

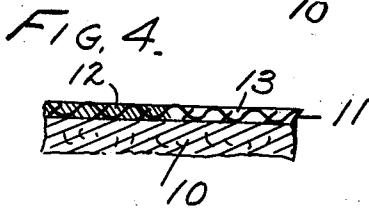
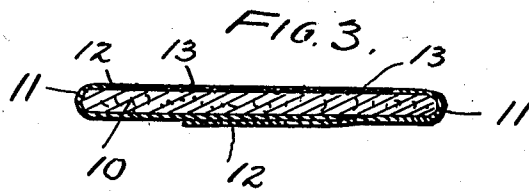
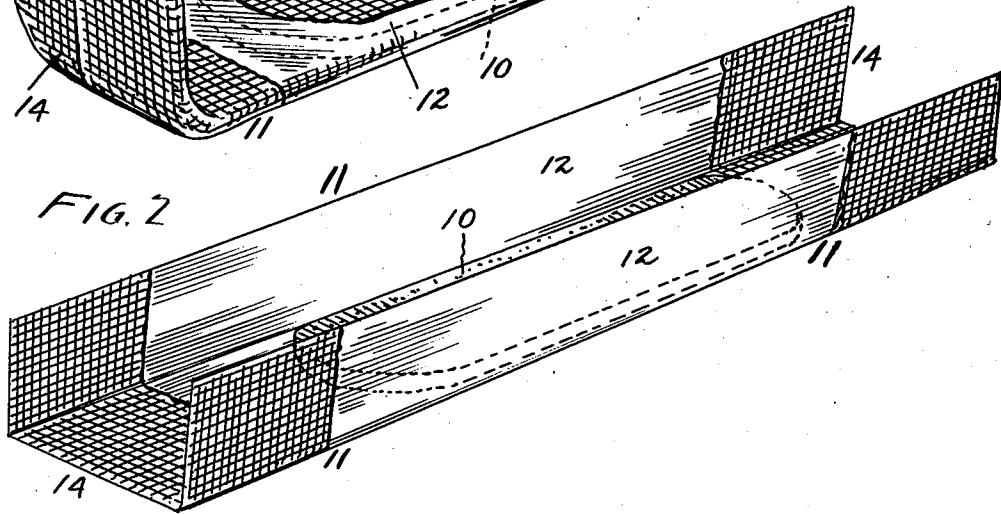
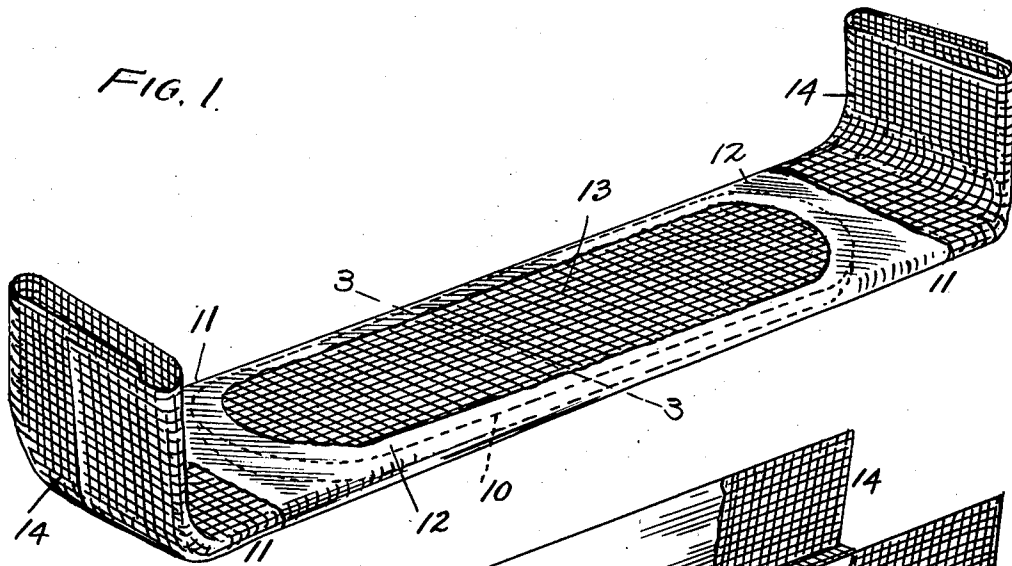
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SANITARY NAPKIN

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SANITARY NAPKIN

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4 Claims. (Cl. 128—290)

Sanitary napkins for catamenial use which we are acquainted have at least two serious faults or defects. One is failure to retain or confine the liquid or flow received thereon even when the napkin or pad has a body of absorbent material so that what may be termed an objectionable leakage is likely. The other is that the flow has a tendency to coagulate on the napkin surfaces and also on the body parts with which it comes in contact. This is due to the fact of failure of the napkin to absorb all the flow so that which is not absorbed coagulates, dries upon the surfaces upon which it coagulates and creates or forms rough exposed surfaces which chafe the body parts having contact therewith and cause adhesion between the napkin and the body parts. These conditions result in great discomfort and annoyance otherwise to the wearer and when adhesion exists, the discomfort is increased when the napkin is removed because of the resistance to separation or rupture of the adhesion. An object of our invention is to provide a napkin which will entirely overcome the faults just mentioned and which nevertheless can be made and sold at a very small price and which will have characteristics of construction that will enable a napkin after one use to be discarded or thrown away.

What we consider the most simple and satisfactory form or embodiment of our invention, consists of but two members, one an oblong pad of absorbent material such as is commonly in use in such articles and a wrapper of coarse mesh gauze that provides the means for holding the absorbent pad in position on the wearer and which affords ready access of the fluid or flow to be absorbed to the absorbent pad, the wrapper being simply folded about the pad so that assembly is easy and inexpensive.

In the accompanying drawing:

Fig. 1 is a perspective view of a catamenial pad or napkin which satisfactorily embodies our invention;

Fig. 2 is a similar view with the gauze wrapper partly opened out;

Fig. 3 is a cross-section on the line 3—3 of Fig. 1.

Fig. 4 is a detail cross section on a greatly enlarged scale.

The pad 10 is oblong in form but narrow compared with its length so that its proportions are suitable for the intended use of the article. It may be composed of loosely superimposed thin layers or sheets of cellulosic material so that by reason of the nature of the material itself and

the loose piling of the sheets, the pad has ample capacity for absorption of the liquid flowing thereto, it is light, soft and pliable to avoid discomfort from its use, and it readily disintegrates when in water, so that when thrown in the sewage receptacles or pipes, its dissolution takes place rapidly, and clogging will not occur.

The wrapper 11 is of coarse mesh gauze and is sufficiently wider crosswise than the width of the pad as to be foldable thereover with overlapping side portions of sufficient extent to completely enfold the pad so that on one side thereof, there will be a single ply of the wrapper and on the opposite side a double ply, and it is sufficiently longer than the pad to provide beyond each end thereof a free portion that may be used for securing the pad to the person of the wearer by the waist band or strap commonly employed.

All portions of the wrapper in contact with the pad except that which lies in a single layer or fold over one side thereof are rendered liquid impervious, preferably by a thin coating 12, of latex rubber cement which in effect is a homogeneous or integral part of the wrapper, filling the interstices or holes in the gauze and which besides its important characteristic of liquid impermeability is flexible, smooth and soft and therefore is comfortable to the wearer. The area 13 of the wrapper not having the liquid impermeable coating is preferably a little less than the area of the surface of the pad next which it lies so that there is a marginal overlapping of the coating all around the pad. This uncoated area, of course, comes next the body and in position to receive the liquid to be absorbed, but all other portions of the pad are completely covered or sealed by the liquid impermeable portion of the wrapper, the result being that there can be no escape or leakage of liquid from any part of the pad when worn. The coating extends a substantial distance beyond the ends of the pad while leaving the portions 14 of the wrapper beyond such ends uncoated and therefore available for the ready or convenient attachment of fastening means to connect the pad to its supporter, such as a band or belt about the waist of the wearer. The uncoated portion of the wrapper may be centrally located in the wrapper, but, of course, such central location transversely at least is not necessary since it is desirable merely that there shall be sufficient overlap of the free portions of the wrapper as effectually to seal against the escape of liquid.

We apply to the pad an anti-coagulant that will maintain the catamenial flow in a liquid

state and prevent the objectionable conditions we hereinbefore set forth which result from coagulation, and this maintenance of the liquid condition renders all the more desirable that characteristic of our pad which effectually seals against the escape therefrom of liquid. Thus in a sense, the maintenance of the liquid state of the flow adds to the problem of providing an effectual liquid seal or enclosure for the pad, but our wrapper with its liquid impermeable coating, as described, with entire efficiency prevents leakage or escape of liquid taken up or absorbed by the pad. Various anti-coagulants may be used. For example, a citrate such as sodium citrate has been found by us entirely suitable for the purpose and efficient.

Sodium citrate when that is used can be applied to the pad either as a solution or in a dry powdered form it may be dusted on and through the pad.

What we claim is:

1. A catamenial napkin having a liquid absorbing pad that is supplied with an anti-coagulant for the flow to be absorbed by the pad and having a water-proof wrapper with means of access of liquid to be absorbed by the pad.
2. A catamenial napkin having a liquid absorbing pad that is supplied with an anti-coagulant

for the flow to be absorbed by the pad, and a wrapper of gauze having a liquid impermeable area on that side of the pad opposite the one which comes in contact with the body in use, said impermeable area being a coating that closes the meshes or interstices of the gauze fabric.

3. A catamenial napkin having a liquid absorbing pad that is supplied with an anti-coagulant for the flow to be absorbed by the pad, and a wrapper of gauze having a liquid impermeable area on that side of the pad opposite the one which comes in contact with the body in use, said impermeable area being a coating that closes the meshes or interstices of the gauze fabric, the coating on the side of the pad next the wearer's body reaching over the margin of the pad on all sides for a limited extent, and such coating reaching from the ends of the pad only part way to the ends of the wrapper, leaving substantial end portions of the wrapper uncoated, such uncoated end portions being adapted for the attachment of the pad to supporting means applied to the body of the wearer.

4. A catamenial napkin as in claim 2, in which the anti-coagulant consists of sodium citrate.

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