United States Patent [19]

Traverse

[11] 3,865,110

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[54] **DIAPER AND INTEGRAL EVERSION CONTAINER**

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[21] Appl. No.: **388,210**

[52] **U.S. Cl.** **128/284,** 128/296

[51] **Int. Cl.** **A61f 13/16**

[58] **Field of Search** ..... 128/284, 287, 296, 132, 128/290 R, 285

[56] **References Cited**

UNITED STATES PATENTS

3,024,788	3/1962	Lane	128/285
3,369,545	2/1968	Wanberg	128/287
3,528,421	9/1970	Vaillancourt	128/284
3,670,731	6/1972	Harmon	128/284
3,731,689	5/1973	Schaar	128/287

Primary Examiner—Aldrich F. Medbery

[57] **ABSTRACT**

A damp proof easily disposable diaper is provided comprising a pad of absorbent sheet material carried in superimposed relation by a bag of water resistant sheet material forming a damp resistant backing for the pad. After use, the bag may be manually everted through an opening thereof to enclose the pad therein. To facilitate the eversion, an end portion of the pad attached to the bag only adjacent the opening may be released therefrom and folded over the remaining portion of the pad thereby covering soiled surfaces thereof.

1 Claim, 4 Drawing Figures

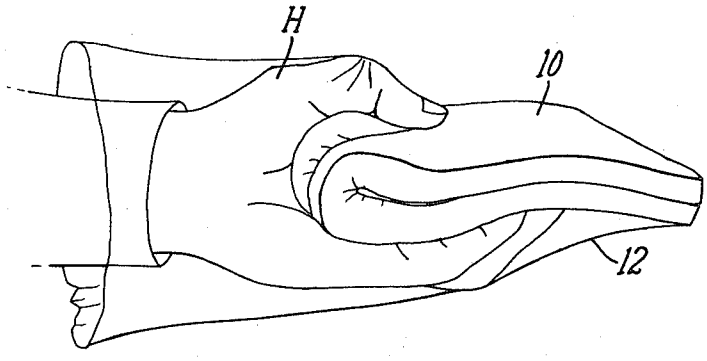


FIG. 1

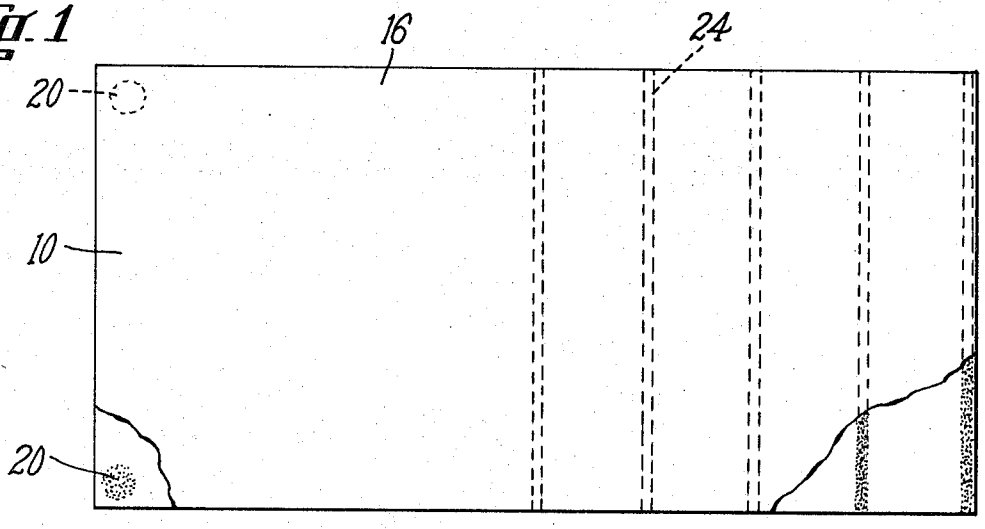


FIG. 2

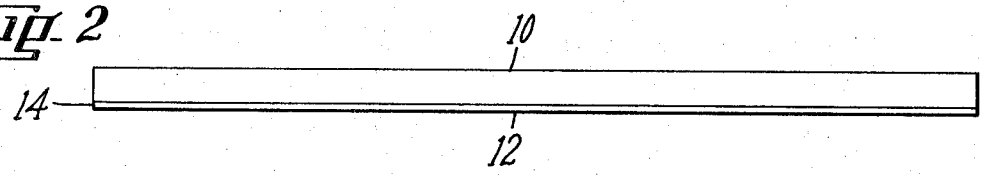


FIG. 3

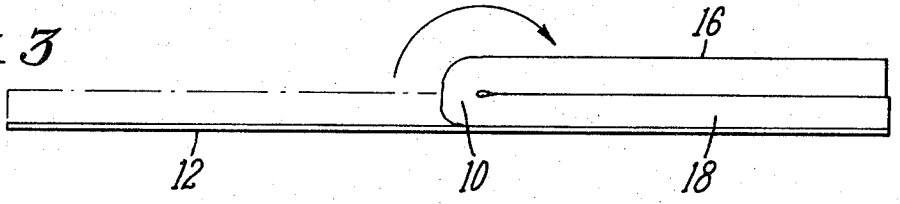
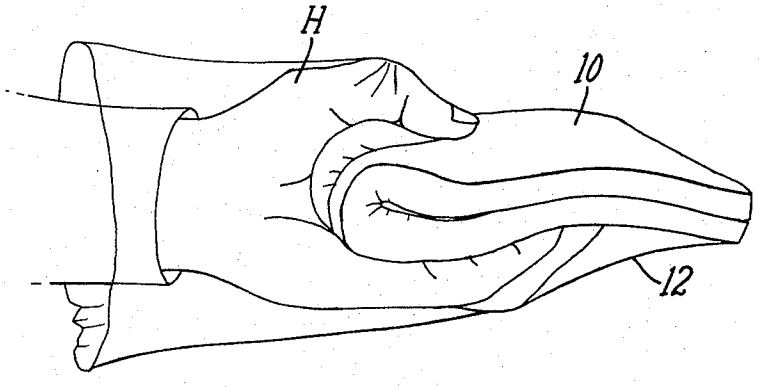


FIG. 4



DIAPER AND INTEGRAL EVERSION CONTAINER

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to improvements in diapers and more particularly to improvements in diapers adapted for disposal after use.

2. Description of the Prior Art

The disposal of used diapers has generally been a disagreeable task. Retaining diapers for washing or for disposal as trash is apt to create problems of sanitation and the generation of odors. An existing diaper construction is at least partly disposable in toilets, but this manner of disposal is not always completely satisfactory as it requires careful handling in rinsing matter off a water proof backing sheet and the separate disposal of the backing sheet.

Related problems of disposing of used catamenial devices as discussed in U.S. Pat. No. 3,024,788 have been approached by a construction including a bag attached to a flexible extension from the pad, the bag being usable to enclose the pad. However this construction is not adapted to provide a suitable diaper.

SUMMARY OF THE INVENTION

It is accordingly an object of the present invention to provide an improved diaper in which the construction provides enhanced capability for pleasant, convenient and sanitary disposition of the diaper after use.

Another object of the present invention is to provide an improved diaper incorporating means for the convenient and sanitary enclosure of the pad of the diaper after use, which means also serves to provide a damp resistant backing for the pad of the diaper.

To these ends and in accordance with the present invention, there is provided an improved diaper comprising a pad of absorbent sheet material and a bag of water resistant sheet material carrying the pad in superimposed relation therewith, the bag forming a damp resistant backing for the pad and having an opening therein to admit a hand for manual eversion of the bag to enclose the pad after use.

To facilitate the manual operation of eversion of the bag to bring the pad inside it, an end portion of the pad preferably constituting approximately about one half of its length, is secured to the bag only by attachment thereto adjacent the opening so that after use of the diaper in the operation of everting the bag, the end portion may be detached from the bag and folded over the remaining portion of the pad, thereby enclosing soiled surfaced and making the diaper more pleasant to handle.

Other features and advantages of the invention will best be understood from the following description taken in connection with the appended drawings.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a plan view, partly broken away, of a diaper embodying the present invention;

FIG. 2 is a side elevation of the diaper shown in FIG. 1; FIG. 3 is a side elevation of the diaper shown in FIG. 1 illustrating a stage in the operation of manual eversion; and FIG. 4 is a view, generally in side elevation, of another stage of the operation of manual eversion in the disposal of the diaper of FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to FIGS. 1 & 2 of the drawing, the diaper of the present invention comprises an absorbent pad **10** formed of a conventionally suitable material and a bag **12** of water resistant sheet material such as plastic film carrying the pad **10** in superimposed relation therewith. Preferably, and as shown, each of the pad **10** and the bag **12** has a generally rectangular configuration. The rectangular form of the pad **10** is elongated to provide the desired fit to an infant while the bag **12**, as shown, may be generally co-extensive with the pad.

The bag **12** has an opening **14** (FIG. 2) at one end thereof to receive a hand (FIG. 4) in the operation of everting the bag. To make this operation more convenient and pleasant, an end portion **16** of the bag **10** is secured to the bag **12** only by attachment thereto adjacent the opening **14** so that the portion **16** may be released from the bag and folded over the remaining portion **18** of the pad thereby covering soiled surfac of the pad and making the eversion operation more pleasant. Preferably the attachment of the pad portion **16** to the bag **12** takes the form of adhesive tacks **20** at the corners of the bag adjacent the opening **14**, using any suitable cement such as a contact cement. Thus any tearing of the bag which might occur upon release of the portion **16** therefrom is confined to the area of the bag adjacent the opening **14** and will not interfere with the subsequent enclosure of the pad since the major portion of the bag **12** remains intact. Suitably each of the portions **16** and **18** constitute approximately one half of the length of the pad **10**. The portion **18** is bonded to the bag **12** to maintain its superimposed disposition therewith during the manipulation of the diaper. Suitably, and as shown, the attachment of the portion **18** may be accomplished by a plurality of adhesive bonds **24** extending across the pad **10**.

In operation, after a used diaper has been removed from an infant, the end portion **16** of the pad **10** which is tacked to the bag **12** is released from the bag and folded over the remaining portion **18**. After folding of the pad to the disposition illustrated in FIG. **3**, a hand may be inserted through the opening **14** of the bag to grasp the folded pad through the material of the bag as shown in FIG. **4** and the operation completed by withdrawing the pad through the opening **14** and tying off the everted bag in conventional manner.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States is:

1. A damp resistant diaper ensemble in the configuration of a flat elongated rectangle, said ensemble having a means for manual eversion of a bag to enclose a used damp diaper comprising a diaper having on one half length, at least one adhesive means across the width thereof, a water resistant bag of sheet material of a size substantially coextensive of the diaper and having an opening in a first end portion and attached on the outside surface adjacent its second end portion to said diaper adhesive means, said outside surface of said bag adjacent its opening and the diaper second half being joined by an adhesive tack means to define a disengageable attachment means between the bag and diaper whereby said bag opening defines a hand insertion means so said diaper second half portion may be readily detached from the bag, folded over the remaining first portion to cover the soiled surfaces, and be enclosed in the bag by said manual eversion thereof.

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Notice of Adverse Decision in Interference

In Interference No. 99,547, involving Patent No. 3,865,110, R. F. Traverse, DIAPER AND INTEGRAL EVERSION CONTAINER, final judgment adverse to the patentee was rendered Aug. 24, 1977, as to claim 1.

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