

United States Patent

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[54] **HYGIENIC GUARDING DEVICE**
3 Claims, 4 Drawing Figs.

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128/271, 128/284

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A61f 5/44

[50] Field of Search..... **128/270-**
—271, 285, 1

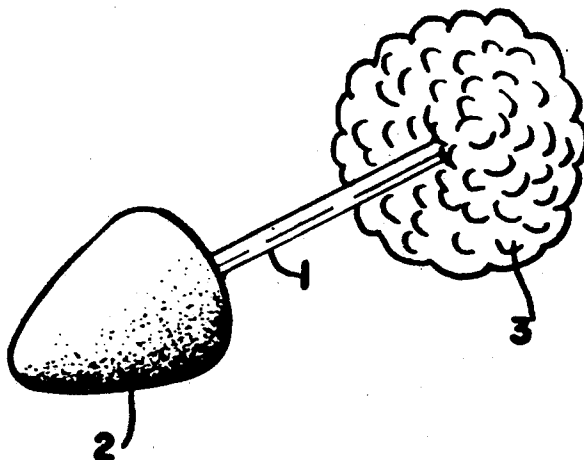
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ABSTRACT: Intended for use as an insert in a lower cavity of the human body to prevent undesired discharge therefrom.

It comprises a stiff but relatively slender stem, to one end of which is permanently secured a plug or head of insoluble material. To the other end of the stem is attached a mass or fluff of soft, fibrous, absorbent material. The stem is sufficiently stiff and strong to serve as an applicator to insert the head or plug up through the anal canal, for example, into the rectum. The stem is of such length that, when the head or plug is thus inserted, the mass or fluff of soft absorbent material will be held snugly against the opening of the anus.



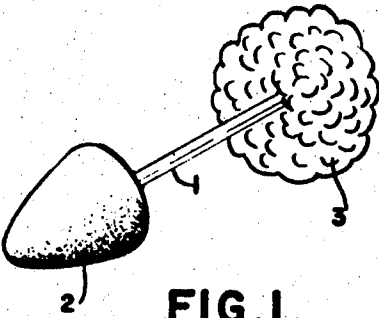


FIG. 1.

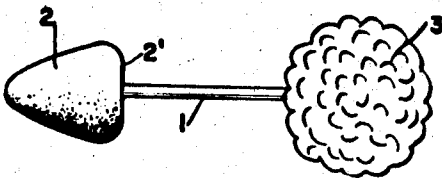


FIG. 2.

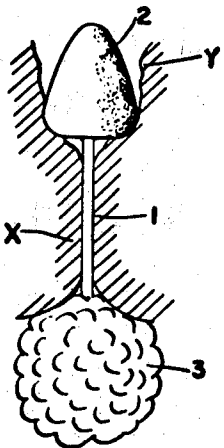


FIG. 3.

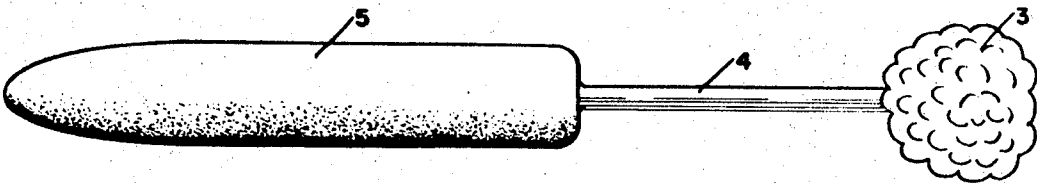


FIG. 4.

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HYGIENIC GUARDING DEVICE

This invention relates to hygienic guarding devices, and more particularly to devices for insertion in a lower cavity of the human body to prevent undesired discharge therefrom.

Specifically, the invention is intended for use as an insert in the anus or vagina to control involuntary discharge or leakage.

So far as concerns use as an anal insert, the main object of the invention is to provide a device of this nature for preventing the soiling or staining of the clothing by a discharge due to the weakening of the muscles which normally hold the anus tightly closed, or to some diseased condition.

A further object is to provide such a device which may be worn without discomfort, and which, in fact, is so designed that the wearer will not be conscious of it.

A still further object of the invention when used for either purpose, is to devise an article of this nature including a plug and means for inserting the plug in the cavity, such inserting means being permanently secured to the plug, and forming a part thereof.

A further object, when the invention is used as a vaginal insert, is to devise such inserting means which, while rigid enough to perform its function, is somewhat flexible, so as to be capable of bending slightly to adapt itself to different positions which the wearer may assume.

Yet another object is to provide a device of this kind which is of simple construction, having no relatively movable parts, and which can be manufactured at low cost.

With the above and other objects in view, and to improve generally on the details of such devices, the invention consists in the construction, combination and arrangement of parts hereinafter described and claimed, and illustrated in the accompanying drawing, forming part of this specification, and in which:

FIG. 1 is a perspective view of the form of my improved device used for an anal insert;

FIG. 2 is a side elevation thereof;

FIG. 3 is a view showing in section a portion of the human anatomy, and illustrating my improved insert in position in the anus; and

FIG. 4 is a side elevation of my improved device used for a vaginal insert.

The use of the invention as an anal insert will be first described.

Referring to the drawing in detail, and first more particularly to FIGS. 1 and 2, my improved insert comprises a relatively small, stiff stem 1, to one end of which is permanently secured a bullet-shaped or conical head 2. To the other end of stem 1 is secured a mass or fluff 3 of soft fibrous material, such as absorbent cotton, shown as a ball.

The large end of the head 2 is preferably flat and disposed at right angles to the stem, as shown at 2', to provide a shoulder for anchoring the insert in a body cavity, but the edge is rounded, as illustrated.

Referring now to FIG. 3, I have illustrated the use of the device in the anus. In this figure, X indicates the anal canal, and Y the rectum. In practice, the head 2 is pushed up through the anus by means of stem 1, until it lies within the rectum. The shoulder 2' then engages THE WALLS OF THE RECTUM AND ANCHORS THE INSERT IN PLACE.

The diameter of the head would be on the order of 1 to 1.5 centimeters, and it may, if desired, be coated with a suitable lubricant to facilitate insertion.

The diameter of the stem should be within the range of 2 to 3 millimeters. It must be stiff and rigid enough to have sufficient strength to enable it to insert the head through the anus, as described, but should be as thin as possible, so that, when in position, it is not felt by the wearer, and does not cause the reflex urge to defecate. The length of the stem may vary from 1.5 to 3 centimeters, depending upon conditions but in most cases would be about 2.5 centimeters. It should be only slightly longer than the length of the anal canal, so that, when the head 2 is positioned within the rectum, the mass 3 of absorbent material will be held snugly against the opening of the anus.

The head and stem are preferably formed of compressed fibrous material such as paper or natural or synthetic fibers. They may be impregnated or coated with a suitable innocuous cement or insoluble adhesive, to increase their hardness and smoothness but, whatever the material used, the surface, to avoid irritation, should have a pH value approximately that of the skin, namely, 4.2 to 4.5 pH.

Alternately, the stem may be made of a piece of thin, plastic-coated wire, having its end embedded in and permanently secured to the head.

The tuft or ball of absorbent material 3 may be fastened to the other end of the stem in any suitable way, as, for example, by a waterproof cement.

While the head and stem may be formed integral, as above mentioned, or the three parts of the device separately fabricated and united, as described, I contemplate forming the entire insert, complete in one piece, from a mass of insoluble fibrous material, shaped and compressed by means of suitable dies or a rolling operation, or both.

It has heretofore been proposed to mold suppositories in one piece, but these are formed of soluble material, intended to dissolve after being inserted. It has also been proposed to provide an anus insert having an absorbent pad or the like adapted to engage against the outside of the anus opening, but in these the pad was connected with the insert or plug only by a flexible cord. Furthermore, it has been proposed to provide a tampon or the like with a relatively small rigid stem by means of which it could be inserted, but the stem was detachable from the tampon or plug, and was withdrawn, once the latter was in position.

So far as I am aware, it is broadly new to provide an insert or plug of insoluble material having permanently secured thereto a relatively thin stem, stiff enough to serve as an applicator, and adapted to remain with the plug in the cavity as long as desired, and then serve as a means for withdrawing the plug.

While, of course, when employed as an anal insert, the invention can be used by either sex, it may also, with slight modification, by use as a vaginal tampon. This is illustrated in FIG. 4.

For this purpose, the stem 4 is considerably longer than in the case of an anal insert, being on the order of 3 to 4 centimeters long. It may also be somewhat larger, as for example, 3 to 4 millimeters in diameter.

The head 5 is much longer than in an anal insert, being in the form of a cylinder 4 to 6 centimeters long. This cylindrical head is made of soft, absorbent fibrous material, such as a special type of paper, or cotton.

The stem 4 is permanently secured to the head as before, either by forming the two parts integral, or by other means. It must be stiff enough to experiencing as an applicator for inserting the plug or tampon, and, in fact, the stem may serve as a handle by means of which the head or tampon may be used as a swab, for cleansing purposes.

Since the stem remains in the cavity with the tampon, it must be somewhat flexible, and capable of bending slightly, so that the wearer may assume different positions without experiencing any discomfort.

It will thus be seen that the invention may assume different forms, but all based upon the same basic concept; namely, a relatively thin, stiff stem permanently secured at one end to an enlarged head or plug, and having at its other end a mass of absorbent material.

I claim:

1. A hygienic guarding device adapted to be inserted in the anus, and comprising a stem having an enlarged head permanently secured to one end, and a mass of absorbent material attached to the other, said head and stem being formed of relatively hard insoluble material having a smooth surface, the length of said stem being substantially equal to that of the anal canal, so that said head, when inserted, lies within the rectum, and said mass of absorbent material is held in contact with the anus opening, said stem being of relatively small diameter, but stiff and strong enough to serve as an applicator for inserting the said head through the anal canal.

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2. A hygienic guarding device in accordance with claim 1, in which the diameter of the stem is so small as to cause on appreciable distention of the normally collapsed anal canal, and consequently no reflex urge to defecate.

3. A hygienic guarding device adapted to be inserted in a lower cavity of the human body and comprising a relatively small, smooth stem having at one end an enlarged head permanently secured thereto, and at the other end a mass of absorbent material, said head being of relatively hard, insoluble

material and of generally conical shape having a circular flat bottom disposed at right angles to the stem, which is secured to the center thereof, so as to provide a shoulder around the stem for anchoring the insert in a body cavity, said stem being relatively long, and stiff and strong enough to serve as an applicator for inserting the head into the cavity, and also to serve as means for withdrawing the same.

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