

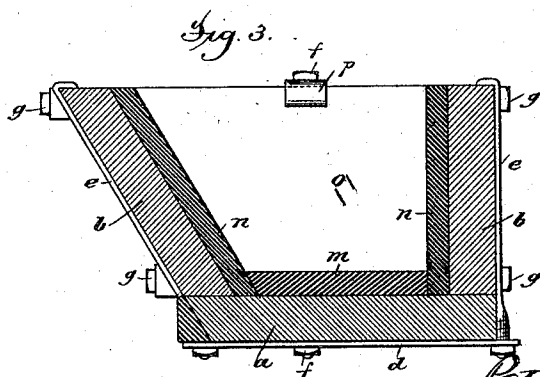
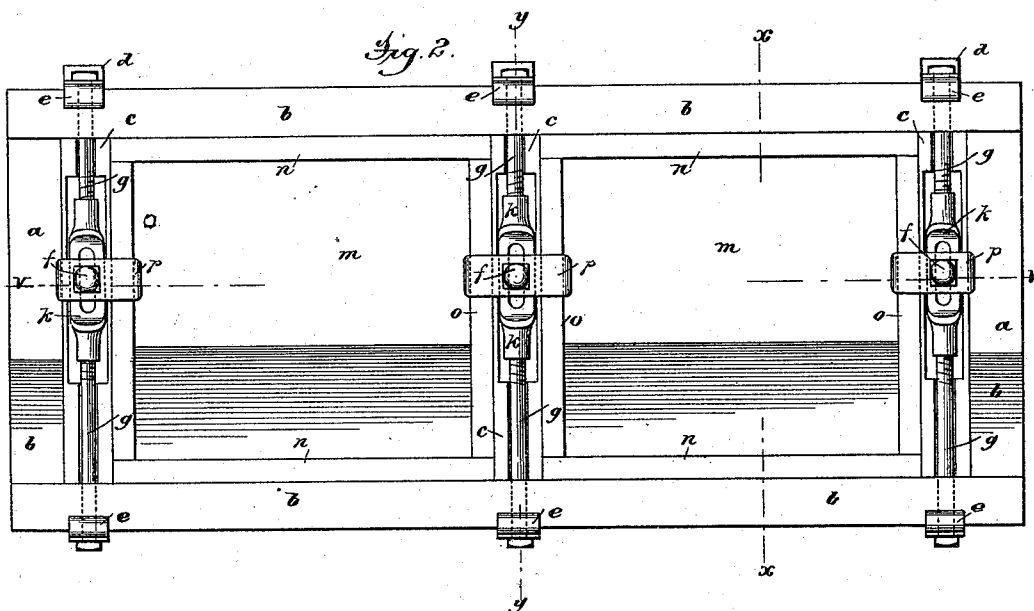
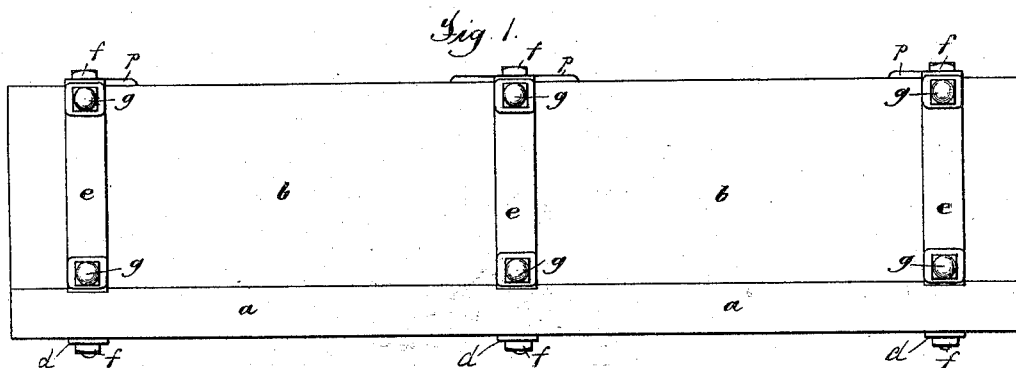
(No Model.)

3 Sheets—Sheet 1.

P. CONNOLLY.
WASHTUB.

No. 561,493.

Patented June 2, 1896.



Attest:
Geo. H. Potts
J. Kennedy

Inventor:

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(No Model.)

3 Sheets—Sheet 2.

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Fig. 4.

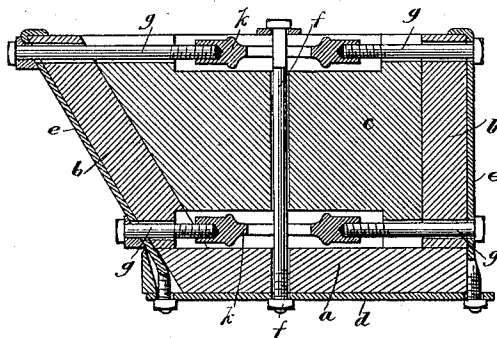
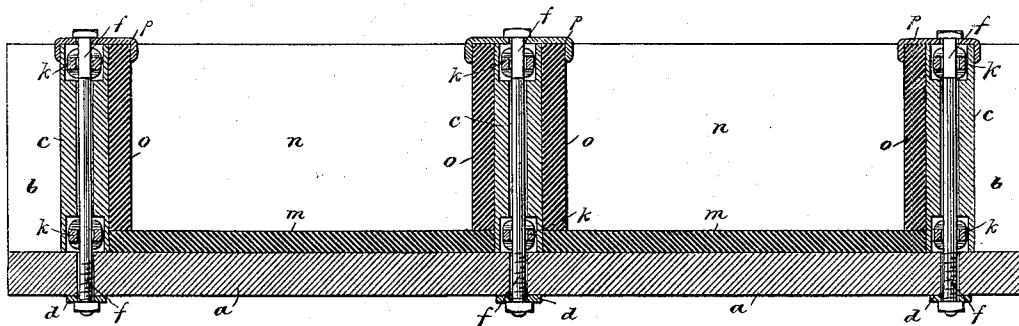


Fig. 5.



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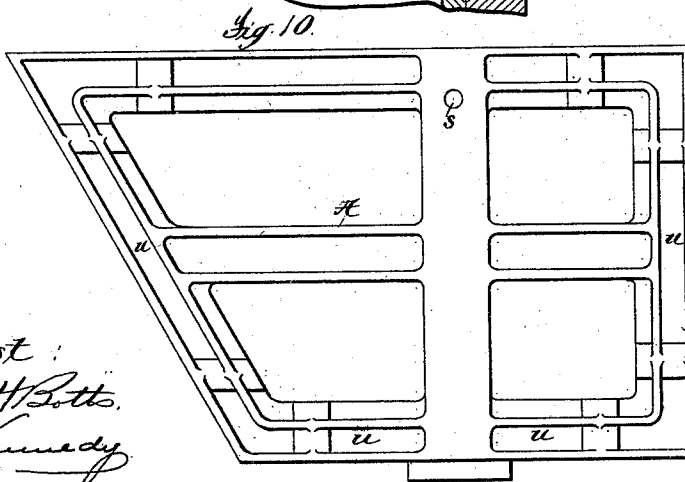
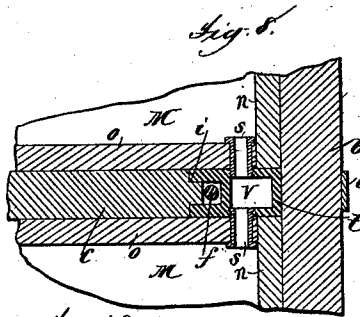
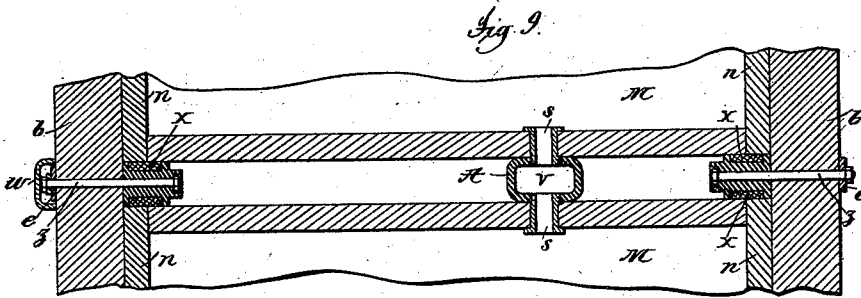
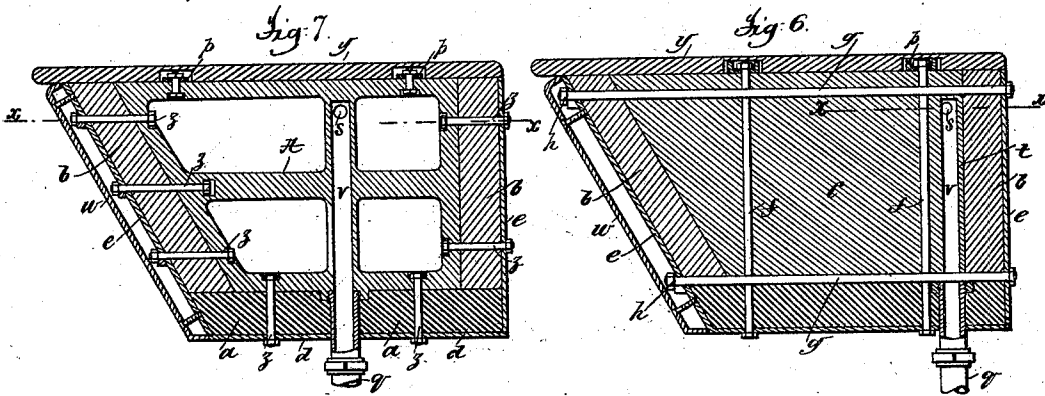
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UNITED STATES PATENT OFFICE.

PATRICK CONNOLLY, OF BROOKLYN, NEW YORK.

WASHTUB.

SPECIFICATION forming part of Letters Patent No. 561,493, dated June 2, 1896.

Application filed November 2, 1888. Serial No. 289,824. (No model.)

To all whom it may concern:

Be it known that I, PATRICK CONNOLLY, a citizen of the United States, residing at Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Tubs for Laundry and other Purposes, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to the construction of those stationary tubs such as are commonly used in laundries and for other similar purposes. The tubs of this class have heretofore been constructed in a variety of ways. In some cases they have been formed of wood, in other cases of cast metal, and in a comparatively few cases, where the expense could be incurred, they have been made of porcelain or earthenware or of slabs of slate or soapstone joined together. The wooden tubs are objectionable because of the difficulty of keeping them properly cleaned and because they soon become water-soaked and decay. The metal tubs, although they can be more readily kept cleaned, soon rust and corrode, and the tubs made of earthenware or slate or soapstone slabs are so expensive that they are not available except in a comparatively few cases.

It is the object of the present invention to provide tubs of this class which, while possessing all the essential characteristics and advantages of those made of stone and earthenware, will be capable of production at a cost which will permit of their general use.

As a full understanding of the improvements constituting the invention can be best given by an illustration and description of a tub embodying the same in different forms, all preliminary description will be omitted and a full description given, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, and Fig. 2 a plan view, of a pair of tubs embodying the invention in one form. Figs. 3, 4, and 5 are sectional views taken, respectively, on the lines *x x*, *y y*, and *v v* of Fig. 2. Figs. 6, 7, 8, 9, and 10 illustrate different forms of the invention, Figs. 6 and 7 being views similar to Fig. 4, Figs. 8 and 9 enlarged sections taken on the line *x x* of Figs. 6 and 7, respectively, and Fig. 10 an enlarged side view of a metal end or partition frame.

Referring now particularly to Figs. 1 to 5 it is to be understood that the main part or body of the tub, as therein shown, is made of wood and of the usual or substantially the usual form, consisting of bottom, side, and end planks *a b c*. These planks are secured together by means of metal plates *d e* and tie-rods *f g*. The plates *d* extend across the bottom of the tub and the plates *e* extend across its sides, the latter plates being provided at their upper ends with hooks, which extend over the upper edges of the side planks *b*, and at their lower ends with threaded portions which pass through openings in the plates *d* and are provided with tightening-nuts. These plates serve to maintain tight joints between the bottom plank *a* and the side planks *b*. The rods *f* pass through vertical openings in the end planks *c* and through openings in the plates *d*. They are screw-threaded at their lower ends and are provided with tightening-nuts, by which tight joints are maintained between the bottom *a* and ends *c*. The rods *g* extend across the tub and pass through the sides *b* and plates *e* and lie in recesses formed in the top and bottom edges of the ends *c*. These rods may be provided with nuts at their ends; but, as shown, they are made in two parts, which are connected by turn-buckles or screw-couplings *k*, by which they can be tightened, so as to maintain tight joints between the sides *b* and ends *c*.

The body of the tub thus constructed is provided with a lining consisting of bottom, side, and end slabs *m, n*, and *o*, of stone or pottery. These slabs will preferably be of slate; but they may be of marble or other stone, as soapstone, or they may be of pottery or glass or enameled iron or any other similar material. These slabs, which are of sufficient thickness to properly maintain themselves, are arranged as follows: The side slabs *n* rest against the sides *b* and extend from end to end of the tub and from the top to the bottom plank *a*. The bottom slab *m* rests upon the bottom *a* and fits between the slabs *n* and extends from end to end of the tub. The end slabs *o* rest against the ends *c* and fit between the ends of the side and bottom slabs *n m*.

The edges of the slabs *m n o* are properly dressed, so as to form tight joints with each

other, and the several slabs are pressed together and held in position by means of plates *p*, through which the rods *f* pass, and which rest upon the tops of the end planks *c* and the edges of the slabs *o*. From this construction it will be readily seen that when the parts are assembled and the several rods and plates tightened up the planks *a b c* and the slabs *m n o* will be drawn and held together, so as to form a tub having tight joints. To still further insure the tightness of the joints, thin rubber or other elastic packing or any suitable cement may be introduced into the joints between the edges of the slabs *m n o* before the plates and rods are tightened.

The construction which has been described provides a tub which possesses all the desirable characteristics and advantages in the way of cleanliness and durability of a tub made wholly of stone or pottery-ware, but at a cost which is comparatively small. The slabs which are used for lining the tub, being comparatively thin, can be produced at a comparatively small cost, and in case one of the slabs should become broken it can be easily removed by loosening the rods and a new one inserted in its stead at a trifling cost and without sacrificing any of the other parts of the tub. A tub thus constructed also possesses an advantage over one made wholly of stone or similar material in regard to weight, it being much lighter, and also in the fact that the thin lining-slabs will absorb less heat, and thus have less cooling effect upon the water than the thicker slabs which are employed when the tub is made wholly of stone.

As illustrated in the present case, the invention is embodied in a structure forming two tubs, or what is generally known as a "compartment-tub," which may have any number of compartments; but the invention is of course applicable also to single tubs. Certain features of my invention, however, are of special application to compartment-tubs, and my invention consists in part of a compartment-tub embodying these features.

In compartment-tubs, in which slate, concrete, porcelain, or similar material has been used, the sides and bottom of the tub have been made of single pieces extending from end to end of the tub. With this construction when hot water is used in one compartment and cold in another simultaneously, as is common in the use of washtubs, different portions of the same material have been subjected to different temperatures and to expansion and contraction in different degrees. This is one of the most frequent causes of breakage of the stone or porcelain compartment-tubs now in use. I avoid this difficulty by forming the linings of the different com-

partments of separate pieces, as is shown clearly in Figs. 1, 2, and 5, so that the same piece is never exposed to different temperatures at different points, as with the old constructions. This feature is applicable not only to the sides and bottom of the tub, but also to the partitions, which have previously been formed of a single piece, which consequently is exposed to different temperatures on opposite sides. While the danger of breakage from this cause is not so great as in the case of the sides and bottom, I prefer to form the partitions, as shown, with a central body or frame of wood or metal, upon opposite sides of which are placed slabs forming the ends of the two adjacent compartments.

In some cases it will be found more desirable to dispense entirely with the wooden planks *c*, forming the ends or ends and partitions, and to substitute therefor cast-metal skeleton frames of the general form illustrated in Figs. 7, 9, and 10. In this case the frame *A* is provided with the vertical duct *v* for the overflow, the same as the casting *t* in the construction shown in Figs. 6 and 8; but in this case the parts are held together by bolts *z*, which take the place of and are the equivalents of the tie-rods. The frames *A* will preferably be provided around their edges with channels *u* to receive a suitable cement *x* to aid in forming tight joints between the slabs *o* and *m n*.

The side and end planks when made of wood may, instead of being solid, be cut away, so as to provide openings to expose the lining-slabs and thus in effect constitute frames.

What I claim is—

1. A tub for laundry and other purposes, consisting of an outer body having its sides, ends and bottom formed of separate parts, and a lining of stone or similar material, composed of separate side, end, and bottom slabs having their edges joined to form tight joints, and the whole being united by suitable bolts or rods, substantially as described.

2. A compartment-tub consisting of an outer body composed of separate side, end, bottom and partition pieces and a lining of separate side, end, and bottom slabs of stone or similar material, the linings of the different compartments being formed of separate pieces, the slabs having their edges joined to form tight joints, and the whole being connected by suitable rods or bolts, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

PATRICK CONNOLLY.

Witnesses:

T. H. PALMER,
EDWARD WOOD.