION FLASKS

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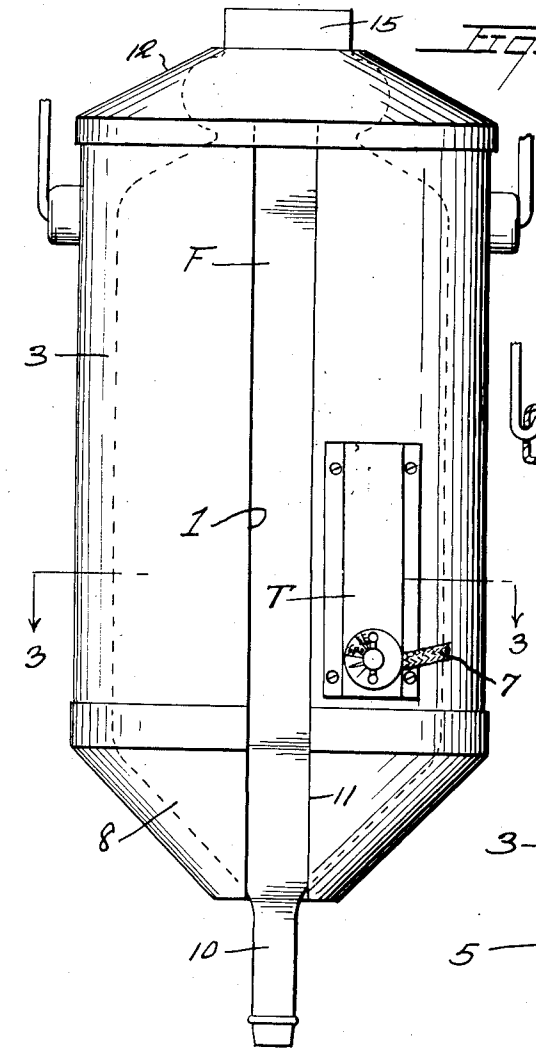


Fig. 1

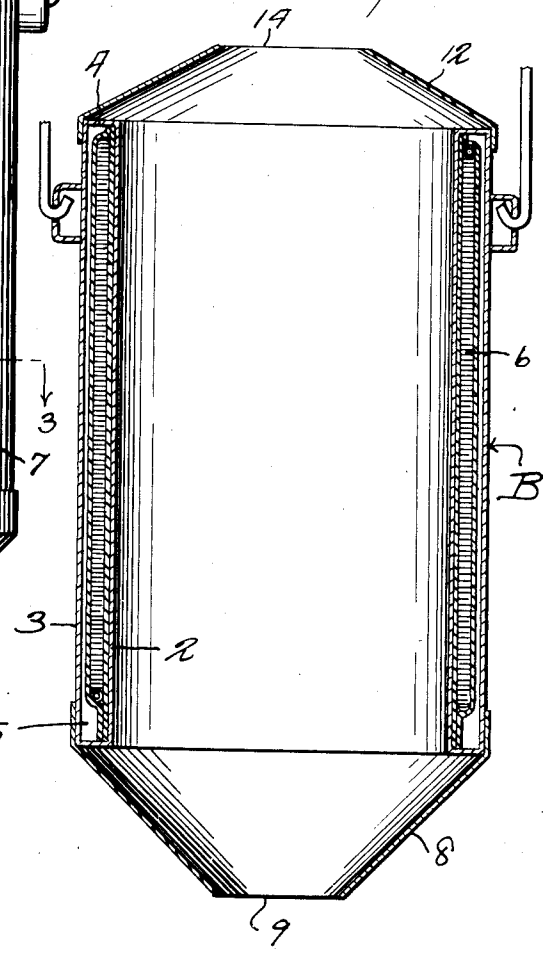


Fig. 2

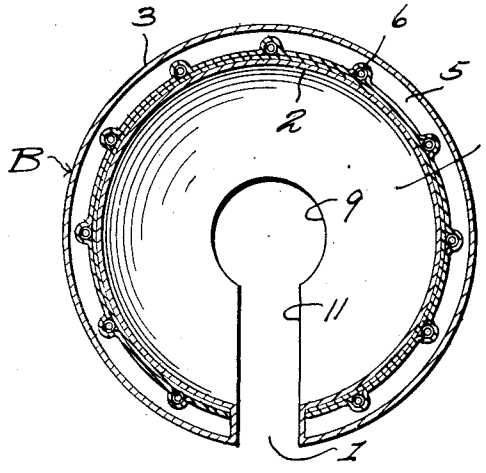


Fig. 4

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JACKET FOR TRANSFUSION, INFUSION, AND INJECTION FLASKS

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8 Claims. (Cl. 219—38)

This invention relates to a jacket for transfusion, infusion and injection flasks and the invention has for an object to provide a jacket of this character of a substantially rigid type and which is constructed in a manner to facilitate its desired placement about a flask.

It is also an object of the invention to provide a jacket of this kind of a double wall type to provide effective heat insulation together with a potential heating means arranged within the insulating space between said double walls.

Another object of the invention is to provide a device of this kind which when in applied position affords means for warming or heating the contents of transfusion, infusion or injection flasks and the like.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved jacket for transfusion, infusion and injection flasks whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawing, wherein:—

Figure 1 is a view in elevation of a jacket constructed in accordance with an embodiment of my invention and in applied position;

Figure 2 is a vertical sectional view taken through the jacket as herein disclosed and unapplied;

Figure 3 is a sectional view taken substantially on the line 3—3 of Figure 1 with the flask omitted.

As herein disclosed, my improved jacket comprises a body member B substantially C-shaped in cross section whereby said body has disposed lengthwise thereof from end to end a slot 1 affording communication with the interior of the body B which is tubular in form. The body B comprises spaced side walls 2 and 3, the opposite end portions of which being connected by the annular members 4 whereby the space 5 between the walls 2 and 3 is closed or sealed to provide a dead air chamber affording an effective heat insulating medium. Within the chamber 5 and surrounding the inner wall 2 and carried thereby is an electrical heating element 6. The terminals of this heating element 6 are connected in a manner believed to be obvious with a thermostat T generally disclosed in Figure 1 and which may be as preferred. This thermostat however is positioned exteriorly of the jacket so that convenient connection for the heating element 6 may be had through the cable 7 with and available source of electrical energy.

Fixed to the lower end portion of the body B is a bottom cap 8 in the form of an inverted frusto-cone, the central opening 9 of which being adapted to surround the tube 10 of the flask F upon which the jacket is applied. The slot 1 hereinbefore referred to is continued, as at 11, through the cap 8 to the opening 9.

The slots 1 and 11 are of particular importance as it allows a ready and convenient application of the jacket to the flask without danger of infecting sterile tubes and needles.

When the jacket is applied to a flask the upper or outer end is open but after the jacket has been applied said open end is adapted to be substantially closed by a removable cap 12 also preferably in the form of a frusto-cone and having a central opening 14 so that the applied cap 12 will not be obstructed by the adjacent neck portion 15 of the flask F.

The cap 12 is preferably maintained by gravity in applied position upon the body.

With the jacket applied to a flask F and the thermostat T set for a desired degree, as for example 98°, the electricity delivered through the cable 7 will traverse the element 6 to heat it and thus maintain the desired heat of the flask content. Should such heat, however, tend to rise above approximately 98°, the thermostat T operates to open the electric circuit. When the temperature drops back to approximately 98° the thermostat will then operate to close the circuit to again allow the element 6 to become effective. The jacket as herein disclosed, and particularly when applied to a flask, may be readily transported by hand, as by use of a bail or the like, and which is of particular advantage in transporting fluid from the subject to the patient.

From the foregoing description it is thought to be obvious that a jacket for a transfusion and infusion flask constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in car-

rying out my invention in practice except as hereinafter claimed.

I claim:—

1. As a new article of manufacture, a jacket to be applied around a transfusion and infusion flask, said jacket comprising a tubular body substantially C-shaped in cross section to provide a slot extending lengthwise thereof from end to end, said slot being open at both ends, a bottom cap carried by the body having a central opening and having a slot continuing from the slot of the body to the central opening of the cap, and a potential heating element carried by the wall of the body.

2. As a new article of manufacture, a jacket to be applied around a transfusion and infusion flask, said jacket comprising a tubular body substantially C-shaped in cross section to provide a slot extending lengthwise thereof from end to end, said slot being open at both ends, a bottom cap carried by the body having a central opening and having a slot continuing from the slot of the body to the central opening of the cap, and a potential heating element carried by the wall of the body, the wall of the body having spaced parts providing a dead air space, the heating means being within said space.

3. As a new article of manufacture, a jacket to be applied around a transfusion and infusion flask, said jacket comprising a tubular body substantially C-shaped in cross section to provide a slot extending lengthwise thereof from end to end, said slot being open at both ends, a bottom cap carried by the body having a central opening and having a slot continuing from the slot of the body to the central opening of the cap, and a potential heating element carried by the wall of the body, and a cap detachably engaged with the opposite end of the body, said cap also having a central opening.

4. As a new article of manufacture, a jacket to be applied around a transfusion and infusion flask, said jacket comprising a tubular body substantially C-shaped in cross section to provide a slot extending lengthwise thereof from end to end, said slot being open at both ends, a bottom cap carried by the body having a central opening and having a slot continuing from the slot of the body to the central opening of the cap, a potential heating element carried by the wall of the body, and a thermostat associated with the heating means for controlling the same.

5. As a new article of manufacture, a jacket to be applied around a transfusion and infusion flask, said jacket comprising a tubular body substantially C-shaped in cross section to provide a slot extending lengthwise thereof from end to end, said slot being open at both ends, a bottom cap carried by the body having a central opening and having a slot continuing from the slot of the body to the central opening of the cap, and a potential heating element carried by the wall of the body, said potential heating element being of an electrical type.

6. As a new article of manufacture, a carrying and warming jacket for a transfusion and infusion flask having a discharge tube at one end, said flask comprising a tubular body substantially C-shaped in cross section to provide a slot extending lengthwise thereof from end to end, said slot being open at the opposite ends of the body, said tubular body being adapted to surround the flask, a bottom cap carried by the body having a central opening and having a slot continuing from the slot of the body to the central opening of the cap, the slot of the body and the slot of the cap facilitating the placement of the flask within the jacket without breakage of the discharge tube, and a potential heating element carried by the body.

7. As a new article of manufacture, a carrying and heating jacket to be applied around a transfusion and infusion flask, said jacket comprising a tubular body having spaced side walls providing a dead air chamber therebetween, an electrical heating medium within said dead air chamber, said medium being carried by and surrounding the inner wall, and means for connecting said heating medium with a source of E. M. F.

8. As a new article of manufacture, a carrying and warming jacket for a transfusion and infusion flask having a discharge tube at one end, said flask comprising a tubular body substantially C-shaped in cross section to provide a slot extending lengthwise thereof from end to end, said slot being open at the opposite ends of the body, said tubular body being adapted to surround the flask, a bottom cap carried by the body having a central opening and having a slot continuing from the slot of the body to the central opening of the cap, the slot of the body and the slot of the cap facilitating the placement of the flask within the jacket without breakage of the discharge tube, and a potential heating element carried by the body, the applied flask engaging the bottom cap from above with the tube of the flask extending out through the central opening of the cap.

JESSE C. HOPKINS.