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J. E. B. SHAW

2,367,806

PARENTERAL ADMINISTRATION SET

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*Fig. 1.*

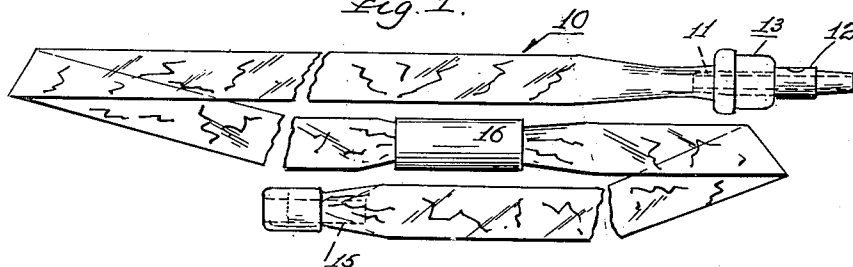


*Fig. 2.*

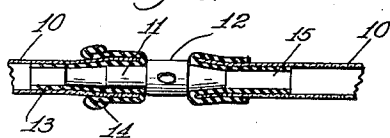


*Fig. 3.*

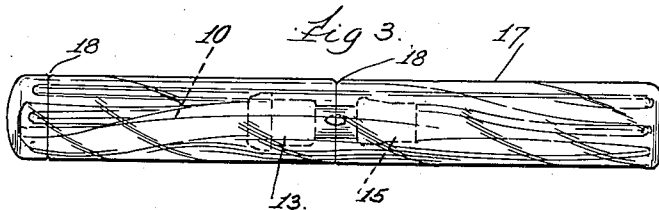
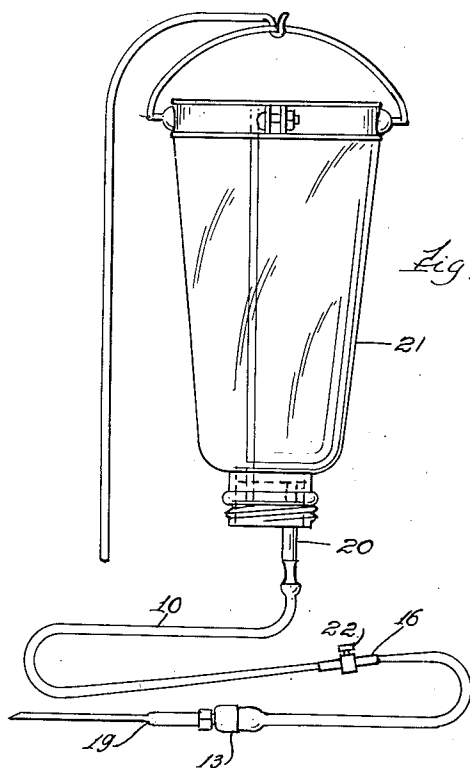


*Fig. 4.*



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## UNITED STATES PATENT OFFICE

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## PARENTERAL ADMINISTRATION SET

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1 Claim. (Cl. 128—214)

In parenteral injections, it has been a custom to use old tubing, and connections. Frequently, foreign matter had to be removed from such equipment, in addition to completely sterilizing the parts. All this took time and effort. In those instances where a parenteral injection had to be given in an emergency, and time was of the essence, the problem became acute.

It is among the objects of this invention to solve this problem by providing a parenteral administration set in an hermetically sealed tube. My set has sterile, previously unused tubing, connections for immediate attachment to the dispensing means of a bottle containing the injection solution, and to the injection needle, and means for receiving a clamping member. My set is packed and sterilized in an hermetically sealed glass tube. The tube is so formed, scored and marked as to be easily and quickly broken and its contents made available for aseptic use. After one use the parts of my set may be disposed of, never to be used again for a parenteral injection. 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 tubing and its associated members; Fig. 2 is a detailed sectional view of the juncture of the adaptor and the connection; Fig. 3 is a front elevational view of my parenteral administration set and Fig. 4 is an elevational view of my tubings and fitting in position for use with the blood transfusion apparatus after removal from the glass tube.

The embodiment selected to illustrate my invention comprises a suitable length of tubing 10 of cellulose or other disposable material. Within one end of said tubing extends the rear shank 11 of a needle adaptor 12. A rubber member 13 tightly fits around shank 11 and is rolled back against the end portion of said tubing 10 to form a band 14 holding the tubing 10 and the adaptor 12 in fixed position.

Within the other end of tubing 10 is inserted a rubber tube or connection 15 adapted to fit snugly therein, said tube 15 is rolled back against the end portion of said tubing 10 to fit tightly thereagainst.

Another rubber tube or sleeve 16 surrounds tubing 10 and is positioned thereon at a desired point spaced from said needle adaptor 12 and is adapted to receive a clamping means for regulating the flow of fluid in tubing 10.

Originally the tubing 10 is folded so that the adaptor 12 is slipped into the connection 15. A

thin coating of glycerine is applied to the tubing before sealing so as to overcome any possible dryness. These parts are new and unused, when they are hermetically sealed and sterilized in container 17 of glass or the like. My container 17 is substantially tubular in shape with closed rounded ends and is preferably transparent. A score 18 is provided in the central portion of the container, so that when the physician desires to use my device, he merely grasps the container with a hand on either side of the score, and aseptically breaks the container on said score.

My container 17 may have the score 18 adjacent one of the end portions so that it may be conveniently filed on said score to open said container.

The tubing 10 is removed from the container 17 and unfolded. The adaptor 12 is withdrawn from the connection 15. The adaptor 12 is attached to a sterile needle 19, the connection 15 is attached to a sterile dispensing means 20 of a bottle 21 containing desired injection solution, and a clamping member 22 is attached to sleeve 16, as shown in Fig. 4. The needle is then inserted into the patient and the injection begins without delay. There is no need to remove any foreign matter or to further sterilize the tubing and its associated parts. After the injection has been completed, the set being inexpensive and disposable, may be thrown away. When human life is at stake, or in the balance, as is generally the case when parenteral injections are given, my set guarantees the standard of asepsis required for such operations.

Having thus described my invention, I claim:

A parenteral administration set comprising a desired length of foldable cellulose tubing, a glycerine coating adapted to overcome dryness applied to said tubing, an adaptor extending into one end of said tubing, a rubber member tightly attached to said adaptor and rolled over against said tubing to hold said adaptor and said tubing in fixed position, a rubber tube connection extending into the other end of said tubing and rolled over against the outside of said tubing, and a rubber sleeve slidable on said tubing, the open end of said connection being slightly larger than said adaptor, said tubing folded so that said adaptor extends within said connection, said tubing, adaptor, connection and sleeve members being sterile, previously unused and disposable, said adaptor adapted to be removed from said connection and to receive a sterile injection needle, said connection adapted to be attached to a dispensing cap of a bottle containing injection fluid, said sleeve adapted to receive a clamping member to control the flow of liquid through the tubing, said members adapted to be thrown away after use.

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