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INFANT'S BATHING DEVICE

Filed Aug. 24, 1948

2 SHEETS—SHEET 1

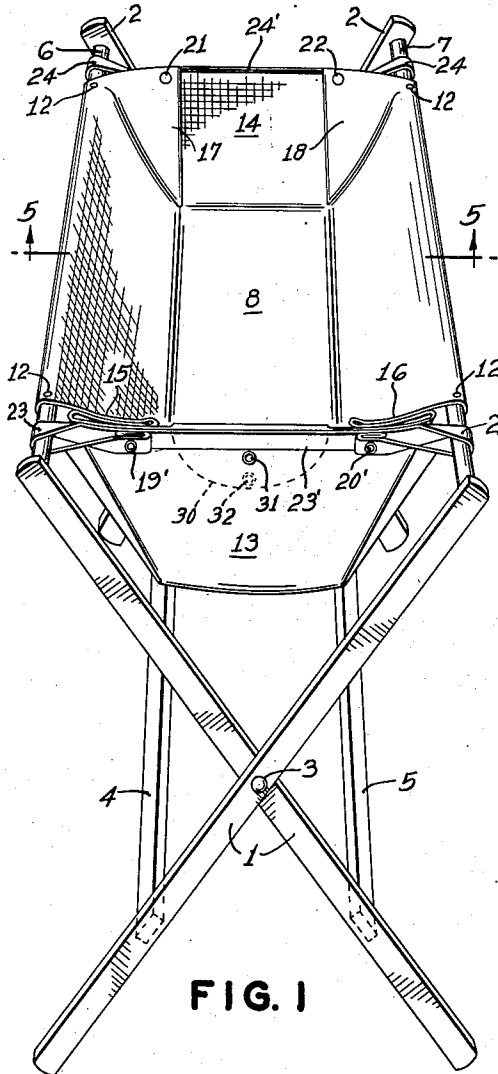


FIG. 1

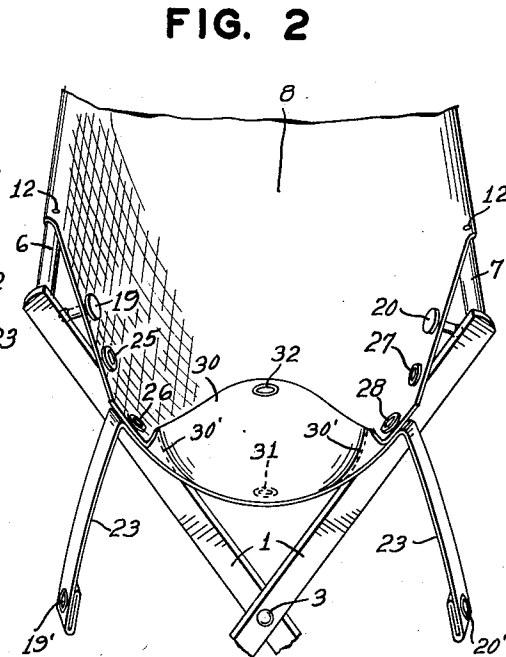


FIG. 2

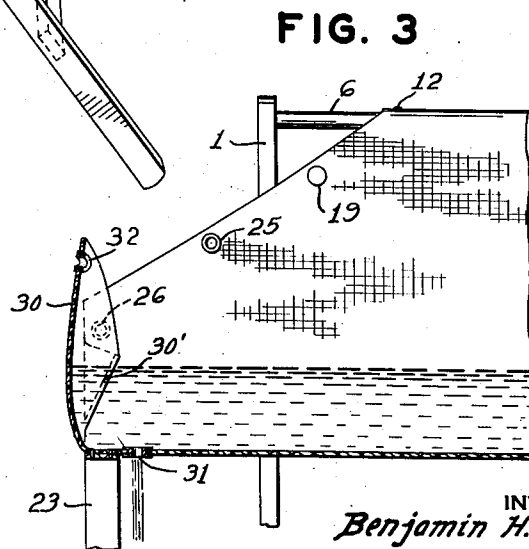


FIG. 3

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2 SHEETS—SHEET 2

FIG. 4

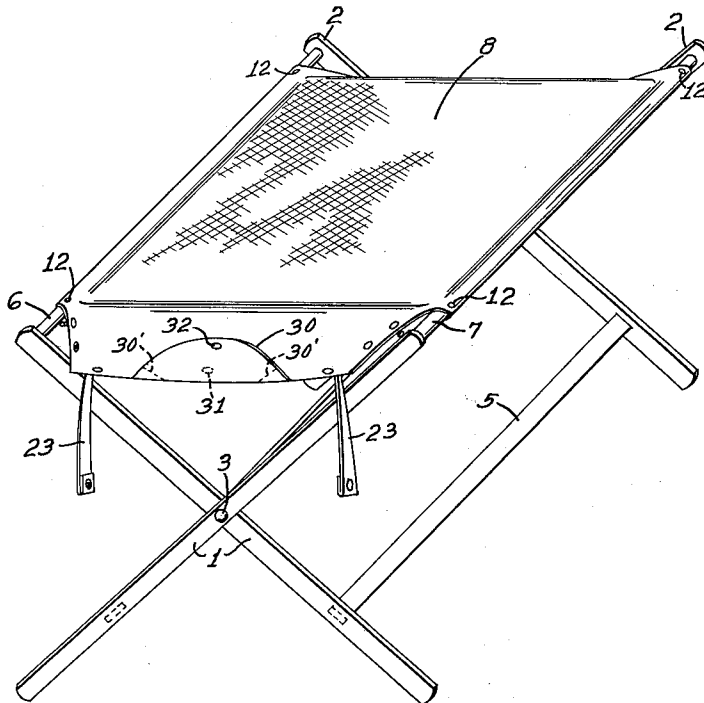
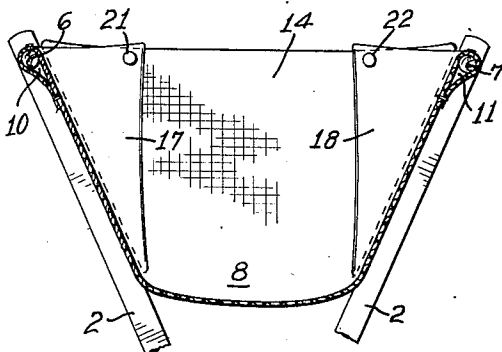


FIG. 5



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INFANT'S BATHING DEVICE

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4 Claims. (Cl. 4-177)

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This invention relates to infants' bathing devices of the type having a flexible tub and a folding support therefor, and has for its object the provision of an improved tub and connection of the tub to the support. My invention simplifies the construction, reduces the cost, and gives improved results in the way of sanitation and efficient use.

I attach the long sides of the tub to longitudinal rails or like members of the support in any suitable manner, and fold the ends together with pleats or folds to effect end closures and to give depth to the tub, but I do not permanently secure the pleats. In accordance with the invention, the end folds or pleats are openable and are held together with suitable fastening means so that the ends may be readily opened or unfolded for cleaning, and at least one end is provided with means to control the discharge of water from the tub when the folds at this end are opened or unfolded. I provide means for holding the free end of the tub while the folds and hence the end itself is being opened to prevent spilling of water therefrom. After the folds and end have been opened, the free end may be lowered gradually to allow the water to flow out at any desired rate.

In a preferred embodiment of my invention, I attach a barrier end wall to the tub which acts as a dam when the end is lowered, an opening in the tub at the end to drain out the water, and means to hold the end after it has been detached from the support. I prefer also to provide reinforcing means for the ends of the tub which are attachable to the support. Any suitable fastening or clasp means may be used to secure the openable folds together when the tub is assembled in its operative condition for bathing the infant. I may use, for example, grommets with pin couplings, such as a Dot fastener, or draw cords and the like, the object being to secure the end folds while the tub is assembled for bathing and to provide for the facile letting-out of the folds and opening of the end of the tub to drain out the water in a controlled manner. For convenience, the means for holding the openable folds together are herein referred to as manually operable means.

In a preferred form of the invention, I provide the end folds of both tub ends with detachable connections so that the entire tub may be opened out flat for complete cleaning.

My invention eliminates the objectionable bottom drains which have been difficult to make leak-proof and to maintain in a sanitary con-

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dition. Moreover, the present invention enables one to empty the water very quickly and to clean and dry the end folds.

These and other objects of the invention will be better understood after considering the following discussion taken in connection with the accompanying drawings, in which:

Fig. 1 is a perspective from above of an infant's bathing device embodying my invention;

Fig. 2 is a fragmentary enlargement of one end of the tub of Fig. 1;

Fig. 3 is a view similar to that of Fig. 1 illustrating one end when opened for discharge of the water;

Fig. 4 is a perspective from above of the device of Fig. 1 with both ends open; and

Fig. 5 is a view along line 5-5 of Fig. 1.

The infant's bathing device illustrated in the drawings comprises a collapsible or folding type support including two pairs of cross-legs 1 and 2 pivotally connected near their centers by pins 3, and interconnected by the lower longitudinal rails 4 and 5 and the upper longitudinal rails 6 and 7. These members (1 to 7) comprise the collapsible support for the tub 8. The tub is formed of a rectangular piece of flexible sheet material, such as rubber or a fabric coated with a waterproof material such as rubber or the like. The upper rails 6 and 7 are inserted through side tunnels 10 and 11 formed on the longitudinal sides of the tub and thereby support the sides of the tub. Pins or tacks 12 hold the tub in position on the rails.

The ends 13 and 14 of the tub have two pleats or gusset folds 15-16 and 17-18, respectively, detachably connected together with Dot fasteners 19-19', 20-20', 21 and 22. The male part (19, 20, 21 and 22) of each fastener is attached to the tub proper, as best shown in Fig. 2, while the female parts 19' and 20' of the fasteners 19 and 20 are attached to reinforcing straps 23 at one end (13) of the tub. The female parts (not shown) of the fasteners 21 and 22 are attached to similar reinforcing straps 24 at the other end (14) of the tub. The registering or coincident holes in the gusset folds of the tub through which the male part of the fasteners 19 etc. extend are preferably reinforced with flat eyelets, such as the eyelets 25-26 and 27-28 of the folds 15-16, respectively, shown in Fig. 2.

The reinforcing straps 23 and 24 are provided to relieve undue strain on the material of the tub. The straps are sewed to the edge of the tub end. In the form of the invention illustrated in the drawings, the straps 23 are the free ends of

a relatively longer strap or tape, the intermediate section 23' of which is sewed to the outer edge of the tub end, and the eyelets 26 and 28 extend through both the tub and strap at the place of contact. The straps are sufficiently long to loop around the adjacent rail 6 or 7. The male part (19 etc.) of each fastener extends through the registering eyelets of the gusset fold (e. g. 25—26 and 27—28) and is clasped by the female part (19' etc.) attached to the free end of the reinforcing strap. The fasteners thus perform the dual functions of holding the folds in position and of securing the straps (looped over the upper rails) to the gusset-folded portions of the tub. When the fasteners are disconnected the tub may be stretched out flat, as shown in Fig. 4.

In that form of the invention illustrated in the drawings, one end (13) of the tub is provided with means for the controlled discharge of water from the tub. A piece of sheet material 30 such as that used to form the tub, and having the general shape shown, is attached to the end 13 of the tub to form an end wall. The piece 30 may be an extension of the tub end and hence integral therewith, although it may be a separate piece sewed to the end. The strap 23 is placed in position and stitched to the tub. The seam of stitching 30' is curved inwardly to hold the sides in a more or less upright position, as shown in Fig. 3. When the gusset folds 15 and 16 are made and held together by the fasteners 19 and 20, respectively, the piece 30 lies flat against the upper inside face of the end 13, as shown in Fig. 1. When the fasteners are unclasped, the folds let out, and the end lowered, the piece 30 forms an upright wall or barrier at that end of the tub, as shown in Figs. 2 and 3.

Adjacent the line of contact of the piece 30 with the end proper of the tub, and a slight distance inwardly of that line, the tub end 13 has a water-discharge hole 31 preferably provided with a protective grommet. When the tub is in its operative water-holding position (Fig. 1), the discharge hole 31 is well above the normal water level in the tub, but when the folds 15—16 are let out and the end of the tub lowered (Figs. 2 and 3), the hole 31 is at the tub's lowermost point, to permit the discharge of all the water from the tub. The end 13 of the tub, when let down (Figs. 2 and 3) extends beyond the support so that the discharging water may flow into a suitable vessel placed outside the cross-legs 1 (Fig. 3). The piece 30 may conveniently serve as a handle in lowering the end 13 of the tub, and in furtherance of this function the outer end of the piece 30 is provided with a relatively large grommeted hole 32 through which a finger may be inserted to hold the tub end as it is being unclasped and lowered.

In the operation of bathing the infant, the tub is formed by clamping the gusset folds together and to the looped straps 23, as shown in Fig. 1. Water to the desired level is poured into the tub. When it is desired to empty the water in the tub, the nursemaid pulls up the piece 30, inserts a finger in the hole 32 and holds the end while opening the fasteners 19 and 20 to release the straps 23 and let out the folds 15 and 16. As the unfolded end 13 of the tub is lowered, the discharge hole 31 drops below the water level and permits the discharge of water into the vessel beside the legs 1—2. The rate of discharge of the water can be controlled by gradually lowering

the tub end. The end need not be manually held until all the water has been emptied from the unfolded tub, since the piece 30 closes the end to provide a shallow pocket from which the remainder of the water will drain when the end is completely lowered. When so lowered, the end 13 may be readily cleaned and dried before assembling the end for reuse. If desired, the other end 14 may be unclasped and cleaned after each use of the tub. When both ends are unclasped, the tub may be stretched out flat by pushing the rails 6 and 7 as far apart as the tub material permits, as shown in Fig. 4. When thus stretched out, the entire tub material may be readily cleaned and dried, and the ends 13 and 14 then refolded and clasped for use of the tub in the next bathing operation.

It will be seen from the following description that the invention resides primarily in the provision of openable end folds held together when the tube is assembled for bathing by manually operable fastening means. By manually undoing or unclasping the fastening means, the folds are opened or let out and the end of the tub is thus opened to permit the discharge of water, either by the open or free end acting as a spout or by the provision of a hole in the tub positioned above the normal water level when the folds are fastened together and at the lowermost level of the tub when the folds are opened and the free end is lowered. For controlling the rate of discharge of water from the open free end of the tub, a handle or equivalent gripping means is provided for gently or gradually lowering the open end. Preferably, both ends of the tub have openable folds held together by manually operable fastening means, but only one end need be provided with means for facilitating the discharge of water. Since the openable end folds and the frequent opening thereof tend to weaken the usual attachment of the tub to the upper longitudinal rails of the collapsible support, reinforcing straps are preferably provided for strengthening the support at the ends of the tub when the folds are assembled and fastened together for bathing.

I claim:

1. The improvement in infant's bathing devices having a flexible tub and a support therefor which comprises at least one end of the tub having openable folds, manually operable means for holding the folds in position to give the contemplated depth to the tub, a flexible end wall attached to said end which assumes an upright position when the folds are open and the end lowered for discharge of the water, a hole in the tub near said end which occupies a position above the normal level of water in the tub when the end is closed and another position at least as low as the bottom of the tub when the end is lowered, the flexible end wall serving as a barrier to confine the water when the end is lowered and handle means for holding the end of the tub by hand to control the emptying of water when the folds are open.

2. The improvement in infant's bathing devices having a flexible tub and a folding support therefor which comprises a reinforcing strap attached to the edge of the tub at at least one end, said strap passing around the support to carry part of the weight of the tub, openable folds at each end of the tub to give the tub depth, manually operable fastening means for securing the end folds in folded position, the folds at the end having a reinforcing strap when opened and lowered forming an extension from the tub the lower portion of which is not higher than the bottom

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of the tub, a hole in the bottom of the extension which is above the normal water level in the tub when the end is closed, an end wall attached to the end of the extension and foldable therewith which stands upright when the end is lowered to close the end and direct the water through the hole, and handle means for holding the end of the tub by hand and controlling the emptying of water when the folds are open.

3. The improvement in infant's bathing devices having a flexible tub and a folding support therefor which comprises at least one end of the tub having openable folds and a portion extending beyond the support when the folds are open and the end lowered for emptying the tub, an end wall attached to said extending portion to serve as a closure for the end, a hole in the bottom of the tub near the end wall when in its extending position for the discharge of water, and handle means for holding the end of the tub by hand when the folds are open to control the emptying of water.

4. The improvement in infant's bathing devices having a flexible tub and a folding support which comprises openable folds at each end of the tub

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to give the tub depth, manually operable fastening means for securing the folds in folded position, a flexible member secured to the outer edge of one end of the tub and adapted to form an upstanding wall when the folds of that end are open and the end is lowered, and a hole in the tub adjacent the juncture of said member and said end adapted to be above the normal water level in the tub when assembled for bathing and at the bottom of the tub when the folds are open and the end lowered for discharge of water.

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