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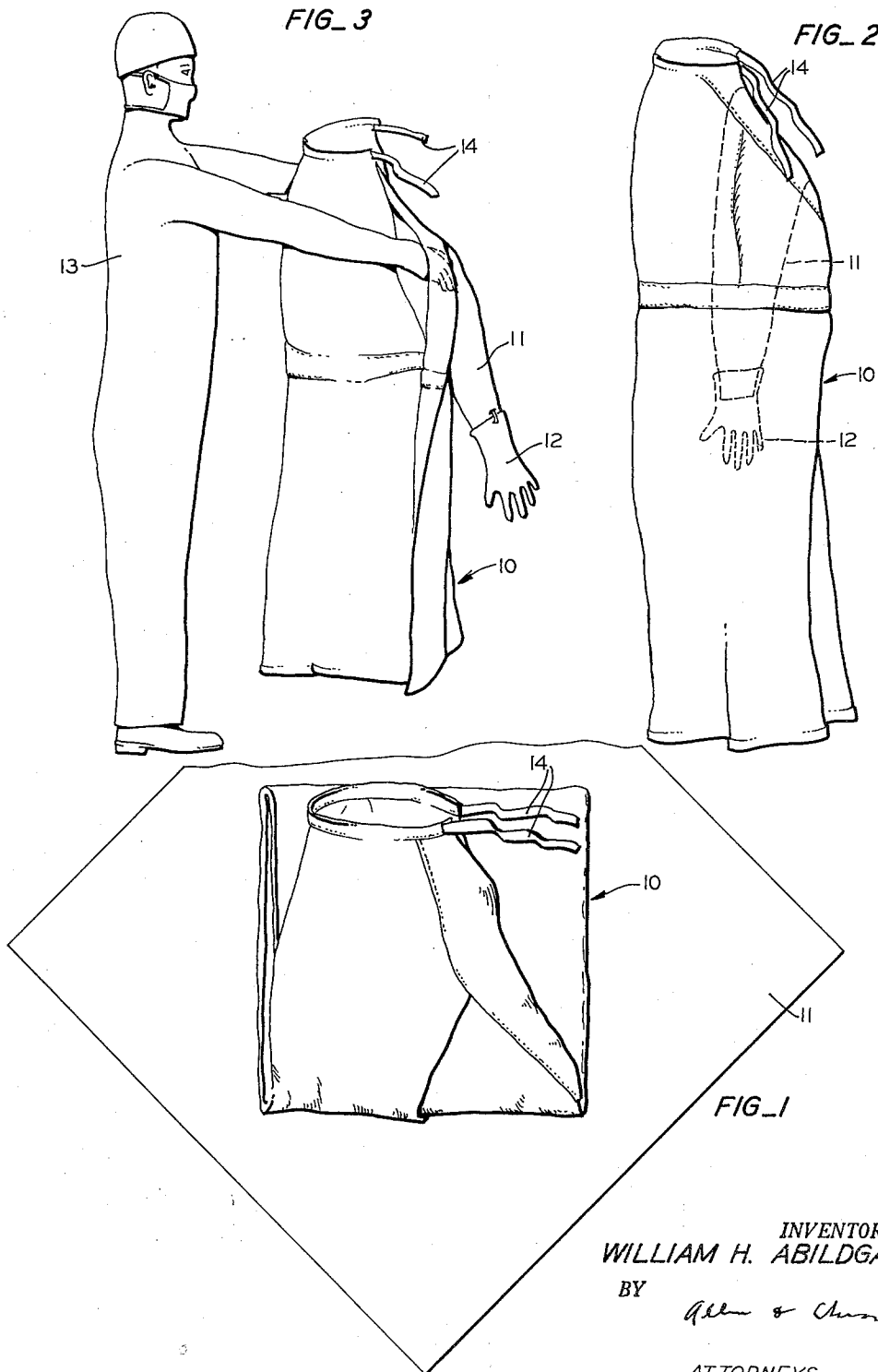
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3,045,815

SURGEON'S GOWN AND GLOVE ASSEMBLY AND METHOD OF STERILIZING SAME

Filed Aug. 24, 1959

2 Sheets-Sheet 1



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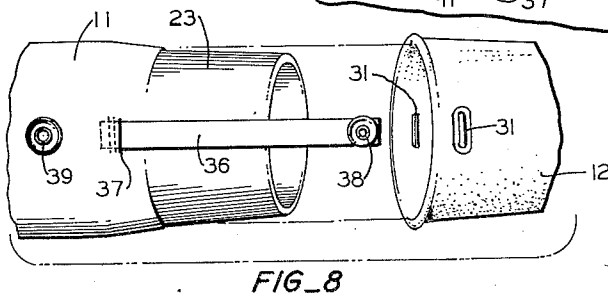
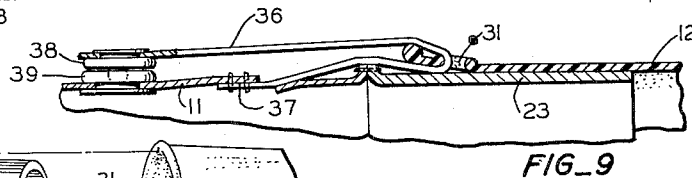
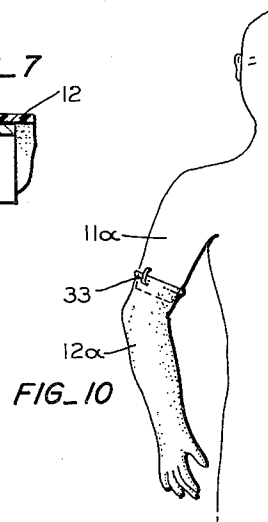
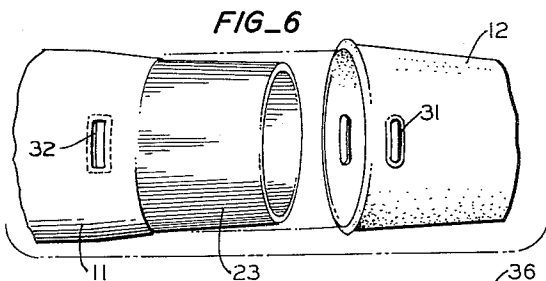
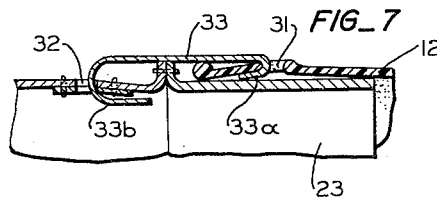
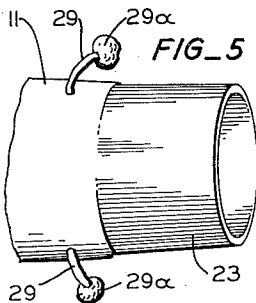
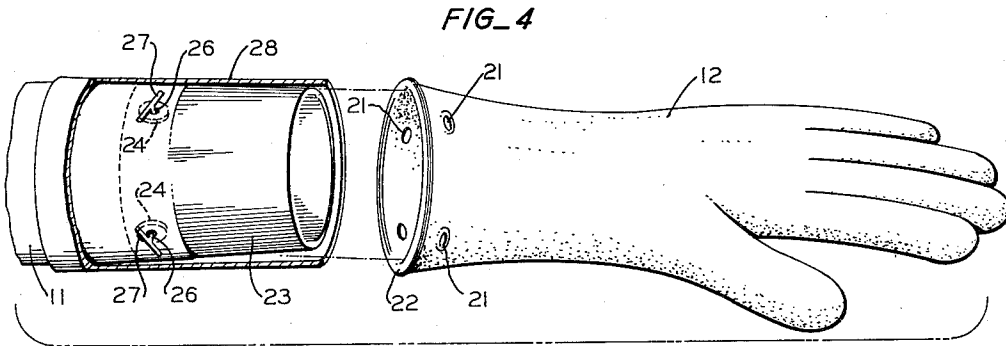
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SURGEON'S GOWN AND GLOVE ASSEMBLY AND METHOD OF STERILIZING SAME

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2 Sheets-Sheet 2



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SURGEON'S GOWN AND GLOVE ASSEMBLY AND METHOD OF STERILIZING SAME

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The present invention relates to surgeon's gowns and glove assemblies and is concerned more particularly with a new structure and method which will materially reduce the cost of laundering, handling, and sterilizing operations, as well as reducing the cost of robing surgeon for operative procedure.

The present practice to provide a surgeon with sterile wearing apparel comprises individually wrapping each folded gown after laundering in a cover, and then sterilizing the gown while protected by the cover and delivering this wrapped sterile package to the place of storage for use by a surgeon. Also the surgeon's gloves are individually wrapped as a pair in a covering, the entire package sterilized, and then stored for use adjacent to the stored sterilized gown package. When the surgeon is ready to put on the gown and gloves, a sterile nurse assists him in the handling of the gown so that the surgeon's hands will not come in contact with the exterior portion of the gown. While the gowns are folded inside out, so that a surgeon can handle the inside of the gown in putting it on, it is necessary for the sterile nurse to hold the gloves so that the surgeon can plunge his hands into them in completing the robing operation, the gloves overlapping the stockinet portion of the sleeve of the operating gown.

The above procedure is expensive and time-consuming and sometimes takes several minutes with a nurse in attendance to properly robe a surgeon for an operation, or to supply him with a new gown if for some reason the sleeve or some portion of the gown becomes soaked with blood or the like so as to render the surgeon unsterile.

The present invention is designed to materially simplify the operation in the handling of the gown in sterilizing and the handling of the gown during robing by the surgeon and to render unnecessary the presence of a sterile nurse to handle the gloves while the surgeon is putting them on, and to assist the surgeon with the gown as is quite often done.

In accordance with the instant invention, the gloves and sleeves of the gown are preferably of special construction and design so that the gloves can be detachably connected to the sleeves to enable the handling of the gown and the gloves as a unit during the sterilizing operation and during the operation of putting the gown and glove assembly on the surgeon. This eliminates the separate sterilizing of the gloves and the gown, eliminates entirely the covering for the gloves which is now used and thereby reduces the laundering cost and the handling cost of the gowns and gloves in preparing them for an operation and in preparing the surgeon for an operation.

Accordingly, it is the general object of the invention to provide improved means and method for handling surgeons gowns and gloves during sterilization and during the donning of this assembly for the operation.

It is another general object of the invention to provide a new surgeon's gown and glove assembly which facilitates the above objects.

It is the further object of the invention to provide a gown and glove assembly where the glove can be attached at a desired portion on the sleeve, and the sleeves can be made of the desired length in accordance with the operation being performed.

Other objects and advantages of the invention will be-

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come apparent from the following description of certain preferred embodiments thereof, taken in connection with the accompanying description, made with reference to attached drawings, in which:

FIG. 1 is a plan view of the surgeon's gown and assembly, as folded after assembly of gloves thereon and placed inside of the wrapper ready for wrapping and placing in the sterilizing chamber.

FIG. 2 is an elevational view of a gown and glove assembly, as unfolded in an inside-out condition ready for the surgeon to put it on.

FIG. 3 is an elevational view showing a surgeon in the act of donning the surgeon's gown and glove assembly.

FIG. 4 is a perspective elevational view illustrating one form of detachable glove and sleeve combination.

FIG. 5 is a perspective view of a modified form of sleeve for use with the glove of FIG. 4.

FIG. 6 is a fragmentary perspective view illustrating the glove and sleeve construction for another form of attaching means.

FIG. 7 is a fragmentary sectional view showing the glove and sleeve construction of FIG. 6 in assembled relation with the connecting means in place.

FIG. 8 is a fragmentary perspective view illustrating another form of glove and sleeve attaching means.

FIG. 9 is a fragmentary sectional view illustrating the glove and sleeve assembly of FIG. 8 in an assembled condition.

FIG. 10 is a fragmentary elevational view of a short sleeve and long glove assembly.

Referring to FIG. 1, this view illustrates the gown and glove assembly as folded in an inside-out condition, and placed on a rectangular wrapping 11 which is then folded about it so that the gown and glove assembly is completely enclosed and ready for the sterilizing chamber where it is subjected to a sterilizing action for a desired period of time. It is thereafter stored as a wrapped package adjacent to the location where the surgeons are robed.

FIG. 2 shows the surgeon's gown and glove assembly 10 as unfolded as it would be held by the surgeon, with his hands touching the inside of the gown, and with the sleeves 11 and with the gloves 12 folded inside of the gown and with the openings of the sleeves in position for ready access by the surgeon in donning the gown.

FIG. 3 illustrates how the surgeon 13 places his hands inside of the sleeves 11. Thereafter by working his arms, hands and shoulders, the surgeon can put on the gown and gloves without touching anything except the inside surface, so that the outside of the gown remains completely sterile.

This entire operation can be carried on by the surgeon without the assistance of a sterile nurse so that the presence of the nurse in gowning the surgeon is dispensed with and she can be performing other duties in connection with the operation. Where there are several surgeons to be gowned for an operation, a material saving in time is made, both in the time for getting ready and in the total time the operating room and the operating equipment is in use for a particular operating procedure.

Referring to FIG. 4, there is shown one preferred construction of detachable glove and sleeve assembly wherein the glove 12 is provided with a series of apertures 21 adjacent to the cuff band 22. The sleeve 11, which is provided with the conventional stockinet cuff portion 23, has detachably secured therein a series of metallic or plastic fastening elements including a circular base portion 24, a stem portion 26, and a pronged inserting and fastening portion 27, similar to certain types of conventional cuff links. The fastening portions 27 are adapted to be inserted in the openings 21 to secure the glove on the

sleeve. Also the sleeve 11 is provided with an outer covering for protection comprising a stockinet band 28, which will cover the fasteners 24 so that a smooth exterior sleeve and glove surface will be presented during the operation.

FIG. 5 shows a modified form of fastening element 29, in which cottonballs 29a are provided at the end of a stem portion of thread or string and these balls 29a are drawn through the holes 21 to hold the glove in place on the sleeve.

FIGS. 6 and 7 illustrate construction in which the glove 12 is provided with a pair of elongated openings or slots 31, and the sleeve 13 is provided with a similar pair of elongated openings or slots 32 and suitable band-type connectors 33 are provided, having respective bent ends 33a and 33b to be received in the respective slots 31 and 32 to form the connection between the sleeve and the glove.

FIGS. 8 and 9 illustrate a further preferred modification of detachable connection for a glove and sleeve assembly in which the glove is again provided with elongated slots 31. However the sleeve in this case is provided with a band 36 which is attached at one end to the sleeve at 37, and the other end is provided with a male portion 38 of a snap fastener, the female portion 39 being sewed in the sleeve at a proper location so that this band 36 can be inserted through the slot 31 and then the snap fastening made as shown in FIG. 9.

In FIG. 10, there is illustrated a modified form of gown assembly where the sleeve or sleeve portion 11a is short and terminates at or adjacent the elbow, and the glove 12a is long and terminates at or adjacent the elbow in overlapping relation with the sleeve portion 11a. A suitable type of connection means such as the bent fastener 33 is employed in making the connection between the glove and the sleeve portion.

From the above description, the carrying out of the method is believed obvious, however, it will be briefly summarized. After an operation a soiled gown is first laundered, the soiled gloves 12 being detached and thrown away. Thereafter the gown 10 is laundered in the usual manner, and a new pair of gloves 12 is attached to the sleeves 11. The gown is then folded inside out to a condition as approximately shown in FIG. 1, with the gloves in the interior of the bundle, and the bundle is placed inside of a covering 11. After this step the covered package is sterilized and then the gown and glove assembly is stored as a covered package until ready for use.

When it is to be used, the surgeon or assisting doctor, after scrubbing, unwraps the bundle and removes the gown allowing it to unfold to the condition as shown in FIG. 2. Thereafter by inserting his arms in the sleeves

as shown in FIG. 3, he can work his arms and hands down through the sleeve placing his hands inside the gloves, being able to assist one hand with the other during this operation by virtue of having the gloves attached to the sleeves.

The above procedure materially reduces the actual dollar cost of the laundry operation in hospitals as it completely eliminates the laundering of the covering for the gloves and eliminates this item from the stock of the hospital. It saves considerably in cost by eliminating the necessity for a sterile nurse to assist the surgeon in becoming gowned and ready for an operation. It reduces the time required for the operating area to be devoted to a given operation and would enable additional use of the operating area and equipment of the hospital.

I claim:

1. In a method of sterilizing a surgeon's gown and glove assembly, which comprises first attaching the gloves to the sleeves of the gown to form an assembly, folding the gown and glove assembly inside out into a folded bundle suitable for storage, wrapping the bundle in a covering to provide a covered package, and sterilizing the covered package.

2. A sterilized surgeon's gown and glove package which can be donned by a surgeon without help, said package comprising a sterilized gown having respective sleeve portions, a sterilized glove detachably connected to each of said sleeve portions, said gown with said gloves attached being folded inside out as a bundle, and a sterilized wrapping encompassing said bundle to complete the sterilized package.

3. A sterilized surgeon's gown and glove package which can be donned by a surgeon without help, said package comprising a sterilized gown having respective sleeve portions, respective sterilized gloves at the ends of said sleeve portions, said gown being folded inside out as a bundle to place said gloves in the interior of the bundle, and a sterilized wrapping encompassing said bundle to complete the sterilized package.

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