

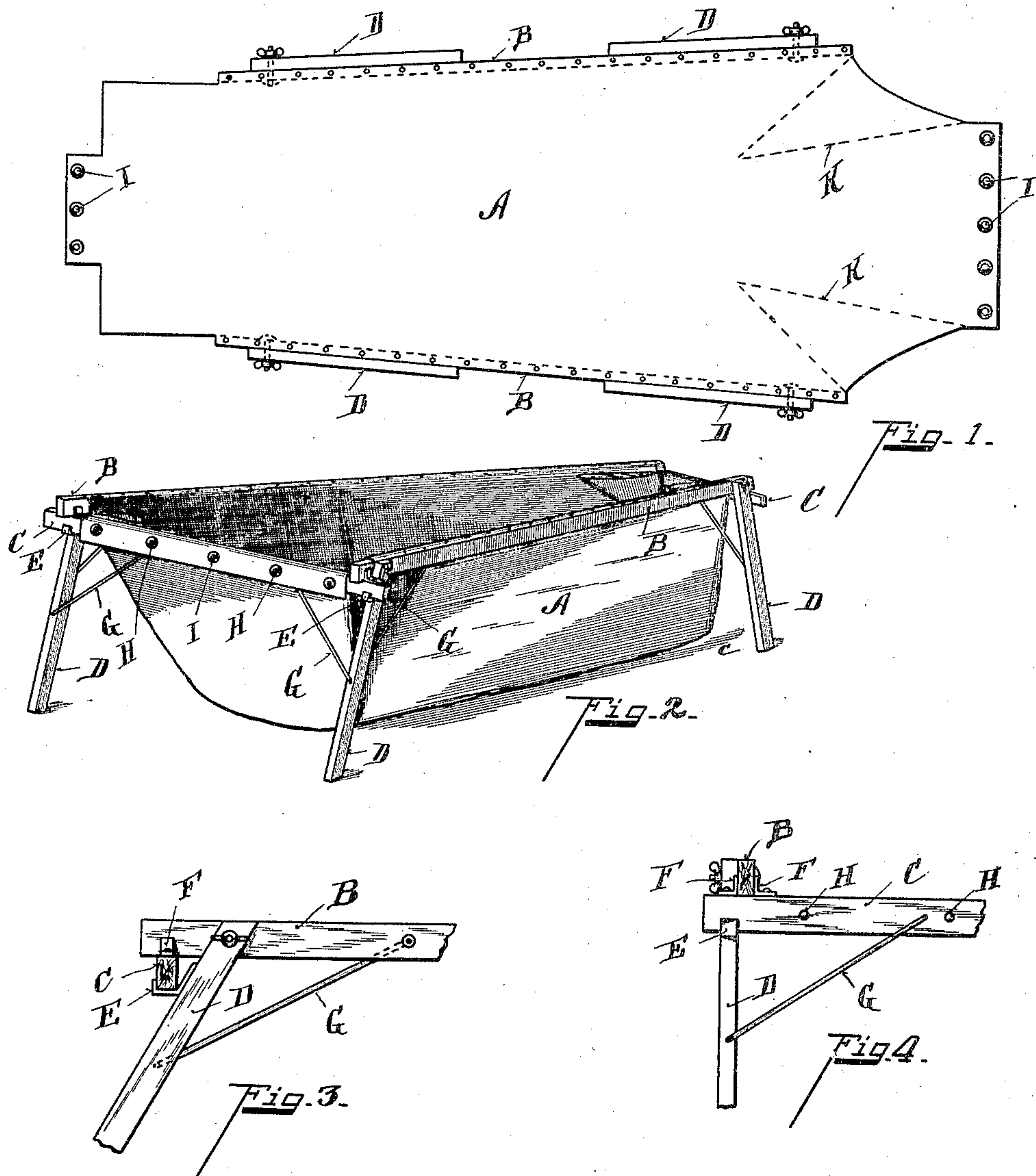
No. 707,060.

Patented Aug. 12, 1902.

W. H. GAMBLE.  
FOLDING OR COLLAPSIBLE BATH TUB.

(Application filed Apr. 8, 1901.)

(No Model.)



Inventor

Witnesses

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# UNITED STATES PATENT OFFICE.

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## FOLDING OR COLLAPSIBLE BATH-TUB.

SPECIFICATION forming part of Letters Patent No. 707,060, dated August 12, 1902.

Application filed April 8, 1901. Serial No. 54,918. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. GAMBLE, a citizen of the United States, residing at Miamisburg, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Folding or Collapsible Bath-Tubs, of which the following is a specification.

The object of my invention is to provide a knockdown and folding portable bath-tub made of flexible (preferably textile) material rendered waterproof, in connection with a supporting-frame, also adapted to be folded, of wood or metal, of such construction that the fabric composing the water-receptacle may be spread out into a flat sheet for being cleaned and for the purpose of being rolled into a compact bundle without unduly creasing, pinching, or injuring the fabric, the fastening devices being of detachable easily-manipulated character, whereby the flat sheet of fabric may be quickly made into a trough shape supported by the sectional supporting-frame attached thereto.

Bath-tubs have been made of flexible material, but they were permanently-formed tubs or water-receptacles, the corners and seams of which could not be cleaned and which could not be rolled into compact bundles without much creasing, wrinkling, and pinching of the fabric, causing leakage, especially at the points of permanent folds or plaits, along the seams, and at those parts habitually creased in attempting to fold the sack. In my construction the fabric can be opened into a flat sheet for scrubbing and cleaning, every point being easily accessible and preparatory for rolling into a cylindrical bundle without creasing the fabric, and the loose plaits or folds which are formed when adjusting the sheet into the tub form may be slightly shifted, so that their points can be brought to different parts of the fabric or above the water-line, if this should be found necessary, although the folds being loose have no tendency to crease or pinch the fabric.

The features of my invention are more fully set forth in the description of the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of the bath-tub in

its knockdown form. Fig. 2 is a perspective view of the bath-tub set in position for use. Fig. 3 is a sectional elevation of a side view of one corner of the frame. Fig. 4 is a sectional elevation of an end view of one corner of the frame.

Referring to Fig. 2, A is the water-receptacle, composed of the sheet of the waterproof fabric folded into tub shape, B the side rails, and C the end rails, composing the top supporting-rim when connected. D represents the supporting-legs, pivoted to the side rails B. E represents hook-shaped brackets or clamps fastened to the legs D, adapted to engage the ends of the end rails C and bind them to the side rails B. F represents yoke notches or projections at the ends of the end rails, adapted to engage the ends of the side rails B to hold them in properly-spaced relation to each other and to complete a firm joint in connection with the legs D and the clamps E. It will be noted that the legs D slant, so that a weight pressing downward on the rails B will tend to tighten the joint at the intersection of the rails B and C by the increased pressure of the clamps E against the rails C. G represents detachable braces extending between the rails B and C and the legs D. H represents buttons on the end rails C, and I represents buttonholes at the ends of the sheet A to fasten over buttons H. This accomplishes a detachable fastening between the end rails C and the sheet A, by which the end rails C may be removed before sheet A is rolled up into a bundle.

In setting up or forming the tub the yokes F of the end rails C are adjusted to the end of the side rails B. The legs D are then brought into position so the clamps E engage the end rails C, and by these operations the sheet A is formed into a tub-shaped sack, that portion of the sheet A inclosed by the dotted lines K forming into loose plaits or folds when the end rails C are brought into connection with the side rails B. In constructing a frame of this kind it would be possible and practical to attach the legs D, bearing the clamps E, to the end rails C instead of the side rails B, in which case the yokes F would be attached to the side rails B instead of the end rails C. The principle of both arrangements is the



same, although the arrangement I have shown is preferable. In the preferred form shown in the drawings the side rails are made of a single piece on account of stiffness, and they  
 5 are shown made of rectangular form. The form of the rails, however, and the material of which they are made are not material features of the invention. The rim or rails of the bath-tub are preferably made of four sections composed of the two end rails and the  
 10 two side rails, so that the bath-tub may be said to have a rim composed of several sections, which sections when put together are firmly connected to rigid fastening devices.

15 In Fig. 2, c shows the floor-line, and it will be observed that the foot of the tub is raised slightly off the floor. It is desirable to have the head and central portions of the tub rest upon the floor, so that the occupant can readily stand therein and have a solid support for  
 20 his feet.

Having described my invention, I claim—

1. A collapsible tub composed of a sheet of flexible material, rims of less length than the  
 25 sides of the sheet secured to the sides respectively, the ends of the sheet projecting beyond the said rims forming fastening-flaps, detachable end pieces adapted to be secured to said fastening-flaps, and means for sup-  
 30 porting said side rims and end pieces, whereby when the latter are brought against the ends of the former respectively, the sheet collapses into a tub without folds or creases, substantially as specified.

35 2. A collapsible bath-tub composed of a sheet of flexible material, rims of less length than the sides of the sheet secured thereto leaving the sheet projected beyond the ends of the rims forming a fastening-flap at each

end, detachable end pieces adapted to be se- 40 cured to said fastening end flaps, legs pivoted to said side rims and brackets on said legs for supporting said end pieces in juxtaposition to the ends of the side rims, when the tub is erected, whereby the sheet collapses 45 into a tub, without creases or folds, the supporting structure being adapted to be knocked down into straight parallel lengths shorter than the length of the sheet so as to be wrapped therein without projecting ends, substantially 50 as specified.

3. In a bath-tub of the class described, the combination of the sheet A, the sectional top rim composed of the rails B and C, the legs D attached to two opposite rim-sections and 55 the clamping devices attached to the legs D and adapted when the legs D are in opened position to bind the sections of the rim together, substantially as specified.

4. A collapsible tub composed of a sheet of 60 flexible material, rims of less length than the side of the sheet secured to the sides respectively, the ends of the sheet projecting beyond the said rim forming fastening-flaps, means for securing the fastening-flaps adja- 65 cent to the respective ends of the side rims and means for supporting the said side rims in erect position whereby when the said fastening-flaps are secured against the ends of the said side rims, the sheet collapses into 70 a tub without folds or creases, substantially as described.

In testimony whereof I have hereunto set my hand.

WILLIAM H. GAMBLE.

Witnesses:

W. A. REITER,

EDW. LIESENHEFF.