

June 24, 1958

M. J. CLARK

2,840,080

HYGIENIC PAD

Filed Dec. 18, 1956

FIG 1

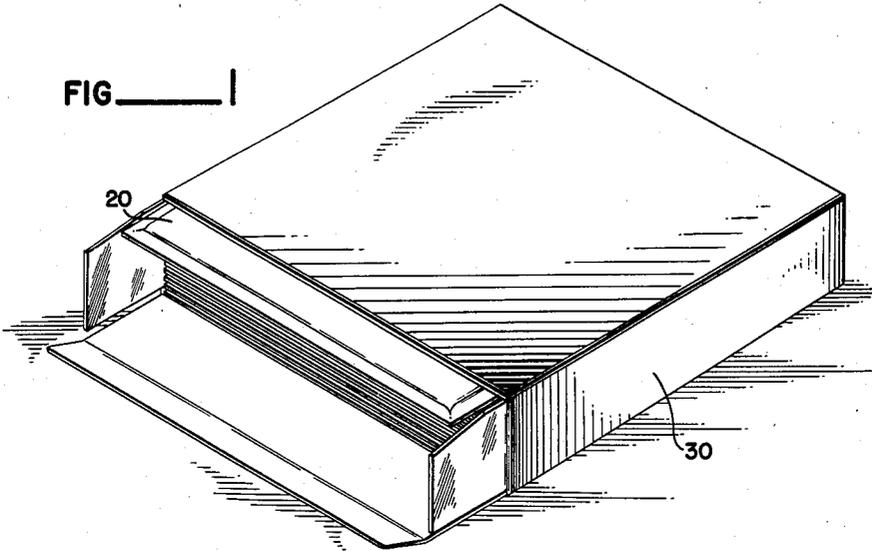


FIG 2

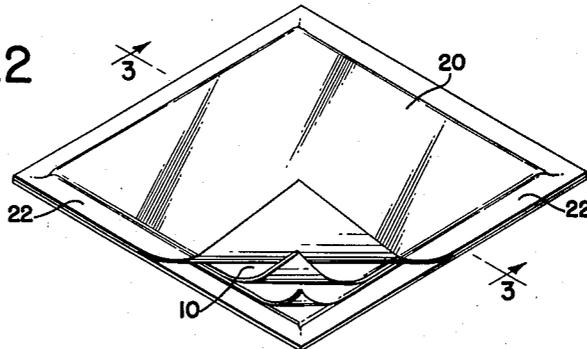


FIG 3

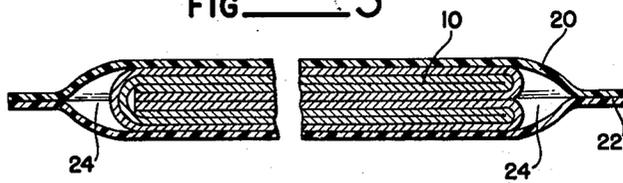
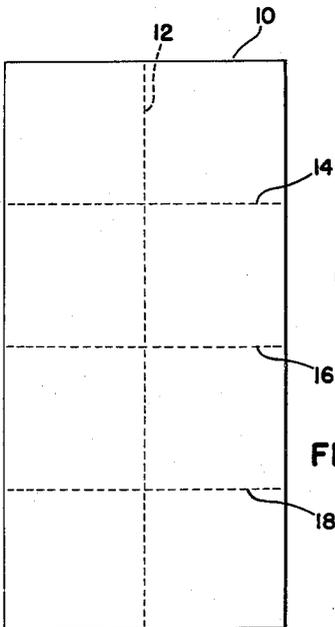


FIG 4



MILLARD J. CLARK
INVENTOR.

BY
Smith & Tuck

1

2,840,080

HYGIENIC PAD

Millard J. Clark, Seattle, Wash.

Application December 18, 1956, Serial No. 629,128

2 Claims. (Cl. 128—296)

This present invention relates to the general art of cleansing pads, and more particularly to a pad formed of a plurality of plies of wet-strength paper, which is moistened with a water solution containing, as a dispersal agent, propylene glycol or a similar inert chemical of similar properties, and further provision for the storage, handling and care of the moistened pads.

It has been found most convenient to have the pads moistened and then to individually seal each of the pads in a polyethylene envelope. This arrangement preserves the pad in a pre-moistened conditioned and suitable for the cleansing of any portion of the human body, and more specifically the anus of the human body. In the past many arrangements have been provided aimed at supplying the means for cleansing parts of the human body under conditions where water and towels and the like are not available. Many satisfactory arrangements have been provided for the cleansing of the body of perspiration, which may occur on the face or neck or under the arms. This present invention is similar in certain respects to these various cleansing pads, but in this instance a pad has been produced which is chemically inert, is always pre-moistened in condition to use and will effectively clean without the use of soap or medication, and which is best termed as neutral rather than antiseptic. This pad is made from a sheet of thin-gauge, wet strength paper, folding it to usable pad size and wetting it with a water solution containing propylene glycol in the percentage of 20% to 40%. Suitable thickness of paper is in the range of designation referred to in the trade as 10 to 15 pound weight. This basic weight is obtained by weighing 500 sheets of 24" x 36" dimensions. A pad formed in this manner can be used to wipe any wound, for instance, as it will remove soil and the like without any danger of infection as might occur in some of the scented or perfumed or powdered cleansing pads now generally in use. The principal use to which this present pad is directed is the final cleansing of the human anus after a bowel movement, and usually after toilet paper has been used in the normal manner. It is therefore not a substitute for toilet paper, but really a cleansing agent to be used after the bulk of the excreta has been removed in the usual manner. This pad provides a cleansing means for a sensitive part of the human body that is now quite generally neglected. When a pad of this order is used, the human body is truly clean and will never give off offensive odors; there will be no stains on the underwear; and particularly with persons where bleeding sometimes occurs through the use of rough toilet paper, there will be a distinct removal of the elements that might cause infection; and particularly does it assist in preventing fissures and the like.

The principal object of this present invention, therefore, is to provide a sterile, pre-moistened and hermetically sealed cleansing pad which will be ready for use at any time the enclosing envelope is torn open.

A further object of this present invention is to provide a hygienic cleansing pad that is particularly adapted to

2

the final cleansing of the human anus after a bowel movement.

A further object of this invention is to provide a cleansing pad which is wetted by a water solution of propylene glycol, so as to produce a colorless and odorless cleansing pad that is neutral and which, because of the dispersal absorption properties of the propylene glycol, lends itself most readily to medication or to scenting.

A further object of this invention is to provide, as a sales package, a folded sheet of paper having the characteristic of high strength while wet, which paper is moistened with a water solution of propylene glycol and is then packaged in a moistureproof envelope having the general characteristics of polyethylene so that the desirable characteristics of the cleansing pad can be preserved for long periods and, when opened, be readily available for use under most satisfactory conditions.

A further object is to provide a cleansing pad which may be obtained ready for use, in the home bathroom, in hotels, clubs, airplanes, steamships, service stations and any other place where cleanliness is stressed.

Further objects, advantages and capabilities will be apparent from the description and disclosure in the drawings, or may be comprehended or are inherent in the device.

In the drawings:

Figure 1 is a perspective view showing a preferred form of sales package, illustrating the ease with which these cleansing pads may be carried about.

Figure 2 is a perspective view of a single cleansing pad, with the corners turned up on certain of the plies to illustrate more thoroughly the construction employed in the folding of the cleansing sheet and the packaging envelope.

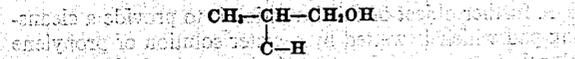
Figure 3 is an enlarged cross-sectional view taken along the line 3—3 of Figure 2.

Figure 4 is a plan view of a sheet prior to folding, with the folding lines being indicated with dashed lines.

Referring more particularly to the disclosure in the drawings, the numeral 10 designates a sheet of paper that is characterized as having high strength when wet and which is now produced commercially. There are a number of producers who supply such paper which obtains its unusual properties by the addition of approximately 1½% melamine resins to the paper stock during manufacture. Paper of this order, which is relatively inexpensive, is an essential base for my pad, in that I want one that will be capable of wiping a surface under pressure without parting or tearing or disintegrating, and particularly one that can be wetted and carried about in a water solution containing propylene glycol. In Figure 4 I have illustrated a desirable type of sheet, in that it would normally provide eight thicknesses of paper when folded along the dashed lines 12, thus forming out of sheet 10 a particularly strong pad in which all the edges except one would be formed with a marginal fold. Such a fold is best accomplished by first folding sheet 10 along the longitudinal folding line and then folding the upper end along the line 14, which would bring the upper edge to the transverse median 16. Similarly the lower end is folded inwardly along line 18, so that the two outer edges meet at the median 16. In use, then, the pad is grasped so that the one margin which is formed of a plurality of unfolded edges should be the trailing edge in any wiping action. This gives maximum security against any breaking or tearing of the paper pad, as all the edges that normally would be under strain are folded edges and thereby do not present a single-thickness edge that would be susceptible to ready tearing. This arrangement makes it possible to obtain liquid from the trailing edge of the pad by the simple expedient of spread-

ing the fingers slightly during the wiping stroke, to form channels, and so increase the cleansing action.

Pads 10 are then dipped in a water solution containing approximately 30% of propylene glycol as a dispersal agent. This chemical corresponds to the chemical formula of



Water is known to be one of the best cleansing agents for the human skin. However, propylene glycol has the very desirable properties of softening, dissolving and putting into solution many of the organic chemical elements present in human excreta and the like. Further, the wetting action of propylene glycol assists in emulsifying oils and gums, and this readily assists in their removal from the human skin or flesh.

Each of the folded sheets 10, when wetted with the water and propylene glycol solution, is considered adequate for use, and in order to maintain them in the wetted condition, it has been found desirable to enclose the same in a water-tight container, and for this purpose a polyethylene envelope is most desirable. An envelope formed of thin gauge has been found to be very satisfactory and is relatively cheap. It is desirable that the envelope 20 be provided with a relatively wide sealed margin 22, to the end that it will give, first of all, a relatively strong margin that will normally resist rupture but will also give enough body so that, when grasped between the thumb and forefinger of the hands, it can be very readily torn, thus making the wet paper sheet 10 readily available. It has been found further desirable that a reasonable space as at 24 be provided around the inner margin of the envelopes, so that, even though the moisture might tend to be squeezed out of the folded paper pad, due to pressure on the sides of the pad, space 24, being marginal around the pad, will collect and retain the water solution, and it will therefore be readily available for re-absorption by the pad prior to use.

In order to provide a convenient sales and carrying package, I provide an enclosing carton as 30, which will hold a limited number of these pads. Normally such a carton could hold a dozen pads and would be a convenient sales package, yet itself would be relatively thin and take up very little room in one's pocket or hand-

bag, and would thus be always readily available when needed. Carton 30 would be relatively thin and have no further function than to provide a carrier for the sealed sheet plastic envelopes and insure that they would not be folded or damaged prior to use.

It is believed that it will be clearly apparent from the above description and the disclosure in the drawings, that the invention comprehends a novel hygienic pad.

Having thus disclosed the invention, I claim:

1. A cleansing pad for use on the human body, comprising: a large sheet of light gauge wet-strength paper, which is folded once on its longitudinal median, each of the ends then being folded in toward each other and meeting on the transverse median of the sheet; said sheet thus forming a cleansing pad in which three of its margins present folded edges with only one margin presenting single-thickness plies; said pad wetted in a water solution containing 20% to 40% of propylene glycol; said pad, after being wetted, enclosed in an impervious transparent envelope having marginal collecting space for any of the water solution which may be pressed out of the pad momentarily; and a pocket carrier carton for enclosing a limited number of said pad-containing envelopes.

2. A cleansing pad for use on the human body, comprising: a large sheet of light gauge wet-strength paper, which is folded once on its longitudinal median, each of the ends then being folded in toward each other and meeting on the transverse median of the sheet; said sheet thus forming a cleansing pad in which three of its margins present folded edges with only one margin presenting single-thickness plies; said pad wetted in a water solution containing 20% to 40% of propylene glycol; said pad, after being wetted, enclosed in an impervious transparent envelope, and a carrier carton for enclosing a limited number of said pad-containing envelopes.

References Cited in the file of this patent

UNITED STATES PATENTS

967,688	Titherly	Aug. 16, 1910
1,786,513	Zuckerman	Dec. 30, 1930
2,095,788	Brown	Oct. 12, 1937
2,379,657	Ryberg	July 3, 1945
2,565,887	Salfisberg	Aug. 28, 1951