

[54] SYRINGE WITH WRITING SURFACE

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3,599,362	8/1971	Klober	40/310

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FOREIGN PATENTS OR APPLICATIONS

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[21] Appl. No.: 416,536

OTHER PUBLICATIONS

Becton-Dickinson and Company catalogue (1951), p. 22.

[52] U.S. Cl..... 128/218 R; 40/310; 222/23

[51] Int. Cl. A61m 5/18; G09f 3/00

[58] **Field of Search** 128/215, 2 F, 218 R, 220,
128/218 D, 218 C, 272, 276, 234, DIG. 5;
222/23; 215/7, 12, 100; 23/292; 40/310, 306;
73/371, 425.6, 425.4; 401/194

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[56] **References Cited**

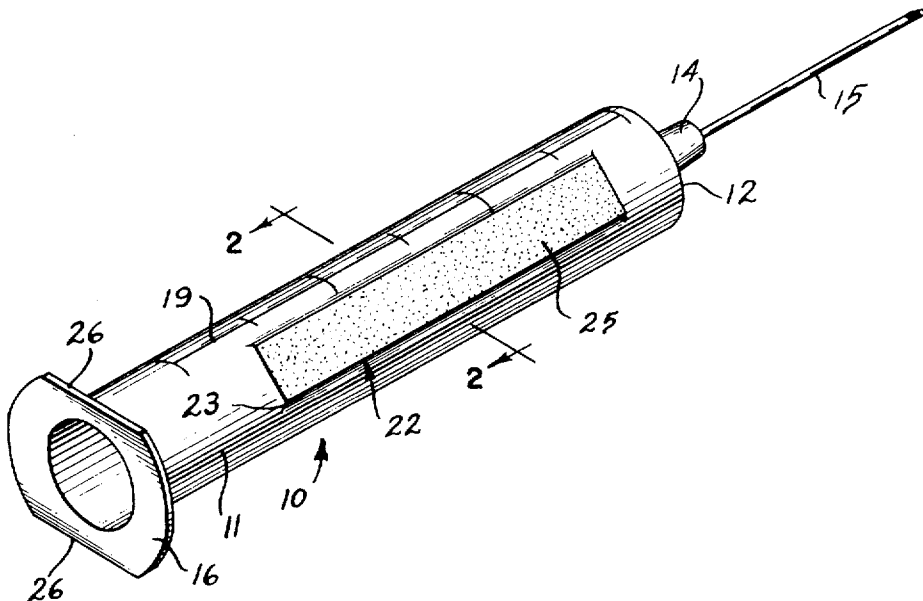
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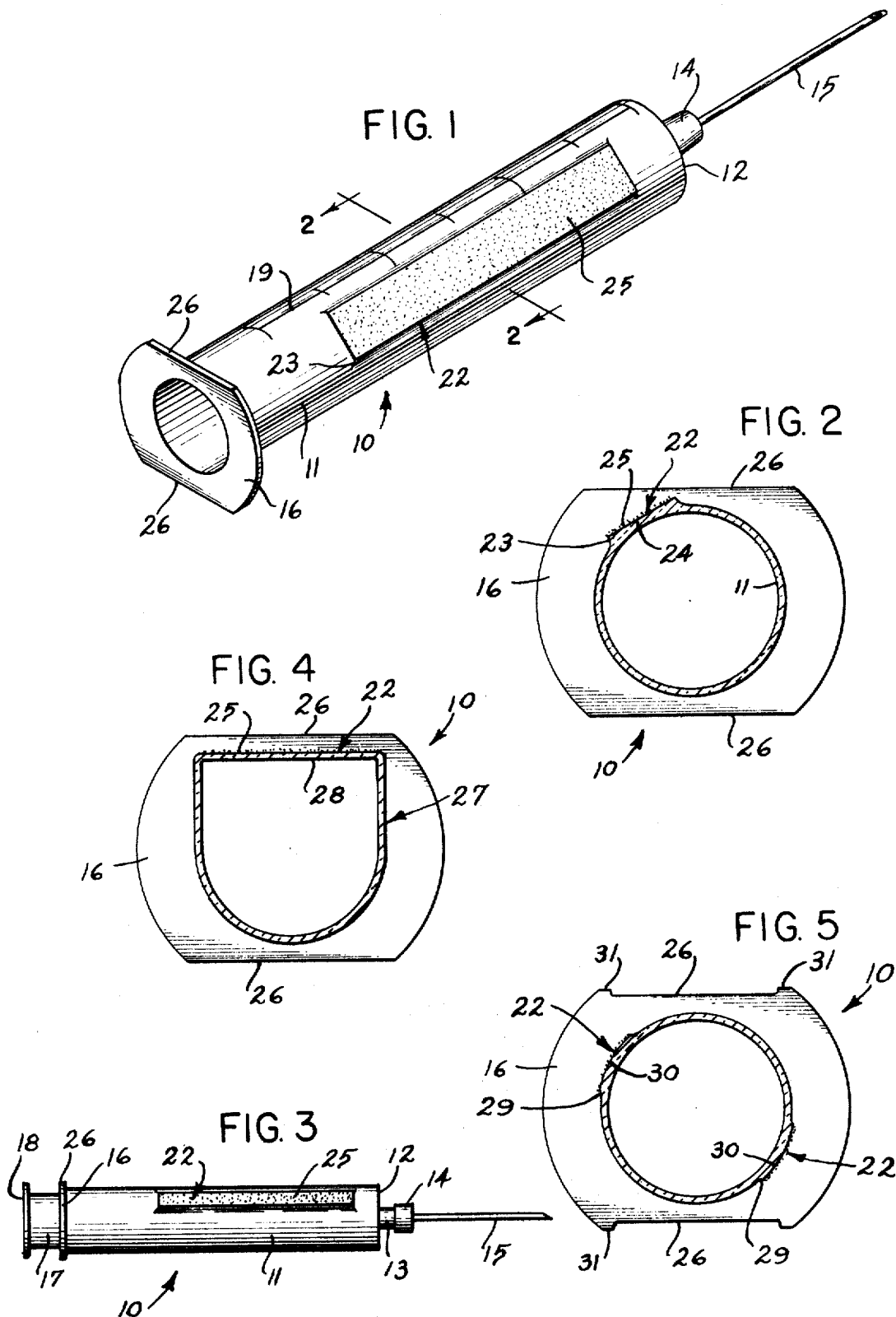
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[57] **ABSTRACT**

Apparatus including a tubular member having a portion of the exterior surface treated to provide a writing surface and such member having a flanged portion adjacent one end which forms a support to maintain the member in a position such that the writing surface is prominently displayed when the member is placed on a supporting structure.

2 Claims, 5 Drawing Figures





SYRINGE WITH WRITING SURFACE

BACKGROUND OF THE INVENTION

1. Field of the Invention

The invention relates generally to medical instruments and relates specifically to a hypodermic syringe of the type used to inject fluids into and withdraw fluids from a person or animal.

2. Description of the Prior Art

Heretofore there has been a continuing effort directed to the development and design of various hypodermic syringes. However, one problem continues to exist which is of direct consequence to the safe utilization of any hypodermic syringe. Specifically, it is necessary to provide a system or method of insuring that a particular injection is administered to the person for whom it was prepared.

There are many instances in hospitals, clinics, doctor's offices, and other areas when an intern, nurse, nurse's aide, or other medical assistant has been called upon or directed by one or more doctors to prepare various types of injections for several patients simultaneously or directed to extract samples of body fluids for subsequent testing. Also the doctor may order that an injection be prepared for administration to a patient by the doctor or an assistant at a later time. The situation often exists in which the individual prescribing a particular medicine or dosage for injection does not or is not able to oversee the preparation or the administration of the injection to the patient. There is, therefore, some likelihood of error or other difficulty encountered in insuring the proper medicinal application to the patient for whom an injection has been prescribed.

Additionally, samples of body fluids, including blood samples, may be extracted from several patients and sent to the laboratory for testing at the same time. It is very important to the diagnosing and treating of the patients that the sample of fluid of one patient is not confused with the sample of another patient either by the person taking the samples or by the laboratory technician.

Some of the present methods for labelling the contents of a syringe or identifying the patient to whom an injection is intended or from whom fluid has been extracted include: recording the information on tape or paper which is then adhered to the syringe, taping the medicine containing vial to the syringe, placing an identifying card or tag in a slot provided in the syringe or a rack which receives the syringe, placing the filled syringe on an identifying card, and leaving the needle of the syringe inserted into the vial mouth or stopper to be filled immediately prior to use.

In the past, efforts have been made to provide containers of glass, thermoplastic material, and other materials having a relatively hard smooth surface, with a roughened area on which indicia could be placed with a writing implement. Some examples of the prior art are disclosed in U.S. Pat. Nos. 283,825 to Shepard; 431,132 to Wharton; 994,482 to Schneider; 3,288,318 to Corbin et al; and 3,599,362 to Kober.

SUMMARY OF THE INVENTION

The present invention is embodied in a hypodermic syringe having an elongated barrel with at least one roughened area thereon providing a writing surface on which indicia identifying the patient and/or the contents of the syringe can be easily applied. The syringe

includes an enlarged flange adjacent one end of the barrel and such flange is adapted to resist rotation of the barrel and insure that the writing surface portion of the barrel is prominently displayed when the syringe is placed on a supporting surface so that the indicia is easily applied thereon and can be easily read.

It is an object of the invention to provide a hypodermic syringe which can be easily and conveniently marked by pencil, pen or other marking device to indicate the contents thereof and/or identify the patient for whom the syringe has been prepared and thereby correlate the contents of the syringe and the patient.

It is a further object of the invention to provide an enlargement at one end of the syringe barrel to resist rotation and allow information to be recorded on the writing surface of the barrel and permit such information to be prominently displayed when the syringe is placed on a table, tray, cart, or other supporting surface.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a perspective view of the hypodermic syringe of the present invention.

FIG. 2 is an enlarged section on the line 2—2 of FIG. 1.

FIG. 3 is a side elevation at a reduced scale.

FIGS. 4 and 5 are sections similar to FIG. 2 of modified forms of the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

With continued reference to the drawing, a hypodermic syringe 10 is provided having an elongated generally tubular barrel 11 constructed of glass, thermoplastic material or other relatively rigid transparent or translucent material. The barrel 11 is substantially closed at one end by an end wall 12 having an outwardly extending projection 13 which is adapted to receive the fastening member 14 of a hollow needle 15. A central orifice (not shown) extends through the end wall 12 and the projection 13 to provide communication between the barrel 11 and the hollow needle 15. The opposite end of the barrel has an outwardly extending flange 16 providing a finger engaging abutment by which the syringe is held between the fingers.

A plunger 17 having a resilient piston (not shown) at one end and an operating portion 18 at the opposite end is provided and at least portions of said plunger are slidably received within the barrel 11 to draw fluids into the barrel as well as to discharge fluids therefrom. If desired the barrel 11 may have a calibrated scale 19 extending generally longitudinally thereof to indicate the precise quantity of fluid within the barrel at any given time. The construction thus far described is conventional in the prior art and forms no part of the present invention.

It is desirable to place identifying indicia directly on the barrel so that the possibility of the indicia becoming separated from the syringe does not exist. In order to do this a writing surface 22 is integrally formed on a portion of the barrel 11 by etching, sand blasting or other roughening process so that indicia can be marked thereon by a conventional writing implement such as a pen, pencil, crayon or the like (not shown). The writing surface 22 has been illustrated as extending along the length of the barrel 11, however, it is contemplated that such surface could extend generally circumferentially

of the barrel or at an angle to the longitudinal axis thereof.

With particular reference to FIGS. 1-3, the barrel 11 is generally cylindrical and the writing surface 22 includes an enlarged portion 23 formed integrally with the barrel 11 and extending outwardly a short distance from the periphery thereof. The enlarged portion 23 may include a substantially flat face 24 which is treated in any desired manner, as by frosting, sand blasting, etching or the like 25 to produce a roughened surface capable of accepting marking material from a writing implement. As illustrated best in FIG. 2, an enlarged portion 23 is provided which is circumferentially offset from the vertical axis of the barrel 11 so that indicia can be readily marked thereon in a position to be easily readable. It will be apparent that the enlarged portion 23 could be located in any desired circumferential position along the length of the barrel 11 including along the top of the barrel so that indicia can be applied with equal facility by either a righthanded or lefthanded person.

In order to prevent the syringe 10 from rolling when placed on an inclined surface, as well as to maintain the writing surface 22 in a stable, easily usable and readable position, the flange 16 at one end of the barrel is provided with flattened portions 26 at opposite sides which engage the supporting surface for the syringe and substantially prevent rotary motion thereof. It is contemplated that a writing surface 22 could be applied to both sides of the barrel 11 so that at least one writing surface will be accessible regardless of which flattened portion 26 is in engagement with the supporting structure.

With particular reference to FIG. 4, another embodiment of the syringe is provided in which a barrel 27 is provided having a generally D-shape cross-section with a flat side 28 being substantially parallel to one of the flattened portions 26 of the flange 16. The upper flat surface of the barrel 27 may have all or any part of its surface roughened by sand blasting, etching or the like to provide a surface capable of accepting indicia applied by a conventional writing instrument. If desired, the flat side 28 can be disposed at an angle to the flattened portions 26 as previously described.

With particular reference to FIG. 5, a further embodiment is illustrated having a pair of opposed enlarged portions 29 projecting outwardly from the barrel 11 so as to be readily visible. The enlarged portions 29 have arcuate outer surfaces 30 which are generally concentric with the outer surface of the barrel 11 and which are etched or otherwise treated to receive indicia thereon. In this modification each of the flattened portions 26 of the flange 16 has a pair of spaced outwardly

extending feet 31 which maintain the barrel in fixed position regardless of any irregularities in the surface on which the syringe is placed.

In the operation of the device, the hollow needle 15 is inserted into a supply of fluid such as a medicament in a vial or other container, blood vessel or the like, after which the plunger 17 is retracted to draw fluid into the syringe 10. As soon as a desired amount of fluid is in the syringe, such syringe is placed on a substantially flat surface with one of the flattened portions 26 in engagement with such surface so that indicia identifying the contents of the syringe can be applied to the writing surface 22. If the contents of the syringe are to be administered at a later time, the indicia may include the names of the patient and the doctor, room number, and the time that the medicament is to be injected. If the contents of the syringe are to be tested for diagnostic or other procedures, the indicia may include the names of the patient and doctor, room number and any specific instructions to the laboratory technician.

If the syringe is to be reused after the contents have been dispensed, the plunger, barrel and needle are disassembled and sterilized during which time the sterilization process removes the indicia from the writing surface 22. If the syringe is not to be used again after the contents have been discharged, such syringe can merely be discarded.

I claim:

1. A hypodermic syringe comprising an elongated substantially non-flexible barrel having wall structure defining a bore adapted to receive a plunger, said barrel being substantially closed at one end and open at the other end, means on said substantially closed end for mounting a hollow needle, an enlarged flange integrally formed on said barrel adjacent the open end, said flange having at least one substantially flat portion located adjacent to said barrel and extending laterally thereof for engaging a substantially level surface, indicia fixed on said barrel and extending longitudinally thereof for indicating the volume of the contents within the same, a roughened writing surface integrally formed on the exterior of said barrel generally opposite the flat portion of said flange, said writing surface extending substantially axially of said barrel adjacent to said indicia, whereby when the flat portion of said flange is placed in engagement with a supporting surface, said barrel is stabilized so that indicia identifying the contents can be written on said writing surface and can be observed without handling the syringe.

2. The structure of claim 1 in which said writing surface is substantially flat.

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