Oct. 10, 1950 W. C. BAXTER 2,524,873

TRAY ATTACHMENT FOR INFANTS' COLLAPSIBLE BATH STANDS

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Fig. 1

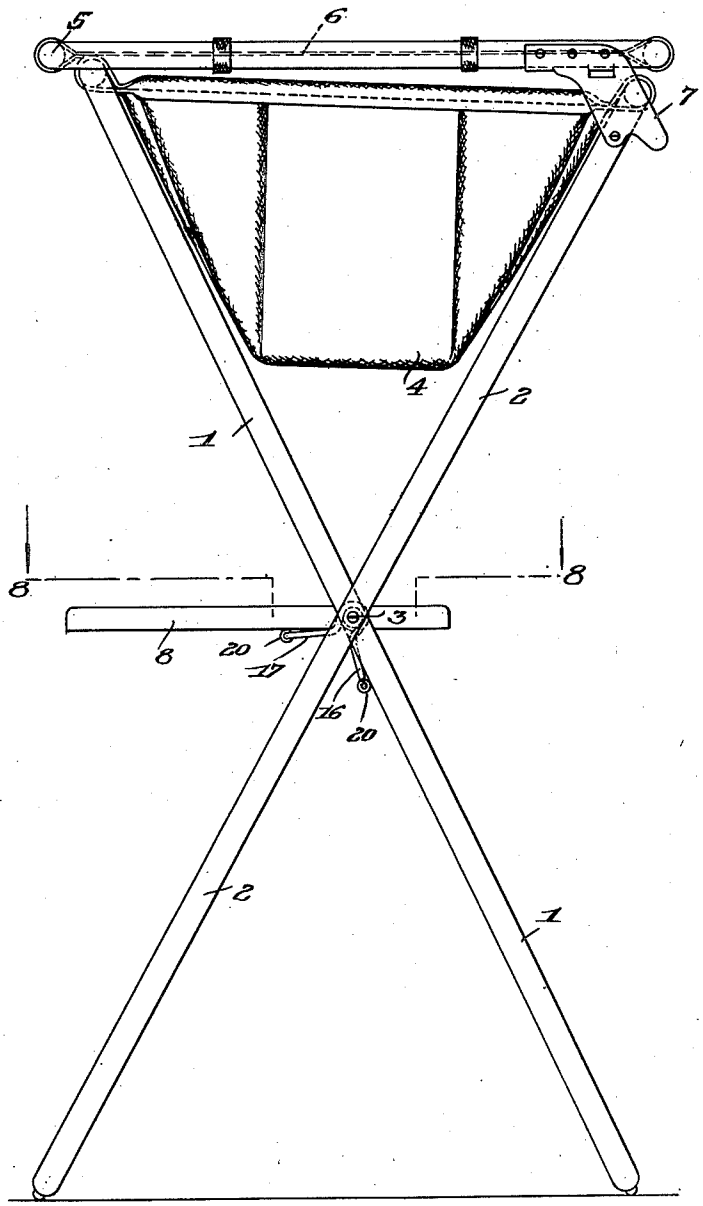
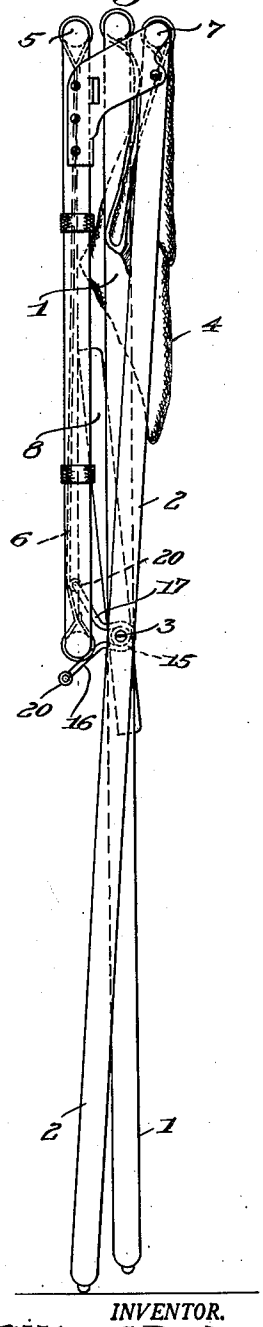


Fig. 2



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Fig. 3

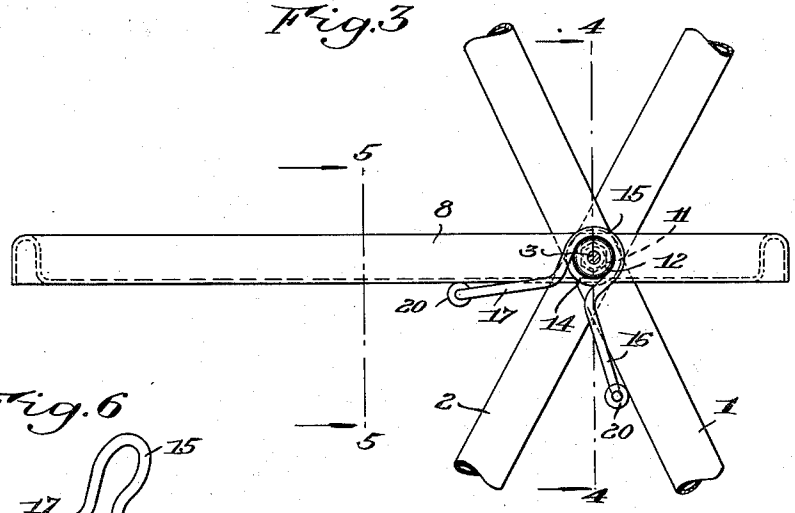


Fig. 6

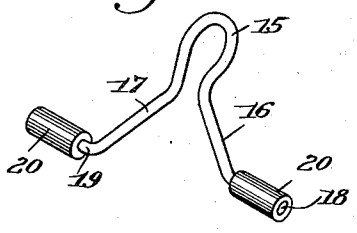
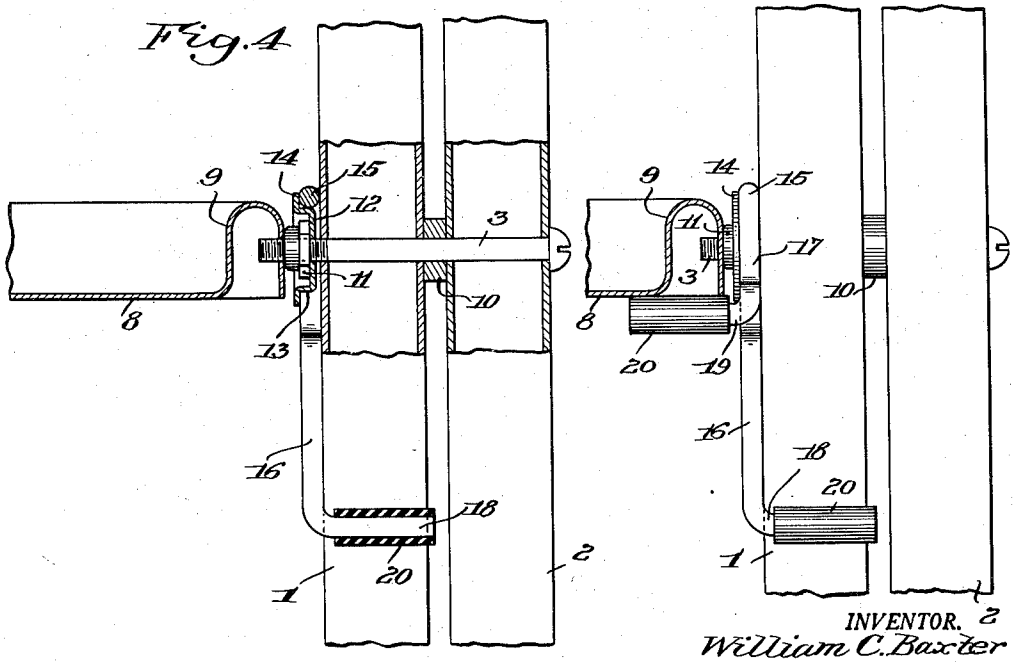


Fig. 5

Fig. 4



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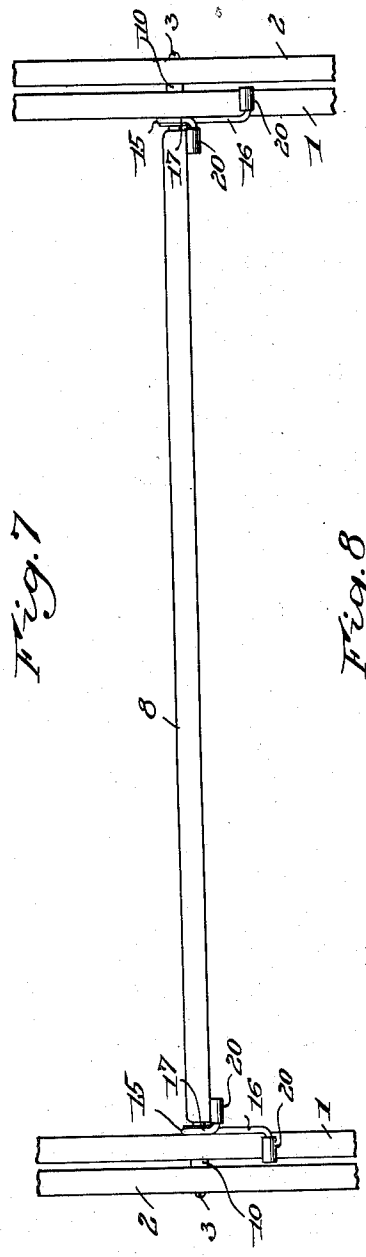


Fig. 7

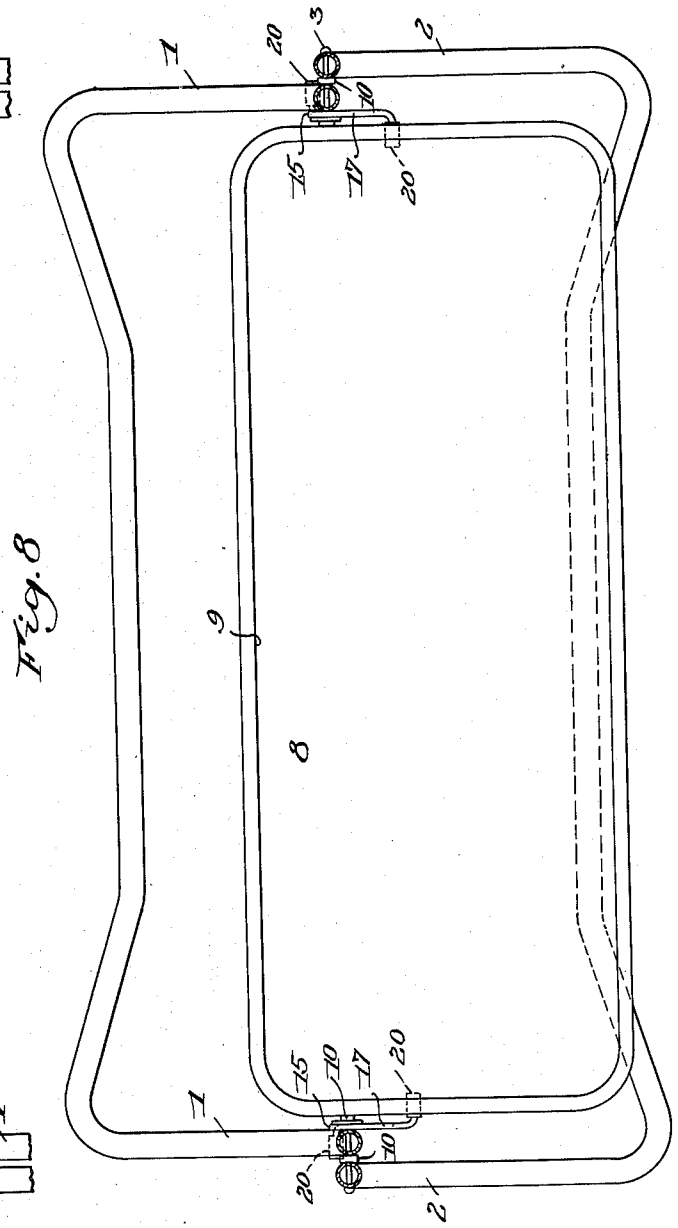


Fig. 8

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TRAY ATTACHMENT FOR INFANTS' COLLAPSIBLE BATH STANDS

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Application March 4, 1948, Serial No. 13,043

2 Claims. (Cl. 211—149)

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This invention relates to a tray attachment for an infant's collapsible bath stand of the type comprising pivotally connected folding leg frames with a utility tray pivotally mounted between the inner leg frame beneath the tub, and it has for its purpose to provide simple, economical, and practical means for automatically limiting downward movement of the tray and supporting it in horizontal operative position.

More particularly, the invention has for its object to afford an efficient, strong and durable device which positions itself in relation to the leg frames when they are unfolded, acting to support the utility tray in operative position, and will remain permanently in proper cooperative relation to the tray and leg frames without requiring positioning or attention of any sort.

Still another purpose of the invention is to afford a construction which will not detract from the appearance of the stand and does not interfere with the collapsing of the utility tray and leg frames when the parts are folded.

To these and other ends, the invention consists in the construction and arrangement of parts that will appear clearly from the following description when read in conjunction with the following drawings, the novel features being pointed out in the claims following the specification.

In the drawings:

Fig. 1 is a view in end elevation of a collapsible bath stand with the dressing table and utility tray in horizontal operative positions, showing a preferred embodiment of the invention in operative relation to the leg frames and utility tray;

Fig. 2 is a similar view, showing the leg frames, tub, utility tray, and dressing table in collapsed position;

Fig. 3 is an enlarged detail view in end elevation similar to Fig. 1 with parts broken away;

Fig. 4 is an enlarged detail vertical sectional view on line 4—4 of Fig. 3;

Fig. 5 is an enlarged detail vertical sectional view on line 5—5 of Fig. 3;

Fig. 6 is an enlarged perspective view of the stop device removed;

Fig. 7 is a view in front elevation of the parts in the position shown in Fig. 1, partially broken away, and

Fig. 8 is a horizontal sectional view on line 8—8 of Fig. 1.

Referring more particularly to the drawings in which like reference numerals refer to the same parts throughout the several views, the invention is illustrated as applied to a collapsible bath stand including inner and outer tubular metal leg

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frames 1 and 2 respectively, which are held in pivotal folding relation by the connections or bolts 3 extending therethrough, while 4 designates a collapsible tub of flexible material secured between the top rails of the leg frames.

5 designates a table frame having a canvas covering 6 secured thereto, the table frame being provided with hinge plates 7 which are pivotally connected to the legs of the outer leg frame 2 to permit folding the table downwardly over the inner or front leg frame when the stand is folded, from the position shown in Fig. 1 to the position shown in Fig. 2, the table thus acting to retain the leg frames in folded relation for packing or transporting.

Pivotally mounted between the legs of the inner leg frame underneath the tub 4 is a utility tray 8 for holding articles of clothing, or toilet and other articles used while bathing an infant. The tray 8 which is preferably formed of sheet metal and has its outer edge reversely bent into U-shaped form as indicated at 9, see Figs. 4 and 5, is mounted on the inner ends of the bolts 3 connecting the legs of the leg frames, the legs being spaced by the blocks 10 surrounding the bolts 3 between the legs. The bolts 3 are held in place to retain the legs in proper pivotal relation by means of lock nuts 11 secured around the bolts 3 or by other suitable fastening devices, while the utility tray is secured in position on the inner ends of the bolts 3 by springing the outer walls of the tray over the ends of the bolts, said outer walls being provided with suitable openings to engage the bolts and sufficiently yieldable to permit springing the tray into place and holding it firmly against accidental displacement while permitting pivotal movement of the tray on the leg frames from its horizontal operative position to vertical folded position when the stand is collapsed.

It is desirable to afford means for limiting downward movement of the utility tray and supporting it firmly in horizontal operative position without interfering with the folding of the tray or of the leg frames, and with a simple structure that is efficient, economical to manufacture, and does not detract from the appearance of the stand as a whole. To accomplish this, there is provided at each end of the utility tray and between it and the adjacent leg a stop device that is pivotally mounted on the inner or front leg frame and arranged to cooperate with the tray and with the adjacent leg of the leg frame so that the latter limits downward movement of the stop device and retains the latter in position for en-

gagement with the utility tray, the downward movement of which is in turn limited by the stop device.

Preferably the stop device is pivoted on the bolt 3 which connects the legs, and to accomplish this result, there is pivotally arranged on the bolt 3 a supporting plate consisting of a central body portion 12 having an opening engaging the bolt 3 and an annular shoulder portion 13 at the outer edge of the body portion 12, with an outwardly extending flange 14 affording a seat for the stop device which is frictionally and rigidly held on the supporting plate.

The stop device is preferably formed of stiff wire and includes a body portion movable in a plane between the tray and leg and including a central loop-shaped supporting portion 15 and radially extending diverging arms 16 and 17 respectively, the arm 16 extending downwardly when the parts are in operative position, see Fig. 3, and terminating in an outward laterally or perpendicularly bent terminal stop portion 18, while the arm 17 extends forwardly and terminates in the inward laterally or perpendicularly bent terminal stop portion 19. The terminal stop portions 18 and 19 are preferably provided with suitable rubber or fiber sleeves 20 to eliminate direct contact between the metal parts.

The central loop-shaped supporting portion 15 of the body is assembled on the supporting plate 12 by forcing it thereon in frictional contact with the annular portion 13 with which it is held tightly engaged, so that the stop device and supporting plate 12 can turn as a unit on the bolt 3, and are held against endwise movement thereon by engagement between the central loop portion 15 and the adjacent leg, and by engagement of the lock nut 11 with the inner face of the supporting plate 12.

In this manner, the stop device can turn on the bolt 3 but is held against endwise movement thereon, so that it is always accurately positioned for proper cooperation with the utility tray and adjacent leg.

When the folded stand is opened to spread the legs, the utility tray drops downwardly to the position shown in Figs. 1 and 3, and moves the forwardly extending arm 17 of the stop device downwardly by engagement with the inwardly extending terminal portion 19. Thus the tray in its downward movement causes the stop device to turn on the bolt 3, moving the arm 16 downwardly and rearwardly until its terminal portion 18 engages the front surface of the adjacent leg 1, which holds the stop device in the position illustrated in Figs. 1 and 3. Since the stop device can swing no further, its forward arm 17 and terminal portion 19 being positioned under the utility tray limits downward movement of the latter and retains it firmly in horizontal operative position.

When the bath stand and dressing table are collapsed, as illustrated in Fig. 2, the stop devices can be swung upwardly until the forward rail of the table supporting frame lies between the diverging arms 16 and 17 of the stop devices, as illustrated in Fig. 2. Thus the arms 16 and 17 do not interfere with complete collapsing of the parts for packing in a carton for shipping

and the diverging arms of the stop devices when collapsed occupying no more space laterally than the dressing table normally occupies.

While the invention has been described with reference to the particular construction shown, it is not confined to the details illustrated herein, and this application is intended to cover such modifications or departures as may come within the purposes of the improvement and the scope of the following claims.

I claim:

1. In an infant's collapsible bath stand including inner and outer leg frames and pivotal connections between said leg frames, the inner leg frame constituting the front of the stand when in operative position, the combination with a tray pivotally mounted on said pivotal connections between the legs of the inner leg frame, the forward portion of the tray being foldable upwardly when collapsing the stand, of a metal plate fixedly secured on each of said pivotal connections between the tray and the adjacent leg of the inner leg frame, said plate having an annular bearing portion, and a stop device comprising a wire member bent to form an enlarged central portion embracing and rotatable on said bearing portion and integral diverging arms terminating in stop portions extending perpendicularly in opposite directions from the ends of said arms and engaging under the tray and against the forward edge of the adjacent inner leg when the tray is in horizontal operative position.

2. In an infant's collapsible bath stand including inner and outer leg frames and pivotal connections between said leg frames, the inner leg frame constituting the front of the stand when in operative position, the combination with a tray pivotally mounted on said pivotal connections between the legs of the inner leg frame, the forward portion of the tray being foldable upwardly when collapsing the stand, of a metal plate fixedly secured on each of said pivotal connections between the tray and the adjacent leg of the inner leg frame, said plate having an enlarged annular bearing portion terminating in an outwardly extending flange, and a stop device comprising a wire member bent to form an enlarged central loop-shaped portion closely embracing and rotatable on said annular bearing portion between said flange and the adjacent leg of the inner leg frame and integral diverging arms terminating in stop portions extending perpendicularly in opposite directions from the ends of said arms and engaging under the tray and against the forward edge of the adjacent inner leg when the tray is in horizontal operative position.

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