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3,288,131

SURGICAL RETRACTOR

Filed Jan. 10, 1964

FIG. 2

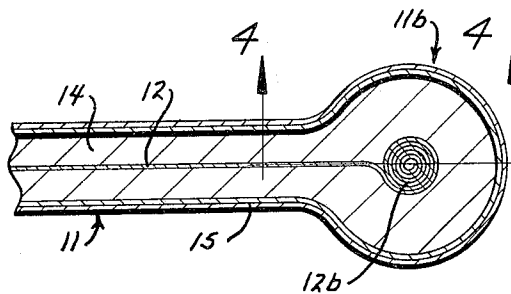
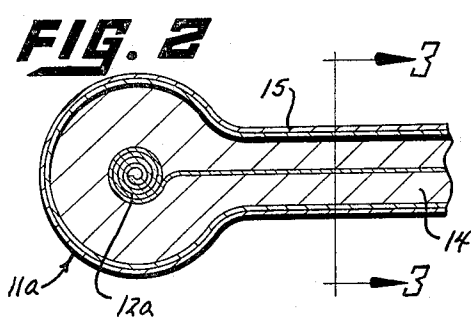


FIG. 3

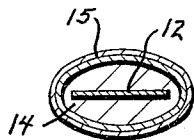


FIG. 4

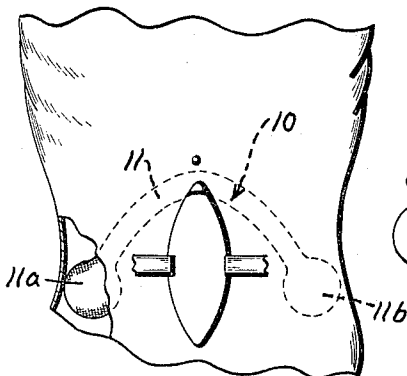
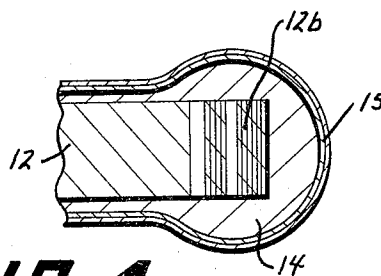


FIG. 5

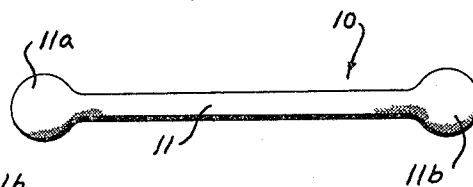


FIG. 1

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SURGICAL RETRACTOR

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1 Claim. (Cl. 128-20)

The present invention relates to a surgical retractor, and more particularly to a new and novel disposable surgical retractor which is highly effective in use in a surgery site having retractable soft tissue.

As is known, during surgery, and after the initial incision has been accomplished, Balfour retractors are typically employed to hold back the skin and associated muscle and fat from the area under surgery. In the event the surgical area involves an operation in a body cavity having soft retractable tissue, as in the abdomen, for example, such soft retractable tissue has customarily been moved away from the organ under surgery, being packed with gauze and maintained in such packed position through the use of metal retractors. The preceding proved objectionable, however, in requiring continual attention by the surgeon, or an assistant, after being properly placed and during the course of the operation.

By virtue of the instant invention, the applicant herein has provided a new and novel disposable surgical retractor which is readily and positively positioned for use during an operation, without any further attention by the surgeon, or his assistant, after initial placement, and which, at the same time provides absorbency for body fluids. The instant invention permits effective retraction without trauma, and eliminates the necessity of using several retractors, as well as the aforesaid personnel involved, inherent with prior operating procedures.

Briefly, the instant disposable surgical retractor comprises a member having pliability and absorbency as its principal characteristics, where the former permits the maintaining of the retractor in proper position during surgery, and where the latter reduces the excess fluid typically produced by surgical manipulation. The instant invention is so arranged as to permit continued and sufficient retraction in any body cavity having retractable soft tissue, as, for example, the area surrounding the gall bladder, and in pelvic surgery.

Accordingly, the principal object of the present invention is to provide a new and novel disposable surgical retractor.

Another object of the present invention is to provide a new and novel disposable surgical retractor which is readily and continually maintained in a position of use, and which, at the same time, includes desirable absorbent characteristics.

A further and more general object of the present invention is to provide a new and novel disposable surgical retractor having particular adaptability for use in body areas having retractable soft tissue, which provides effective retracting pressure during such use, which is readily used without further attention after initial placement, which is sterile, and which is readily manufactured in several characteristic forms.

Other objects and a better understanding of the present invention will become more apparent from the following description, taken in conjunction with the accompanying drawing, wherein

FIG. 1 is a plan view of a disposable surgical retractor in accordance with the teachings of the present invention;

FIG. 2 is an enlarged view in cross-section, showing details of the applicant's new and novel disposable surgical retractor;

FIG. 3 is another view in cross-section, taken at line

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3-3 of FIG. 2 and looking in the direction of the arrows, showing further details of the invention;

FIG. 4 is still another view in cross-section, taken, however, at line 4-4 of FIG. 2 and looking in the direction of the arrows; and,

FIG. 5 is a generally representative view of the instant invention as used in a body cavity during an operation.

For the purposes of promoting an understanding of the principles of the invention, reference will now be made to the embodiment illustrated in the drawing and specific language will be used to describe the same. It will nevertheless be understood that no limitation of the scope of the invention is thereby intended, such alterations and further modifications in the illustrated device, and such further applications of the principles of the invention as illustrated therein being contemplated as would normally occur to one skilled in the art to which the invention relates.

Referring now to the figures, the applicant's new and novel disposable surgical retractor 10 comprises a body member 11 having, in a preferred embodiment of the invention, enlarged or bulbous ends 11a and 11b thereon. As should be evident from FIGS. 2, 3 and 4, the instant disposable surgical retractor 10 is defined by a stiffening member 12, typically made from non-allergic plastic or wire mesh, and having a ribbon-like appearance, where, illustratively, each of the ends 12a and 12b thereof are rolled onto itself. The latter, of course, are employed in the form of the invention utilizing the bulbous or enlarged ends 11a and 11b of the body member 11.

The aforesaid stiffening member 12 is overlaid with a soft non-traumatizing material 14, such as mesh gauze, for example, which, in turn, is overlaid by one or more layers of a cover 15, typically made from a finer mesh gauze. It should be understood that the aforesaid material should preferably have absorbing characteristics which serve to reduce excess body fluids produced by reason of surgical manipulation.

In any event, the finished retractor 10 typically has any desired shape in vertical section, but, in a preferred embodiment of the invention, assumes a generally oval shape (FIG. 3). At this time, it should be understood that the cross-sectional shape of the invention depends, in part, upon the particular use to which it is to be put during surgery, where the overall length is dependent, in part, upon the size of the patient. Moreover, and further in this connection, the stiffening member 12 might also assume other cross-sectional characteristics, and, in some instances, the bulbous or enlarged members 11a and 11b of the body 11 might be eliminated.

In use, after the incision has been made and the typical Balfour retractors employed to maintain the skin and associated fat and muscle from the surgical site, any soft tissue parts beneath the aforesaid skin and associated muscle and fat are moved away from the particular organ under surgery. Thereafter, the surgeon, or an assistant, bends the instant invention so that same is disposed beneath the skin layer and where, in the instance of abdominal surgery, the ends 11a and 11b thereof are in engagement with the inside of the abdominal cavity (see FIG. 5). No further attention is required by the surgeon or his assistant after proper placement of the disposable surgical retractor defined herein.

It should be understood that as soft pliable material is employed in the manufacture of the surgical retractor 10 at hand, intra-cavitary contents are not damaged during use of same, and its new and novel arrangement permits continued and sufficient retraction, in that, principally, the retracted soft tissue parts are urging against the retractor, which, in turn, bears, at its ends, even more firmly against the inner wall of the cavity under surgery. In that

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the applicant's new and novel surgical retractor 10 has no top or bottom, it is equally usable from either of such sides.

As indicated hereabove, the instant invention is disposable, having served to reduce any excess body fluid produced by surgical manipulation, and where various sizes are produced for different patient anatomy. Accordingly, and from the preceding, it should be apparent that the instant invention represents a new and novel approach to sterile, absorbent surgical retraction, where trauma is minimized and, additionally, continual attention by one individual, or added individuals, is precluded during surgery. The applicant's disposable surgical retractor is readily positioned within a body cavity in the surgical area, and is continually and effectively maintained in such position during the time of the operation.

It should be understood, of course, that the surgical retractor described hereabove is susceptible to various changes within the spirit of the invention. For example, the proportioning disclosed in the drawing may be varied, and, as discussed, the cross-sectional shape modified. Additionally, some situations would not require the bulbous ends on the retractor for maintaining the proper operating position thereof. In any event, the preceding description

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should be considered illustrative, and not as limiting the scope of the following claim.

I claim:

A disposable surgical retractor for a body cavity having retractable tissue comprising an elongated body member of an absorbent material having raised enlargements at opposite ends thereof, and a flat stiffening member disposed within said elongated body member coiled upon itself at each end thereof in the areas of said raised enlargements of said elongated body member, whereby when said retractable tissue bears against said surgical retractor, said raised enlargements thereon engage the inside walls of said body cavity.

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