

Dec. 17, 1957

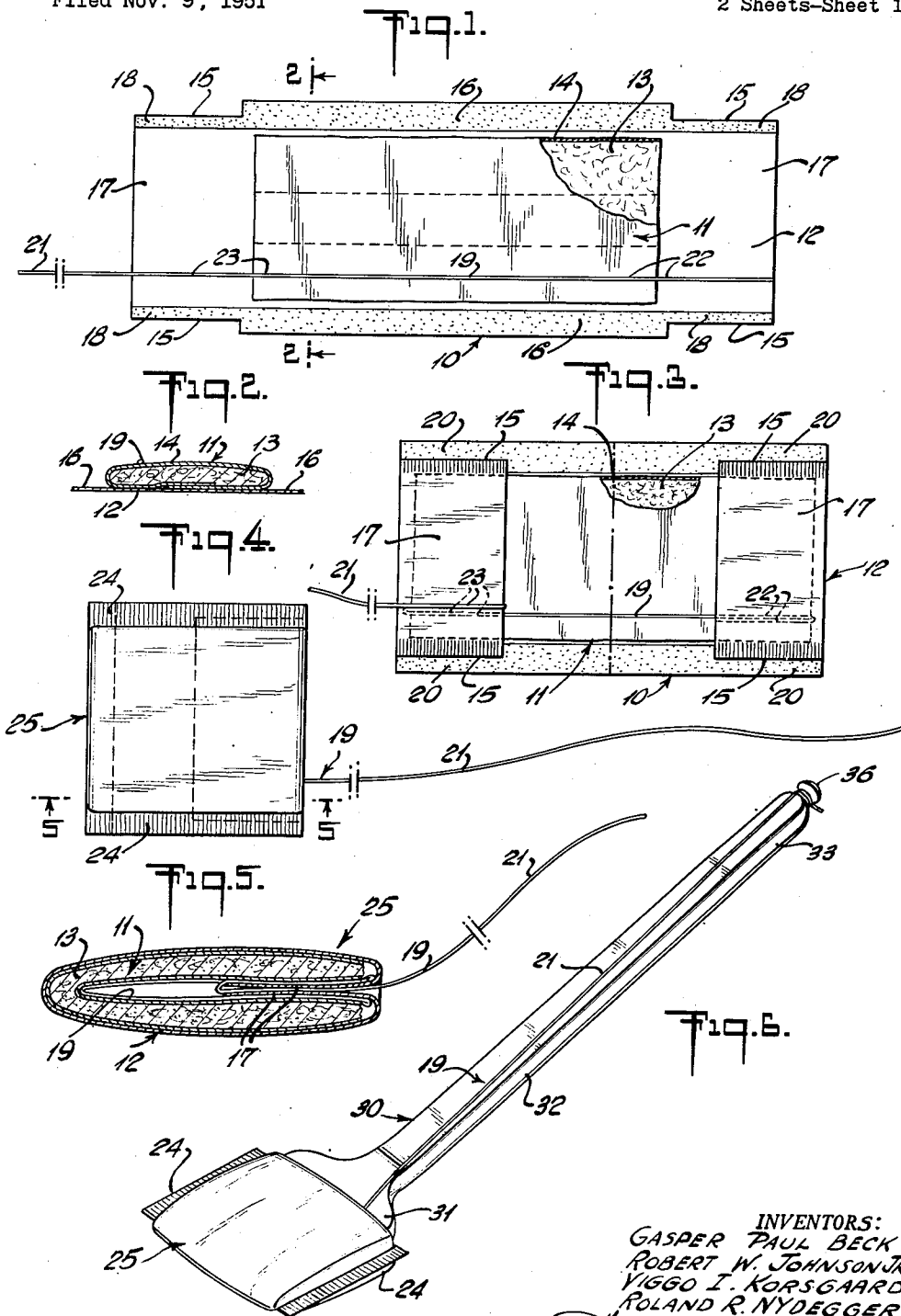
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2,816,313

DISPOSABLE CLEANING SWAB AND HOLDER THEREFOR

Filed Nov. 9, 1951

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 7.

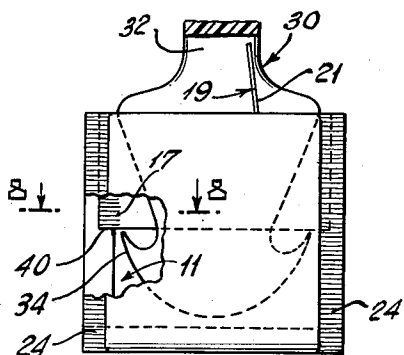


Fig. 8.

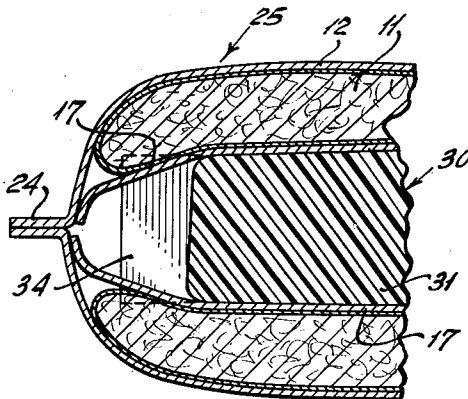


Fig. 9.

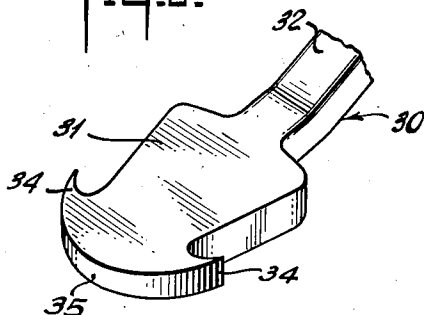


Fig. 10.

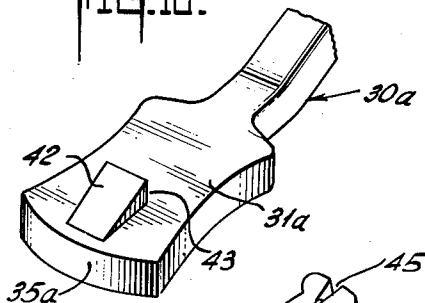


Fig. 11.

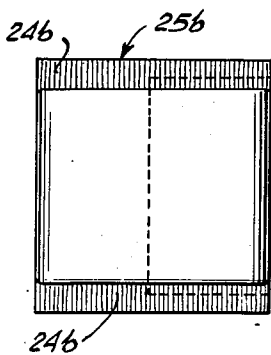
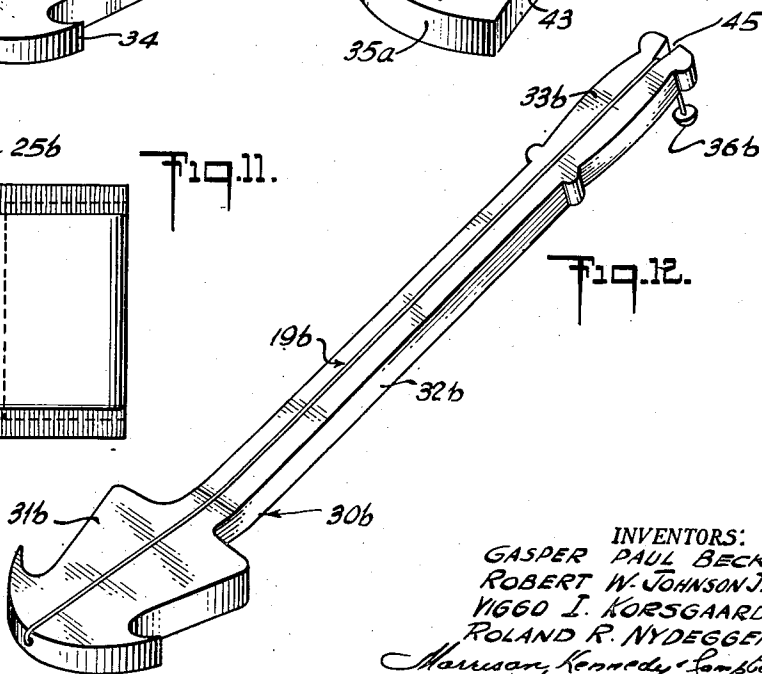


Fig. 12.



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2,816,313

DISPOSABLE CLEANING SWAB AND HOLDER THEREFOR

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Application November 9, 1951, Serial No. 255,652

11 Claims. (Cl. 15—210)

The present invention relates to cleaning devices having disposable cleaning elements and more particularly to devices suitable for cleaning toilet bowls and the like.

Copending application Serial No. 214,918, filed March 10, 1951, and containing the broader claims discloses a cleaning swab comprising a pad constructed, folded and seamed in the form of a pouch or bag. This bag swab has internal flaps adapted to be latched automatically to a catch or catches on the head of a holder when the swab is slipped on said head to retain the swab securely thereon during use. The bag swab is constructed to permit it to be easily ruptured and opened up, so that it can be removed from the holder head and dropped in the toilet bowl for disposal. For rupturing the bag swab so that it can be removed from the holder head for disposal, said head is constructed with relatively movable parts.

The present invention is a modified form of cleaning device disclosed in the aforesaid copending application and has for its object to provide a cleaning swab which is of the general type disclosed in said copending application but which does not require a holder with relatively movable head parts to rupture the swab when it is desired to remove the swab from the holder and to dispose of the swab.

In accordance with certain of the broader features of the present invention, a string is provided in combination with the cleaning swab, located and arranged with respect to the swab, so as not to interfere with its cleaning operation, and manipulable to cause said swab to be ruptured by the string while on the holder head and to permit thereby ready disposal of said swab.

In one form of the invention, the string is built into the swab to form a disposable unit therewith and is so arranged with respect thereto that when the swab is slipped over the head of the holder, the string is made to extend from the swab along the handle portion of the holder to an attachment point. After the cleaning operations have been completed, the string is released from the attachment point and pulled away from the handle and head parts of the holder, to rupture the swab, so that it can be removed from the head of the holder and dropped in the toilet bowl with the string for disposal.

In accordance with another form of the invention, the string is separate from the swab but is attached at one end to the head of the holder, while the other free end is adapted to be removably fastened to an attachment point on the handle or grip part of the holder. The swab is slipped over the head of the holder for latch attachment thereto and over the part of the string extending along said head. After the cleaning operations have been completed, the string is released from the attachment point on the holder and is manipulated to rupture the swab and cause its removal from the holder head for disposal purposes. The string remains on the holder and can be used indefinitely for successive swabs.

Various other objects, features and advantages of the invention are apparent from the following particular

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description and from an inspection of the accompanying drawings, in which:

Fig. 1 is a face view of a flat composite pad from which a form of bag swab with a built-in string embodying the present invention may be constructed, said pad comprising a filler mat, a wrap sheet therefor, and a string secured to the mat and the sheet and extending therealong;

Fig. 2 is a section of the composite pad taken on lines 2-2 of Fig. 1;

Fig. 3 is a face view of the composite pad after the end sections of the wrap sheet have been folded over the filler mat and the side edges of said end sections have been adhesively secured to the side edges of the main body of said wrap sheet to define flaps in the final swab construction;

Fig. 4 is a face view of the bag swab made by doubly folding the pad of Fig. 3 and adhesively securing its side edges together and shown with the built-in rupturing string extending therefrom;

Fig. 5 is a section of the bag swab taken on lines 5-5 of Fig. 4 but shown on a larger scale;

Fig. 6 is a perspective showing the bag swab of Figs. 4 and 5 slipped on and latched to the head of a holder in preparation for cleaning use;

Fig. 7 is a face view of the head of the holder shown with the bag swab attached thereto and with part of the swab broken away to reveal the latch attachment between said holder head and said swab;

Fig. 8 is a section of the combined holder head and bag swab taken along lines 8-8 of Fig. 7;

Fig. 9 is a perspective of a form of holder head which may be employed in connection with the cleaner swab of Figs. 1-8 having the built-in rupturing string;

Fig. 10 is a perspective of another form of holder head which may be employed in connection with the cleaner swab of Figs. 1 to 8 having the built-in rupturing string;

Fig. 11 is a face view of another form of cleaner swab similar to that of Figs. 1 to 8, except that it has no built-in rupturing string; and

Fig. 12 is a perspective of a form of holder with attached string separate from the cleaner swab and adapted to rupture said swab.

Referring to Figs. 1-3 of the drawings, the cleaner swab is constructed from a flat composite laminated pad 10 made up of a filler 11 in the form of a flat flexible mat and a flexible wrap sheet 12 therefor. The filler mat 11 serves as the padding for the swab and is desirably of soft material to yield into conformance with irregularities in the surfaces being cleaned. The filler mat 11, however, must have sufficient body to permit sustained effective cleaning therewith and should be made of a material which is at least readily flushable in a toilet bowl, so that it will not clog the plumbing. Desirably, it should be made of an absorbent material readily disintegrable when wet. For that reason, the filler mat 11 consists essentially of a relatively thick sheet or layer 13 of fluff material which may be macerated cellulose, such as wood pulp, molded or pressed in flat rectangular form. In a specific form, this particular filler sheet 13 may be about 6¾ inches long, 2¾ inches wide and about ¼ inch thick.

In order to retain the particles of the filler mat 13 against rapid disintegration or separation during manufacture, storage, transportation or use, a sheet or napkin 14, of very thin paper which is at least flushable and which is desirably water-disintegrable, is enveloped around the filler sheet 13, with its longitudinal margins overlapping to form the fluff type filler mat 11. This envelope sheet 14 is desirably a facial tissue, self-disintegrable when wet, and has a length co-extensive with the length of the filler sheet so that its ends are flush with the ends of the filler sheet 13.

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Instead of the wood pulp filler being enveloped in the tissue 14, it may have one or more sheets of tissues at the top and at the bottom thereof, or it may be held together merely by a compression pattern in the form of a grid, or the entire filler mat may consist of a number of thin facial tissues similar to the tissues 14 arranged in a stack to form a padding mat for the swab. These superposed tissues could be folded with their longitudinal margins overlapping to produce a mat of the desired thickness.

The wrap sheet 12 is desirably of thin flexible paper easily flushable in a toilet bowl but nevertheless rugged and strong enough to withstand cleaning or scrubbing pressure during use. A partially bleached rope paper weighing 10 lbs. per 1000 square feet and impregnated with a suitable resin, such as urea-formaldehyde or melamine, to impart to the paper the required degree of wet strength has been found satisfactory for the purpose, although any paper which is capable of being similarly processed and which will give equivalent service will suffice.

The wrap sheet 12 is also impregnated with a suitable detergent which is compatible with the resin with which the sheet is treated for control of wet strength. A suitable composition for the purpose is Antorox A-400, which is an ethylene oxide condensation product of substituted phenols having an approximate molecular weight of 660 and which is in the class of non-ionic detergents. The non-ionic class of liquid detergents is desirable because of its foaming action, permitting high degree of paper impregnation. However, an ionic detergent may be used if it is compatible with the resin with which the sheet is treated for control of wet strength.

On its outside scrubbing or cleaning surface, the wrap sheet 12 is desirably coated with a foaming agent, and a suitable composition for the purpose is Orvus Paste, consisting essentially of sodium lauryl sulphate in the class of anionic solid detergents, which will foam but will not give a high degree of impregnation.

The wrap sheet 12 is also treated with a water soluble bluing dye, similar to that used for laundry purposes, to whiten the surfaces cleaned by the swab of the present invention.

The wrap sheet 12 could contain, if desired, one or more materials such as a suitable disinfectant, a scouring agent such as pumice or diatomaceous earth, and a perfume.

The filler mat 11 is in flat rectangular form and the wrap sheet 12 is rectangular except for four rectangular cut-outs or recesses 15 in the corners of the sheet and in a specific form is about 11 inches long and four inches wide across its center. The recesses 15 in the wrap sheet 12 are about 1 3/4 inches long.

The filler mat 11 is laid centrally on the inner face of the wrap sheet 12 with the overlapping margins of the tissues 14 of the filler mat against said face. The wrap sheet 12 is wider than the filler mat 11 to define longitudinal edge margins 16 on said sheet projecting beyond said mat and is longer than said filler mat to define end sections 17 projecting beyond the filler mat 11. The end sections 17 of the wrap sheet 12 are slightly wider than the filler mat 11 by the extent of thin margins 18 along the sides of said end sections.

The longitudinal edge margins 16 and 18 of the wrap sheet 12 on its inner face have a layer of adhesive which is strong enough to hold the seams together, while the swab is undergoing the usual period of use, but which is weak enough to permit rupture of the swab easily along the seams when the swab is wet and ready for disposal. More specifically, this adhesive may be a thermosetting material, such as ureaformaldehyde or polyvinyl acetate, to facilitate manufacture of the swab.

Figs. 1 and 2 show the composite pad 10 with its component parts assembled and ready to be folded and seamed

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to make the bag swab. To produce a bag swab with a built-in rupturing string, a string 19 of the required length and of sufficient strength to withstand the tension thereon in the operation of rupturing the swab is laid along the composite pad 10 in its initial form shown in Figs. 1 and 2. This string 19 which may be of any suitable material, as for example of fibrous material such as silk, cotton, linen, or of plastic such as nylon, is laid preferably off-center on the composite pad 10 near one longitudinal side of said pad and is secured in this position to the filler mat 11 and the wrap sheet 12, as shown in Figs. 1 and 2, by adhesive of the type which is not materially weakened by the water during cleaning action. One end of the string 19 is flush with one end of the wrap sheet 12, while the other end extends beyond the corresponding end of said wrap sheet to define a string section 21 long enough to extend to the grip end of the holder in attached position of the swab, as will be more fully described.

With the composite pad 10 and string 19 arranged and adhesively secured together as described and shown in Figs. 1 and 2, the projecting end sections 17 of the wrap sheet 12 with adhesively attached string sections are folded inwardly over the ends of the filler mat 11 to retain said mat in proper position on said wrap sheet and to define holder engageable flaps, as will be more fully described. The margins 18 of these flaps 17 are secured to the adhesively coated margins 16 of the main body of the wrap sheet through the adhesive, so that the sides of said flaps are closed as shown in Fig. 3. In this preliminary folded position shown in Fig. 3, due to the presence of the recesses 15 in the wrap sheet, the portion 20 of the adhesively coated margin 16 of the wrap sheet along the side of each flap 17 will project beyond said flap side and will serve the purpose to be made apparent. Also in this preliminary folded position, one end section 22 of the string 19 will be doubly folded and retained between one flap 17 and the inner face of the body of the pad and the intermediate section 23 of said string will be doubly folded and retained between the other flap 17 and the inner face of the body of the pad, as shown in Fig. 3.

The pad shown in Fig. 3 is then folded upon itself along its transverse center line, as shown in Figs. 4 and 5, to bring the flaps 17 together in face to face contact. By application of heat and pressure, the facing juxtaposed overlapping margins 16, including the portions 20 thereof, are secured together by the thermoplastic adhesive on these margins to form plain lap seams 24 along the sides of the pad, thus forming a pouch or bag swab 25 with the wrap sheet 12 on the outside to define a scrub sheet and with the filler mat 11 on the inside to form a lining or backing for the scrub sheet. It should be noted that the filler mat 11 is entirely enclosed and protected against separation from the wrap sheet as well as against disintegration. Because of the presence of the adhesively coated portions 20 of the sheet margins 16 which project beyond the sides of the flaps 17, the folded pad will be closed entirely along its sides. The filler mat 11 in the resultant swab 25 will be retained against separation from the wrap sheet 12 and against disintegration during use by the seams 24 along its sides and by the flaps 17 folded over the ends of said mat. These flaps 17 serve not only to protect the filler mat 11 as indicated but in addition are intended to be latched to a projection or projections on the holder head, when the swab 25 is slipped over said head.

In doubly folded pouch or bag position of the pad shown in Figs. 4 and 5, the section 21 of the string 19 will project from the pocket and from the mouth of the bag swab.

Figs. 6 to 9 show a type of holder 30 which is advantageously employed in connection with the pouch or bag swab 25. This holder 30 is about 15 inches long and is desirably made of a material which can be easily cleaned and kept sanitary. For that reason, it is desirable to make the holder 30 of suitable moldable plastic material, such as polystyrene.

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In the specific embodiment shown, the holder 30 is in the general form of a spoon or spatula and comprises a head 31 adapted to be hooded or covered by the swab 25 and a handle or shank 32 therefor terminating in a grip portion 33. The head 31 is offset from the shank 32 and is generally in the form of a lyre having a pair of hooks, spurs or flukes 34 adapted to catch on to the flaps 17 of the bag swab 25 when the latter is slipped over the head. The forward edge 35 of the head 31 is convexly curved and the sides of the flukes 34 are inclined with respect to the longitudinal axis of the holder 30 to taper said end for easy entry of the head 31 into the pocket of the swab 25.

The outer end of the grip portion 33 of the holder 30 carries a button 36 around which the free end of the rupturing string 19 of the swab is adapted to be wound in cleaning position of the swab on the holder 30, as shown in Fig. 6.

In preparing the cleaning device for use, a bag swab 25 with a built-in rupturing string 19 is slipped over the head of the holder 30. When the swab is in place, the ends 40 of its internal flaps 17 extend beyond the ends of the flukes 34. Since the opposed flaps 17 converge towards the side seams 24 of the bag swab 25, these flap ends 40 near said seams across the flukes 34 on the holder head 31 and catch on to said flukes, as shown in Figs. 7 and 8. The swab 25 is thereby latched and locked to the holder head 31 and cannot be removed therefrom without rupturing the swab.

The section 21 of the string 19 will project outwardly from the mouth of the swab 25 when said swab is latched on to the holder head 31 in the manner described. This projecting string section 21 is extended along the shank or handle 32 of the holder 30 and its free end is anchored by winding it around the button 36 on said handle, as shown in Fig. 6. The cleaning device with the string 19 so arranged can be used without interference from said string.

The holder 30 and the swab 25 attached thereto form a cleaning device which can be conveniently handled. For example, in cleaning a toilet bowl, the swab 25 is dipped into the water in said bowl to render the detergents on the wrap sheet 12 active and to dissolve the bluing thereon. The cleaning head can then be manipulated by passing the swab over the surfaces to be cleaned. The wrap sheet 12 presents an effective rubbing or scrubbing surface and the filler mat 11 supplies the necessary body to the swab and also permits it to be deformed to conform with the irregularities in the surfaces being cleaned. The wrap sheet 12 is impervious to the passage of filler material therethrough even when said sheet and said filler are wet, so that disintegration of the filler mat cannot take place during normal period of use.

The holder head 31 constitutes the bulk of the cleaning element and affords the necessary backing and support for the thin-walled swab 25, so that substantial pressure can be supplied to the swab through the holder, while the swab retains its general form. The filler mat 11 tends to disintegrate upon being wet but is retained against disintegration by the protective enveloping action of the wrap sheet 12.

After the cleaning operation has been completed, the end of the string 19 is unwound from the button 36, and the projecting section 21 of the string is pulled in a direction substantially at right angles to the general plane of the holder head 31 and away therefrom to cause the panel section of the swab 25 directly connected to the base end of the string section 21 and located on one face of the holder head 31 to break along the seam 24 nearest to the string 19 and away from the panel section of the swab 25 on opposite face of the holder head.

The breaking of the seam 24 nearest to the string 19 can also be accomplished by pulling the projecting section 21 of the string 19 sideways of the holder 30 to cause said string to pass between the overlapping swab parts of said seam and to rip thereby said seam open.

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After the initial seam opening manipulation of the projecting section 21 of the string 19 as described, this projecting string section is continued to be pulled in any direction that will cause the swab to be more completely ruptured and to be pulled off the head 31 of the holder 30. The ruptured swab with the string 19 attached thereto is then dropped into the toilet bowl. Since the ruptured swab in the bowl is opened up, the filler mat 11 will be exposed to the disintegrating action of the water in the bowl, thereby causing the components of the swab and the rupturing string to be easily washed away by flushing without the danger of clogging the drain.

Fig. 10 shows another type of holder 30^a with a head 31^a which can be used in connection with the pouch or bag swab 25 having the built-in string 19 as shown in Figs. 1-8. This holder head 31^a is in the form of a flat plate having a rounded forward edge 35^a to permit its easy entry into the pocket of the swab 25 and having a spur 42 extending from one face of said plate and shown in the form of a wedge tapering towards the forward end of the holder to merge at one end into the face of the holder head 31^a and defining at its opposite rear end a catch shoulder 43.

In use, the swab 25 is slipped over the holder head 31^a as far as it will go, so that the holder head will be located between the flaps 17 and the spur 42 will be located inwardly beyond the edges of these flaps in position to cause its catch shoulder 43 to engage one of said edges midway between the seamed sides of the swab before the swab is withdrawn too far from said holder head. The swab 25 is therefore retained on the holder head 31^a during normal cleaning operations, with the built-in string 19 projecting from the swab and extending along the shank or handle of the holder 30^a and the free end of said string attached to a button or other anchor device (not shown) on the handle.

After cleaning operations, the swab 25 can be ruptured by tensional manipulation of the string 19 and pulled off the holder head 31^a for disposal, as described in connection with the construction of Figs. 1-9.

In the cleaning devices of Figs. 1-10, the string 19 is built into the swab 25 to form a disposable unit therewith. In the cleaning device of Figs. 11 and 12, the swab 25^b is exactly of the same construction, except for the absence of the built-in rupturing string. Instead, a rupturing string 19^b is provided, forming a unit separate from the swab 25^b and attached to the holder used in conjunction with this swab 25^b to form a permanent unit therewith. This modified form of construction facilitates manufacture of the swab 25^b and permits reuse of the same string indefinitely, thereby effecting economy. The modified construction illustrated may be employed in connection with either of the types of holders shown in Figs. 9 and 10. Specifically, it is shown in Fig. 12 with a holder 30^b made desirably of plastic such as polystyrene, and having a lyre head 31^b similar to that of Fig. 9. This holder 30^b has a shank or handle 32^b and a grip portion 33^b provided at its outer end with a V-notch 45 for receiving the outer free end of the swab-rupturing string 19^b. A button 36^b secured to the underside of the grip portion 33^b near but inwardly beyond the apex of the V-notch 45 serves as an attachment or anchoring post for the outer end of the string 19^b, when the holder 30^b is not in use or when the holder is set up with the cleaning swab 25^b latched to the head 31^b of said holder.

The swab-rupturing string 19^b may be made of fibrous material such as silk, cotton, linen or the like or may be of metal in the form of a wire, but is desirably of plastic and specifically of nylon.

One end of this string 19^b is permanently anchored to the holder head 31^b at its forward edge by any suitable means, and is shown fastened in central position with respect to said head, so that the string extends centrally along the holder 30^b when the holder is not in use, as

shown in Fig. 12 or when the holder is set up with the swab 25^b latched thereto in preparation for cleaning.

To set up the device of Figs. 11 and 12 for cleaning, while the string 19^b extends along the holder 30^b and while the free end of said string is fastened to the button 36^b or other attaching device employed, as shown in Fig. 12, the swab 25^b is slipped over the holder head 31^b until it is latched thereto, as described in conjunction with the device of Figs. 1 to 9. The string 19^b positioned as described does not interfere with the quick automatic latching of the swab 25^b onto the holder head 31^b and will extend along the swab midway between its side seams 24^b.

After the cleaning device has been used in the manner described in connection with Figs. 1-9, the free end of the string 19^b is released from attachment to the button 36^b, and the string 19^b is manipulated to rupture the swab. The manipulation of the string 19^b for this purpose may be effected by pulling the string sideways of the swab 25^b first in one side direction and then in the other to cause the side seams 24^b of the swab to be opened by the shearing action of the string between the superposed layers of said seams, or may be effected by pulling the string away from the holder head 31^b in a direction to draw the top panel of the swab on one side of the holder head away from the other panel of the swab on the opposite side of the holder head and to break the side seams 24^b open. Depending on the strength and character of the side seams 24^b and the strength of the wrap sheet on the swab 25^b, the string 19^b may be pulled in any direction to give any tear action desired, either by breaking of the seams as indicated or by the tearing of the wrap sheet. After the initial rupture of the swab 25^b has been effected, the string 19^b can be further pulled and manipulated in different directions to cause the ruptured swab to drop off the holder head 31^b and into the bowl where it can be easily flushed.

While the invention has been described with particular reference to specific embodiments, it is to be understood that it is not to be limited thereto but is to be construed broadly and restricted solely by the scope of the appended claims.

What is claimed is:

1. A cleaning device comprising a disposable cleaning swab flushable after use in a toilet bowl and in the form of an open-top bag adapted to be slipped over and to enclose the head of a holder, said bag comprising a thin flexible scrub sheet immune to water disintegration during the normal period of use of the swab and being wear-resistant and tear resistant when wet to maintain its integrity during such period, and a lining sheet of soft conformable water disintegrable material to separate the scrub sheet from the holder head when the swab is in place thereon, and a string secured to the swab for rupturing the swab, said swab comprising a composite pad having said sheets in face to face contact, and said string being built into said swab by extending along said pad, with one end section projecting beyond one end of the pad, said pad being doubly folded with the scrub sheet on the outside and the sides of the folded pad where the side portions of the pad come face to face being seamed, to form the bag with the end section of the string projecting from the open end of the bag.

2. A cleaning device comprising a disposable cleaning swab flushable after use in a toilet bowl and comprising a thin flexible scrub sheet folded across its width and sealed along its marginal edge portions to form a flat open-top bag to receive a shaping and reinforcing head of a holder, one end of the scrub sheet being turned inwardly between the overlapping fold sections to form an internal flap adapted to be latched to the holder head when the swab is in place thereon, and a string built into the swab and having an end section projecting therefrom and manipulable to rupture the swab while on the holder head, said string having its other section secured to and extending along the swab on the inside thereof,

a portion of said latter end string section being doubly folded and extending between the inner face of said flap and the body part of the swab and a succeeding string portion passing along the outer face of said flap towards the mouth of the swab and connecting into said projecting string end section.

3. A cleaning device comprising a disposable cleaning swab flushable after use in a toilet bowl and comprising a thin flexible scrub sheet folded across its width and sealed along its marginal edge portions to form a flat open-top bag to receive a shaping and reinforcing head of a holder, the opposite ends of the scrub sheet being turned inwardly between the overlapping fold sections to form internal flaps adapted to be latched to the holder head when the swab is in place thereon, and a string built into the swab and having an end section projecting therefrom and manipulable to rupture the swab while on the holder head, said string having its other end section secured to and extending along the swab on the inside thereof, a terminal portion of said latter end string section being doubly folded and extending between the inner face of one of said flaps and the body part of the swab, an intermediate portion of said latter end string section extending in a single length along said body part between said flaps, a succeeding portion of said latter end string section being doubly folded and extending between the inner face of the other flap and said body part and the next portion of said latter end string section passing along the outer face of the latter flap towards the mouth of the swab and connecting into said projecting string end section.

4. A cleaning device comprising in combination, a swab holder having a head, a disposable rupturable swab preformed with a cavity to receive the holder head, said swab being flushable after use in a toilet bowl, means for securing the swab to the holder head against easy release except by mechanical rupture of the swab, and a string extending at one end along the holder head in the inside of the swab when the swab is attached to the holder head and having a portion projecting from the swab in attached position, said string being manipulable to rupture the swab while on the head of the holder and to assist in the removal of the swab from the holder head.

5. The combination of a disposable cleaning swab flushable after use in a toilet bowl and adapted to be attached to a holder, said swab being formed with a cavity open at an outer portion before attachment to the holder to permit said swab to be slipped in this form over the head of the holder, said swab comprising a pair of opposed substantially flat panels secured together at opposite sides by impermanent means free of stitching and defining therebetween said cavity, means for securing the inside of the swab to the head of the holder against easy release except by mechanical rupture of the swab, and a string for rupturing the swab while on the handle head and for assisting in its removal from the holder head, said string extending into the cavity of the swab between the sides thereof when the swab is slipped over the holder head and being selectively manipulable in one direction to pull one panel away from the holder head and thereby to break the latter panel away from the opposite panel or sideways of the swab to break open the swab along one side, whereby the swab may be ruptured while on the holder head and the ruptured swab removed from the holder head.

6. A cleaning device comprising a disposable cleaning swab flushable after use in a toilet bowl and adapted to be attached to a holder, said swab being formed with a pair of opposed panels secured together at least at one side before attachment to the holder to define a cavity between the panels to receive the head of the holder, the sides of said swab being free of stitched seams, one outer portion of the swab being open to permit the swab to be slipped over the head of the holder, said swab having means for securing the swab to the head of the holder and

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for preventing easy removal of the swab from the head of the holder except by mechanical rupture of the swab, and a swab rupturing string built into the swab to form a unit therewith separate from the holder.

7. A cleaning device comprising a disposable cleaning swab flushable after use in a toilet bowl and adapted to be attached to a holder, said swab being in the form of an open-top bag before attachment to a holder to permit the swab to be slipped over and to enclose the head of the holder, said swab having means for latching itself automatically to the head of the holder when the swab is slipped over the head of the holder, and a string secured to the swab to form a unit therewith and having a section extending into the cavity of the swab and a section projecting from the open end thereof and manipulable while the swab is on the holder head to rupture the swab and to pull it away from the holder head.

8. The combination as set forth in claim 4, wherein the securing means comprises means for latching the swab to the holder head and for effecting thereby positive interlock between the swab and the handle automatically when the swab is slipped over the holder head.

9. The combination as set forth in claim 4, wherein the securing means comprises a catch on the head of the holder and an internal flap in the cavity of the swab adapted to be latched onto the catch.

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10. The combination as set forth in claim 4, wherein the swab has a pair of opposed substantially flat panels defining the cavity therebetween, said string engaging the inner face of one of said panels and being adapted to extend between the holder head and the latter panel when the swab is slipped over the holder head, said string being anchored in position to cause the latter panel to be pulled away from the other panel when the string is pulled away from the said other panel to rupture the swab.

11. The combination as set forth in claim 4, wherein the swab rupturing string is secured at one end to the holder head and is adapted to extend along the holder head to an attachment point on the holder head.

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