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2,346,334

PARENTERAL ADMINISTRATION UNIT

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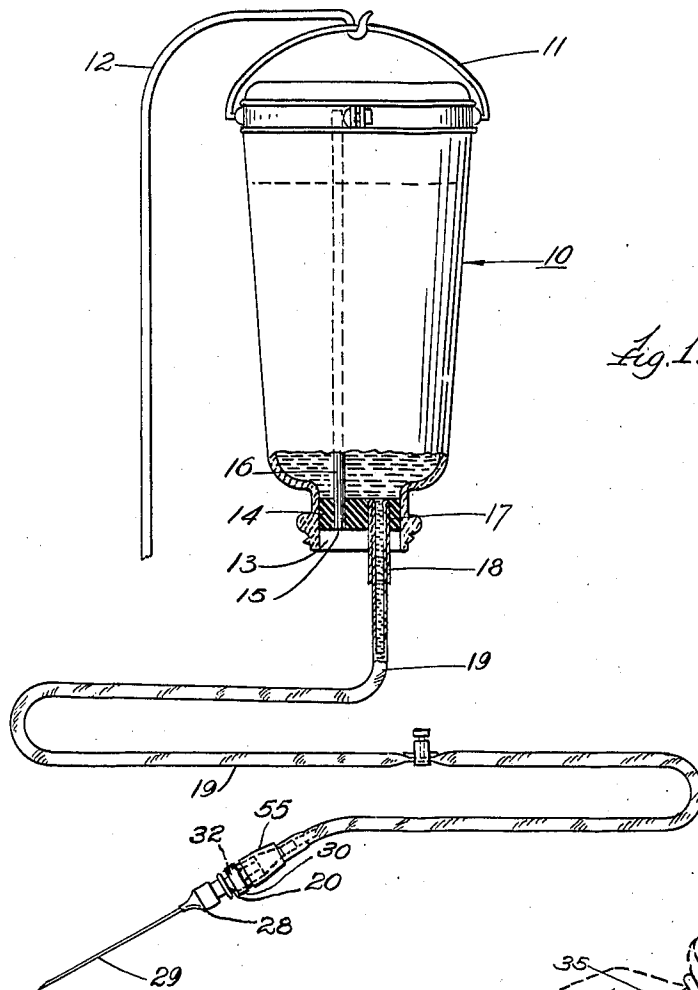


Fig. 1.

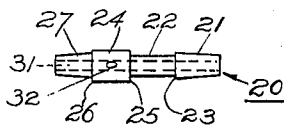


Fig. 2.

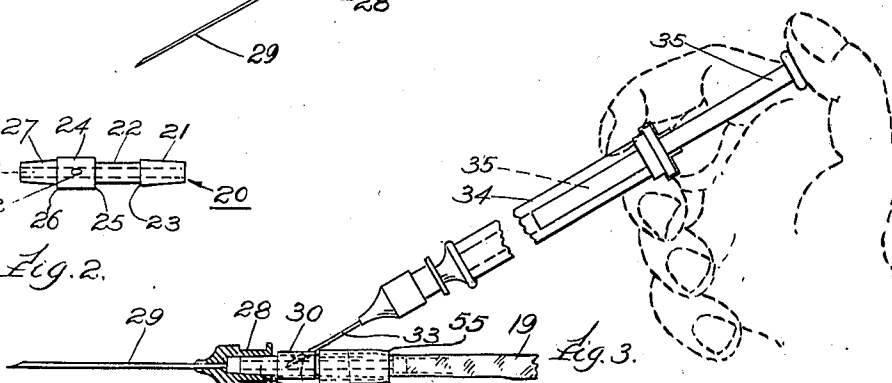


Fig. 3.

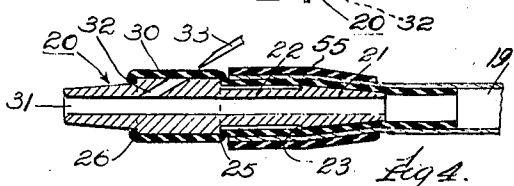


Fig. 4.

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UNITED STATES PATENT OFFICE

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PARENTERAL ADMINISTRATION UNIT

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3 Claims. (Cl. 128—214)

My invention relates to a parenteral administration unit, so constructed as to permit emergency injections through said unit.

When a seriously injured or sick person is given a parenteral administration the person sometimes begins to sink and it is necessary to administer adrenalin or other restoratives or stimulants. The veins of a sick person are often difficult to find and loss of time might result in death.

The object of this invention is to provide a construction whereby the needle containing the adrenalin or the like may be inserted into the parenteral administration apparatus so that the restorative or stimulant may pass through the parenteral administration needle into the person's vein and blood stream without removal of the parenteral administration needle, or interruption of the parenteral administration. This saves locating another vein in the person and eliminates the insertion in the person of a second needle. Time is saved and satisfactory administration is assured. Sometimes death may be prevented.

My invention also contemplates such other objects, advantages and capabilities as will later more fully appear and which are inherently possessed by my invention.

While I have shown in the accompanying drawing a preferred form of my invention, yet I wish it understood that the same is susceptible of modification and change without departing from the spirit of my invention.

Referring to the drawing, Fig. 1 is an elevational view of my parenteral administration unit; Fig. 2 is a detailed elevational view of my adapter; Fig. 3 is an elevational view of the insertion of the second needle into the adapter for use, and Fig. 4 is an enlarged sectional view of the adapter, sealing member and the connection with the tubing.

The embodiment selected to illustrate my invention includes a container 10 containing desired solution. For the administration of the solution the container 10 is inverted with bale 11 held by standard 12. Within neck 13 is a suitable plug 14 having air opening 15 receiving one end of hollow air tube 16 which extends into the container 10. Another opening 17 in plug 14 receives connector 18 to which is attached tubing 19.

Into the other end of tubing 19 is inserted an adapter 20. Said adapter 20 has a rear shank portion 21, and a slightly reduced intermediate

portion 22 with a shoulder 23 therebetween. Adjoining the intermediate portion 22 is an enlarged portion 24 having spaced shoulders 25 and 26. Beyond said enlarged portion 24 is a reduced forward portion 27 having a slight inward taper. Said forward portion 27 is adapted to receive the rounded inner end portion 28 of a needle 29 and to hold the same in position by friction grip.

The tubing 19 preferably extends forwardly to shoulder 25 of enlarged portion 24, and is positioned over a portion of transparent or translucent rubber sealing member 30. Member 30 contacts adapter 20, extending forwardly beyond shoulder 26 and rearwardly beyond rear shank portion 21 as shown in Fig. 4. An outer rubber cover or band member 55 is tightly positioned over that portion of tubing 19 between shoulder 25 and rear shank portion 21.

My adapter 20 has a central bore 31 extending therethrough. An opening 32 is provided in enlarged portion 24 communicating with bore 31. I prefer that the opening 32 extend diagonally forwardly to bore 31 so as to receive all of the beveled portion of an inserted needle. This provides better communication and faster passage of liquid as well as preventing any liquid from being lost.

In use, let us assume that a person receiving a parenteral administration suddenly begins to sink. Adrenalin or the like must be injected immediately to save the person's life. There is no time to find another vein to insert another needle. There is no time to withdraw the parenteral administration needle and insert the adrenalin needle. The user, being able to see opening 32 through transparent member 30, merely pierces sealing member 30 with the needle 33 of a syringe 34 filled with adrenalin or the like, presses needle 33 into opening 32 and actuates the plunger 35. The adrenalin flows through opening 32 into bore 31 and out needle 29 into the person's blood stream. The needle 33 is then withdrawn and the opening in sealing member 30 closes. The parenteral administration, which has not been interrupted, continues.

Having thus described my invention, I claim:

1. A parenteral administration unit comprising a container having sterile injection solution therein, a plug normally sealing the neck of said container, said plug having air inlet means and liquid outlet means adapted to function when said container is being used, a tubing connected on one end to said liquid outlet means, an adapter having a rear shank portion attached

to the other end of said tubing, said adapter having a tapering front portion and an enlarged portion having spaced shoulders between said rear and front portions, said adapter having a bore extending therethrough, said enlarged portion having an opening extending diagonally forwardly to communicate with said bore, a transparent sealing member positioned on said adapter and covering said opening in said enlarged portion, an injection needle attached to said tapering front portion, said injection needle adapted to be injected into the vein of a person designed to receive the injection solution in said container, a second needle in communication with a source of emergency stimulating solution said sealing member adapted to be pierced by said second needle, and said opening in said enlarged portion adapted to receive said second needle and emergency stimulating solution from said second needle for communication to said bore, thence to said injection needle and into the vein of the person receiving the injection solution from said container, without removing said injection needle from the person and without inserting said second needle into the person.

2. A parenteral administration unit comprising a container having sterile injection solution therein, a plug normally sealing the neck of said container, said plug having air inlet means and liquid outlet means adapted to function when said container is being used, a tubing connected on one end to said liquid outlet means, an adapter having a rear shank portion attached to the other end of said tubing, said adapter having a tapering front portion and an enlarged portion between said rear and front portions, said adapter having a bore extending therethrough, said enlarged portion having an opening extending to communicate with said bore, a transparent sealing member positioned on said adapter and covering said opening in said enlarged portion, an injection needle attached to said tapering front portion, said injection needle adapted to be injected into the vein of a per-

son designed to receive the injection solution in said container, a second needle in communication with a source of emergency stimulating solution, said sealing member adapted to be pierced by said second needle, and said opening in said enlarged portion adapted to receive said second needle and emergency stimulating solution from said second needle for communication to said bore, thence to said injection needle and into the vein of the person receiving the injection solution from said container, without removing said injection needle from the person and without inserting said second needle into the person.

3. A parenteral administration unit comprising a container having sterile injection solution therein, a tubing connected on one end to said container, said container having means to permit the flow of the injection solution to said tubing, an adapter attached on one end to said tubing, an injection needle attached to the other end of said adapter, said injection needle adapted to be injected into the vein of a person designed to receive the injection solution in said container, said adapter having a bore extending therethrough to provide communication between said tubing and said injection needle, said adapter having an opening in its side wall extending therein for communication with said bore, a transparent sealing member positioned on said adapter and covering the opening in the side wall of said adapter, a second needle in communication with a source of emergency stimulating solution, said sealing member adapted to be pierced by said second needle and said opening adapted to receive said second needle and emergency stimulating solution from said second needle for communication to said bore, thence to said injection needle and into the vein of the person receiving the injection solution from said container, without removing said injection needle from the person and without inserting said second needle into the person.

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