Oct. 8, 1946. F. H. BERG 2,408,749

MEANS FOR WASHING AND DRYING FABRIC ARTICLES

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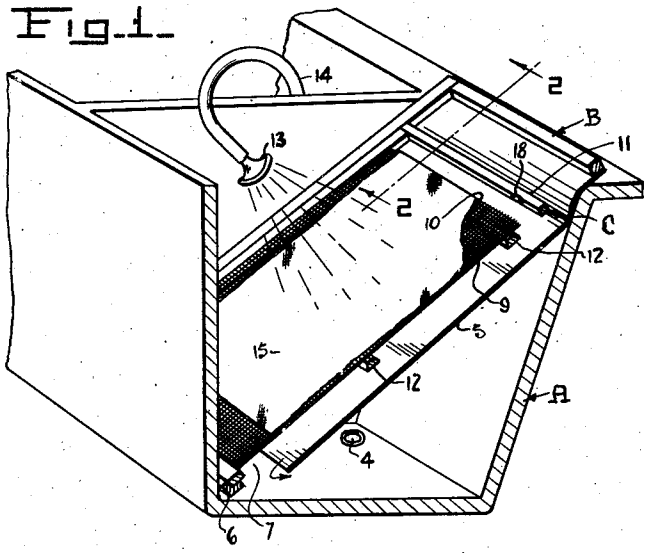
Fig. 1.



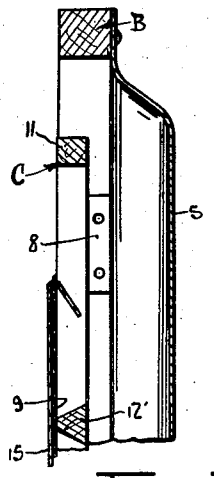


Fig. 2.

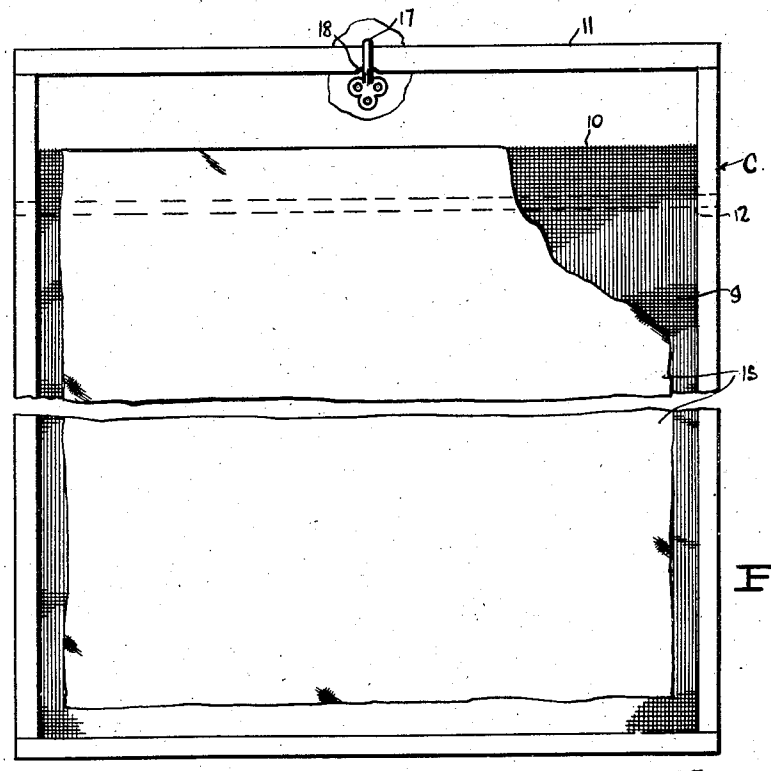


Fig. 3.

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MEANS FOR WASHING AND DRYING FABRIC ARTICLES

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2 Claims. (Cl. 68—205)

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This invention relates to means and methods for washing and drying textile or fabric articles and the primary object is to provide a device for practicing such method or process. More particularly this invention concerns itself with the cleaning and drying of domestic articles such as diapers, towels, and articles of clothing which are subject to unusual soiling and which do not require ironing but which are reusable if they can be dried out without wrinkles and in substantial smooth and flat condition such as this method provides.

In the accompanying drawing which illustrates my improved apparatus by which the method may be practiced—

Fig. 1 is a perspective elevation showing the device in use in a conventional laundry tub, with the device and tub in section, and with parts broken away for purpose of illustration.

Fig. 2 is an enlarged detail section as seen on line 2—2 in Fig. 1.

Fig. 3 is an enlarged elevation of one of the washing and drying frames, removed from the outer frame, and as seen when hung up for drying, fractional portions being broken away.

Referring to the drawing more particularly and by reference characters A designated a conventional laundry tub, having drain 4. The device by which the method is practiced includes an outer frame B, and a series of inner frames such as C, all similarly constructed and adapted to be substituted one for another in the frame B.

The frame B is rectangular in form and to its side and top bars is secured a back plate 5 which is preferably dished so that the whole unit forms a shallow tray. The lower end of the plate 5 terminates short of the bottom bar 6 of the frame so as to provide an opening 7 for escape of water to the drain 4.

The frame C is made to fit within the outer frame B and it, too, is rectangular in form. It may be conveniently supported by blocks 8 attached to frame B, and it is unnecessary to further attach the two frames together. Thus it is a simple matter to merely substitute one such frame C for another, as is necessary during the complete operation of washing and drying.

Each frame C includes a screen 9 which forms a flat, perforated supporting surface. This screen is attached at three edges to the bottom and side bars of the frame, but the fourth or upper edge 10 is spaced from the upper bar 11, as shown. This upper edge of the screen is not folded or selvedged but is left "raw" so that the upper ends of the warp wires will extend above

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the uppermost weft strand and thus form a plurality of closely spaced points or exposed retention pins, for a purpose presently to be set forth. At longitudinally spaced points the screen is supported by cross bars 12 which extend transversely between the side bars of the frame C.

While the device, as thus far described, resembles a scrubbing board, it is not designed or intended for use in that manner. In fact the screen 9 is preferably of such fine wire and mesh that it will not withstand scrubbing pressures. The sole purpose of the screen, during the washing action, is to support the article while it is being cleaned and sterilized under the action of a hot water spray projected from a spray nozzle such as 13, connected to supply hose 14. Thus, when the flat article, such as 15, is to be washed it is first spread out as flat as possible over the screen, and with its upper edge folded over the edge 10 of the screen, as at 16 (Fig. 2). The projecting screen wire points will then engage the fabric to hold the upper edge straight, and, as the cleaning operation continues the wet article can then be straightened out, as may be necessary, to remove wrinkles. The cleaning step is of course performed by the spray from the nozzle which is manipulated to most effectively perform its function. Soap or other cleaning solution may of course be applied, if desired, and with proper pressure equipment cleaning fluid other than water might be circulated to the nozzle and returned to its supply source.

In any event the article or garment 15 is subjected to the spray action until thoroughly cleaned, and as will be evident, the fluid passing through the article will also pass through the screen and then flow down the back wall 5, through the opening 7 and to the drain 4.

With the completion of the washing operation, and after the free liquid has drained off, the operator removes the frame C from frame B and hangs it up on a suitable hook or support such as 17, the bar 11 preferably having a notch 18 to insure properly centered suspension. The article 15 is left on the screen to dry and as an important feature of the invention it is to be noted that as such drying occurs it leaves the article in a surprisingly flat and smooth condition so that when removed it can be folded, or immediately reused, without any appreciable wrinkling or roughness. This is accomplished by reason of the fact that when the article is wet and is pressed against the reticulated surface of the screen by the spray it establishes a close affinity between the two, and thus prevents shrinking, stretching, or

wrinkling, during drying. This adherence or retention is retained even when all moisture has been dissipated so that the completely dried fabric can be virtually peeled from the screen on which it has been cleaned.

It will be understood that with a number of the screen frames in use washing and drying of a number of articles can be effected simultaneously.

It is further understood that various modifications in the device and method as herein disclosed may be made without departing from the spirit and scope of the appended claims. Having now therefore fully disclosed my invention, what I claim to be new and desire to protect by Letters Patent is:

1. In a washing and drying device a rectangular frame, a rectangular screen stretched over the frame opening and attached at three side edges to three sides of the frame, the fourth edge of the screen being spaced from the fourth side of the frame to provide an edge over which an end edge portion of a flat fabric article may be folded with the main body portion of the article in surface contact with one face of the screen, said fourth edge of the screen being raw cut whereby wire ends will project to engage the fold line of the article folded thereover.

2. In a washing and drying device a frame, a screen secured at its side edges to side members of the frame, the upper edge of the screen being spaced from the upper end of the frame whereby a flat fabric article to be washed and dried in surface contact on the screen may be folded, at its upper edge portion, over the upper edge of the screen and means in the form of small pointed elements extending from the upper part of the screen to engage and retain the article thereon.

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