May 15, 1956 A. M. LANDY ET AL 2,745,405

SANITARY RECEPTACLES

Filed March 24, 1953

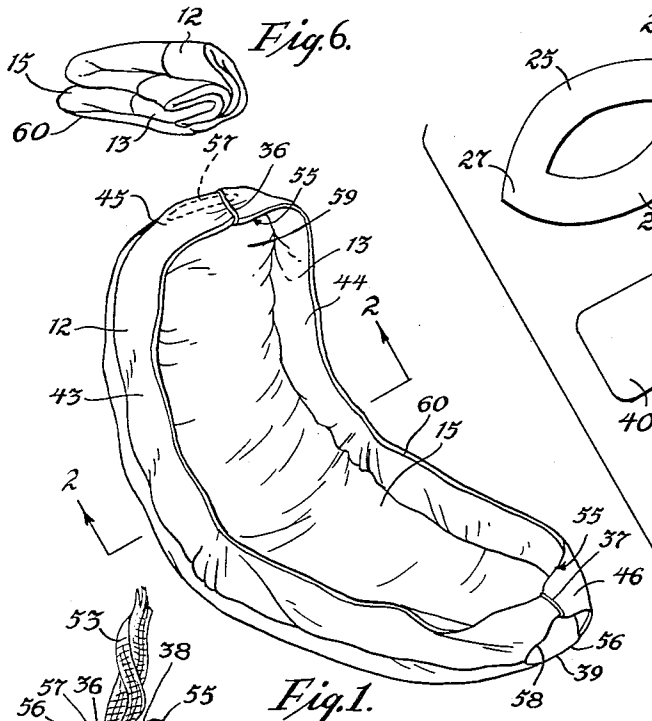


Fig. 6.

Fig. 1.

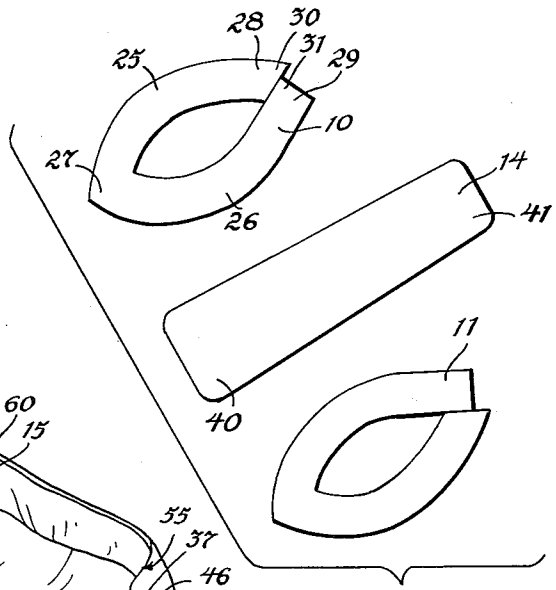


Fig. 5.

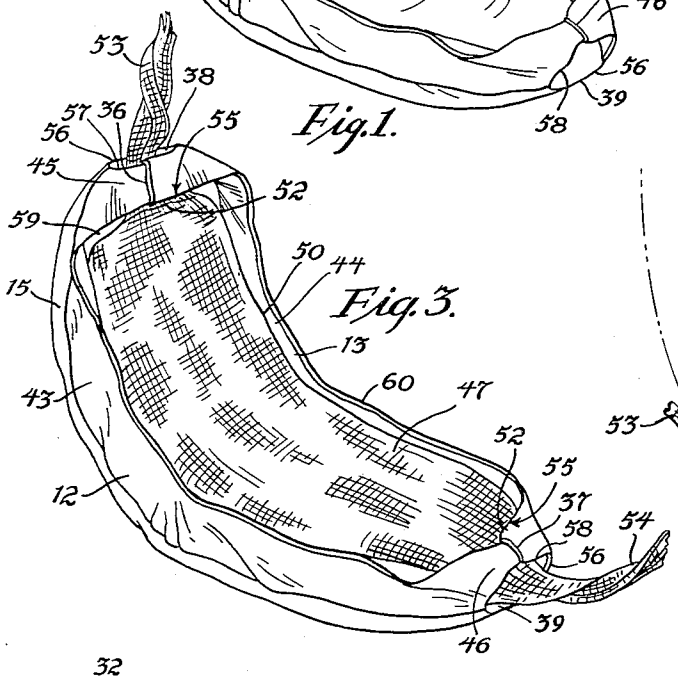


Fig. 3.

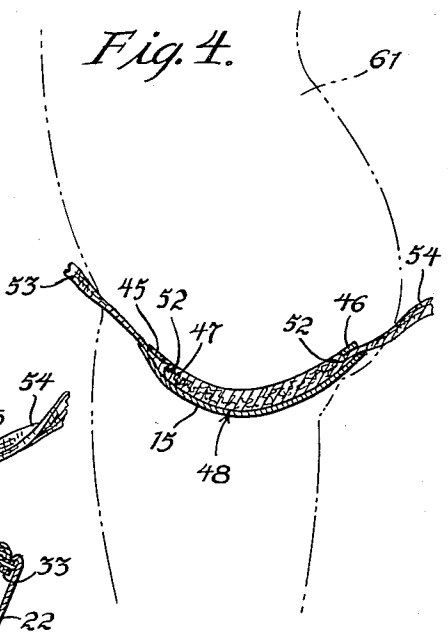


Fig. 4.

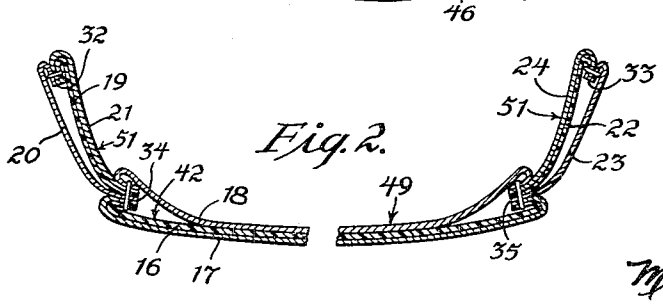


Fig. 2.

INVENTORS.
ANNE M. LANDY
BY NEOLA SEIDLER

ATTORNEY.

United States Patent Office 2,745,405 Patented May 15, 1956

2,745,405

SANITARY RECEPTACLES

Anne M. Landy and Neola Seidler, Philadelphia, Pa.

Application March 24, 1953, Serial No. 344,306

1 Claim. (Cl. 128—286)

Our invention relates to sanitary receptacles, and it relates more particularly to receptacles of the kind which are adapted to hold an absorbent pad such for instance as a surgical or other dressing, or a sanitary napkin, when in use.

In the use of absorbent pads such as surgical or other dressings, or sanitary napkins, it has frequently been the experience that such pads are not able to receive and hold all of the fluid they are intended to absorb. The problem has been particularly acute in cases requiring sanitary napkins, for the flow of fluid is intermittent and of unpredictable quantity. As a result, considerable annoyance and embarrassment has been caused the wearer of said napkin, as well as spoilage of clothing contacted by the fluid which the napkin failed to absorb. Attempts have been made to meet this problem by providing a casing for a sanitary napkin, but such attempts have hitherto proven unsatisfactory for they have either increased the bulk of napkin and casing in such a manner as to betray their use, or they have proven inadequate to catch and hold the excess fluid, and in some instances they were of such construction as to be impractical of manufacture.

One object of our invention therefore is to provide a sanitary receptacle for an absorbent pad, which will be safe, comfortable, secure, and dependable in operation and which will assure the capture and holding of all excess fluids.

Another object of our invention is to provide a sanitary receptacle which will not betray through the user's clothing the fact that an absorbent pad, such for instance as a sanitary napkin, is being worn.

A further object of our invention is to provide a sanitary receptacle which is readily and inexpensively manufactured and which may be packaged or carried in a very small space.

Our invention also consists of the parts and combinations of parts as more fully described hereinafter.

For the purpose of illustrating our invention, we have shown in the accompanying drawings forms thereof which are at present preferred by us, since the same have been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which our invention consists can be variously arranged and organized and that our invention is not limited to the precise arrangement and organizations of the instrumentalities as herein shown and described.

Referring now to the drawings, in which like reference characters indicate like parts:

Figure 1 represents a perspective view of a sanitary receptacle embodying our invention.

Figure 2 represents an enlarged sectional view taken generally along the lines 2—2 of Figure 1.

Figure 3 represents a perspective view of a sanitary receptacle holding an absorbent pad and ready for use, and embodying our invention.

Figure 4 represents a vertical sectional view of a sanitary receptacle holding a sanitary napkin, in actual use, and embodying our invention.

Figure 5 represents a plan view showing patterns which may be used in making a sanitary receptacle embodying our invention.

Figure 6 represents a perspective view illustrating a sanitary receptacle in folded condition for carrying or packaging, and embodying our invention.

The sanitary receptacle of our invention may be formed in accordance with patterns, such for instance as the patterns **10** and **11** respectively indicating the outlines of the materials to be cut in order properly to form the side-and-end wall sections **12** and **13**, and the base pattern **14** indicating the outlines of the materials to be cut in forming the base **15**.

In a preferred form of our invention, we provide the base and side-and-end wall portions with a substantially impervious or waterproof interior surrounded by an absorbent exterior. The waterproof interior may consist of a sheet of rubber, plastic or similar web-like substance; or it may consist of a rubber-impregnated, plastic-impregnated or otherwise waterproofed woven or knit fabric. The fabric exterior may consist of woven or knit silk, lawn, dimity, nylon, rayon, cotton or other absorbent and washable material. Thus, in a preferred form, an impervious or waterproof base **16** is cut along the outlines of the pattern **14**; and an absorbent and washable exterior fabric **17**, as well as an absorbent and washable interior fabric **18** are both cut along the outlines of the same base pattern **14**. In similar manner, an impervious or waterproof side-and-end wall section **19** is cut along the outlines of the pattern **10**, and an absorbent and washable exterior fabric **20** as well as a washable and absorbent interior fabric **21** are both cut along the outlines of the same pattern **10**, to provide the specific materials for the side-and-end wall section **12**; and in like manner, the impervious or waterproof material **22**, external washable and absorbent material **23** and internal absorbent and washable material **24** are provided by following the outlines of pattern **11** for forming the side-and-end wall section **13**.

The patterns **10** and **11** are preferably identical, and if desired, one of them may be dispensed with and by using both faces the other may be used for both sections **12** and **13**. For purposes of description therefor, we shall describe only one side-and-end wall section pattern **10** in detail. In a preferred form, the side-and-end wall section pattern **10** consists of substantially arcuate segmental portions **25** and **26** joining at one of their ends in a substantially V-shaped angle portion **27**, the arcuate segmental portions corresponding generally to the sides of each section **12, 13**. The opposed end portions **28** and **29** respectively of the arcuate segmental portions **25** and **26** are preferably elongated and correspond generally to the end portions of each section **12, 13**, terminating in hem portions **30** and **31** respectively. The base **14** is preferably broader at its forward end portion **40** than at its rearward end portion **41**. In a preferred manner of assembling our sanitary receptacle, the patterns **10, 11** and **14** are made of sufficient length and width to provide for internally disposed hem portions **32, 33, 34** and **35**, as well as the hem portions **36** and **37** respectively disposed in the end wall portions of the sections **12** and **13**.

Thus, in assembling the sanitary receptacle of our invention, the components of each side-and-end wall section **12, 13** may first be joined by sewing the hem **32** with its components disposed in the following manner: the impervious or waterproof material **19** may be laid upon the interior fabric **21** which in turn may be laid upon the exterior fabric **20**; and the hem **33** may be sewn with the impervious or waterproof material **22** laid upon the interior fabric **24** which in turn may be laid upon the exterior fabric **23**. The exterior fabrics **20** and **23** may then be folded back from their respective hems **32** and **33**, and the conjoint material and fabric **19, 21** and con-

joint material and fabric 22 and 24 may be folded back from their respective hems 32 and 33 so as to dispose the ends of the materials and fabrics in position to be sewn together in the base hems 34 and 35. If desired, the side-and-end wall sections may be turned inwardly with their hems 32 and 33 disposed adjacent each other, and their loose edges delineating the outer edge of the base pattern 14. The interior base fabric 18 may then be laid against the interior fabrics 21 and 24 and with its outer edge in registry with the loose edges of said fabrics 21 and 24; while the exterior base fabric 17 may be disposed against the exterior fabrics 20 and 23 with its outer edge in registry with the loose edges of said fabrics 20 and 23; and the impervious or waterproof base sheet 16 may be disposed against the exterior fabric 17, with the edges of said sheet 16 in registry with the edges of said fabric 17. The hems 34 and 35 may then be sewn along the sides of the base components 16, 17 and 18, and preferably along a portion of the ends thereof, leaving an opening at each of the forward end 38 and the rearward end 39 of the base assembly 15. The whole assembly may now be pulled inside out through either end opening 38 or 39, so as to dispose the side-and-end wall sections 12 and 13 in an outwardly projecting manner, with the interior base fabric 18 folded back about the hems 34 and 35 and laying on the inner face 42 of the impervious or waterproof base material 16, while the waterproof material 16 and its adjacent exterior fabric 17 are folded back from the hems 34 and 35 operably to dispose said hems 34 and 35 interior of the base 15. The end openings 38 and 39 may now be closed by appropriate stitching, and the extremities of the side-and-end sections 12 and 13 may be sewn together at both their hem portions 36 and 37, thus forming between said hem portions and their respective adjacent base portions, the channels 57 and 58.

There is thus formed a receptacle 60 having a flexible base 15 which is normally held in concave position by the flexible, arcuate and substantially V-shaped side portions 43 and 44 terminating in end portions 45 and 46 which preferably are themselves spaced from the base 15 in order to permit collapsing substantially thereagainst and in a manner more fully to be described hereinafter, the spacing between said end portions 45 and 46 and said base portion 15, providing suitable channels for passage therethrough of retaining extremities of an absorbent pad 47 to be held by our sanitary receptacle 60; said receptacle having no harsh seams or edges to bear against any portion of the wearer's body, and also comprising an interior wall which is both absorbent and washable in order to capture and resist the flow of excess fluids which are not retained by said absorbent pad, and said interior fabric being embraced by a waterproof material which prevents passage therethrough of said excess fluid, and which waterproof material is itself exteriorly covered by a washable and soft fabric which protects the wearer from unpleasant or conscious contact with said impervious or waterproof material; said embracing being in such a manner that the side walls will not bulge outwardly to permit spillage when the receptacle is curved to conform to the contour of the body of the wearer 61.

In operation, the absorbent pad, such for instance as the sanitary napkin 47 may be disposed within the sanitary receptacle 60 by laying the lower face 48 of the pad against the upper face 49 of the interior base fabric 18, with the sides 50 of the pad 47 disposed adjacent the inner faces 51 of the interior fabrics 21 and 24, and the ends 52 of the pad 47 disposed intermediate the end portions 45 and 46 of the sections 12 and 13. The retaining extremities 53 and 54 of the pad 47 are then threaded respectively through the channels 57 and 58 of the receptacle 60. The pad 47 may then be adjusted along the base 15 so as to permit the end portions 45 and 46 to be collapsed against the retaining extremities 53 and 54 respectively, with the upper edges 55 of the end portions 45, and 46 disposed adjacent the ends 52 of the pad 47, and preferably intermediate said ends 52 and the ends 56 of the base 15. The receptacle 60 with the pad 47 disposed therein, may now be placed in position on the wearer 61, and the retaining extremities 53, 54 secured in any desired manner about the body of the wearer.

It will be found that by our novel invention, the wearer's body at no time contacts the impervious or waterproof sheet material, but will instead bear against the soft, pliable and washable fabrics forming the interior and exterior walls of the receptacle 60. Moreover, excess fluids which are not captured by the pad 47 will be retained within the walls of the sections 12 and 13 and above the base 15, by being first absorbed by the absorbent fabrics composing the interior walls of the receptacle 60, and where not so absorbed, by being held as in a vessel by the impervious or waterproof internal sheet construction of the receptacle 60. Not only so, but the retention of the side walls 43 and 44 in fluid-capturing position is assured by the arcuate and substantially V-shaped contour of the side walls 43, 44. Moreover, the use of the pad and receptacle is very substantially hidden by the disposition of the end portions 45 and 46 in substantially collapsed relation to the base 15, for by this construction there is no abrupt termination of the ends 52 of the pad 47 against the body of the wearer 61. Instead, there is a gradual tapering off from the thickness of the pad 47 to the thickness of the ends 45, 46 bearing against the respective retaining extremities 53, 54 which in turn lie against the base 15, to the thickness of the retaining extremities 53, 54 alone, said tapering off being accomplished in such a manner as to increase the assurance that fluids will not escape the interior of the receptacle. Moreover, the broadened forward end 40 of the base pattern results in a broadened forward end 59 of the base 15, which effectually broadens the forward contour of the pad and receptacle assembly at the very place where the thickness of said assembly is being tapered off as aforesaid. As a result, the fact that an absorbent pad is being worn is effectually hidden when clothes are worn by the wearer 61. If desired, the length of the base 15 may be such as to provide for the collapsing of one end, with the other end 52 of the pad 47 bearing against the interior absorbent wall of the adjacent end 45 or 46. Or, if desired the pad 47 may be spaced from the upper edge 55 of either collapsed end wall 45, 46 and thus provide additional space for the contained reception of excess fluid.

When the receptacle has been used, it may readily be washed, for the interior and exterior fabrics are both washable, and the impervious sheet is not affected by water. Thus, the receptacle 60 may effectually be cleansed and dried. It may then be folded into a miniscule of space, as illustrated in Figure 6, so that it may readily be carried in the handbag or other receptacle. In the same manner, it may readily be packaged for sale.

We are aware that the invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof, and we therefore desire the present embodiments to be considered in all respects as illustrative and not restrictive, reference being had to the appended claim rather to the foregoing description to indicate the scope of the invention.

Having thus described our invention, what we claim as new and desire to obtain by Letters Patent is:

A sanitary receptacle for a pad comprising absorbent material having a top, a bottom, sides and end portions, and having retaining extremities extending from said end portions; said sanitary receptacle comprising a base portion having a substantially continuous wall secured to said base and in fluid impervious relation thereto along the sides and end portions of said base; said base being wider at the anterior end portion and narrower at the posterior end portion and comprising exterior and interior layers of absorbent and washable fabric and an in-

termediate layer of fluid impervious material; said wall comprising side portions and end portions corresponding generally to the side and the end portions respectively of said base; means for securing said retaining extremities to said receptacle; said side wall portions being patterned in accordance with a substantially angular contour; said continuous wall portion being substantially collapsible against said base; said wall portion and said base being adapted to conform longitudinally and transversely to the contour of the body of the wearer and to lie in substantially flat contact therewith.

References Cited in the file of this patent

UNITED STATES PATENTS

342,494	Baldwin	May 25, 1886
1,217,014	Knieriemms	Feb. 20, 1917
1,507,180	Holly	Sept. 2, 1924

FOREIGN PATENTS

134,867	Australia	Oct. 24, 1949