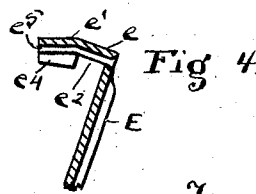
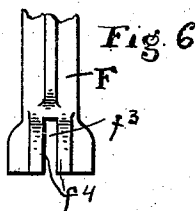
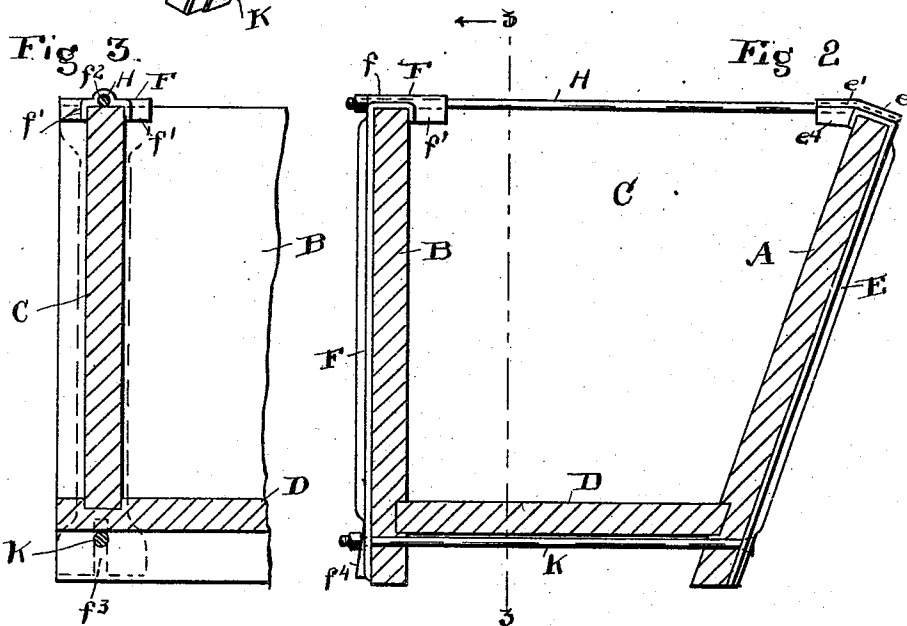
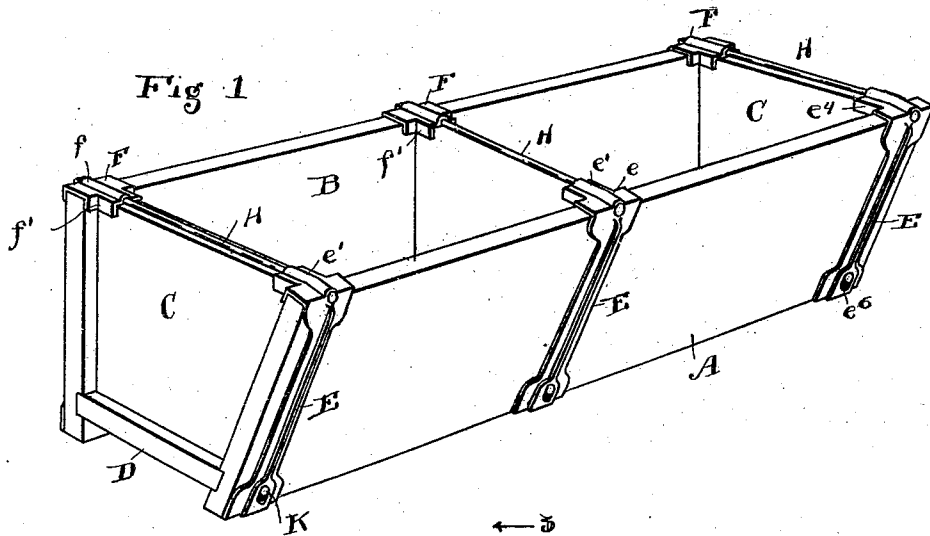


(No Model.)

E. C. BRUNNER & W. J. RENKEL.
LAUNDRY TUB.

No. 501,763.

Patented July 18, 1893.



Witnesses.

P. B. Moser

Georgia Schaeffer

By *H. F. Fisher* ^{Willi}
Attorney

Inventors

Edward C Brunner,
William T B. 1911

William J. Menkel

UNITED STATES PATENT OFFICE.

EDWARD C. BRUNNER AND WILLIAM J. RENKEL, OF CLEVELAND, OHIO.

LAUNDRY-TUB.

SPECIFICATION forming part of Letters Patent No. 501,763, dated July 18, 1893.

Application filed November 9, 1892. Serial No. 451,415. (No model.)

To all whom it may concern:

Be it known that we, EDWARD C. BRUNNER and WILLIAM J. RENKEL, citizens of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Laundry-Tubs; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to laundry tubs, and the invention consists of a laundry tub made preferably of what is known as Euclid blue-stone, and constructed and united substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of one of our new and improved tubs with double compartments. Fig. 2 is a cross section of the tub, practically on the line of the crossrods and uprights, whether at the ends or middle of the tub, the construction of the supporting mechanism being the same at these several points. Fig. 3 is a view at right angles to Fig. 2 and of one part or corner thereof, on line 3, 3, Fig. 2. Fig. 4 is a vertical central sectional view of the top portion of one of the front strips shown in perspective in Fig. 2. Fig. 5 is a front elevation of the lower portion of one of the front strips and showing a closed slot through which the tie-bolt passes, and Fig. 6 is an elevation of the lower portion of one of the rear strips showing the open slot and the inclined or tapering ribs at the side thereof, illustrated partly in Fig. 2.

The tubs herein shown are constructed out of stone, and by preference out of what is known in this locality as Euclid blue-stone. This stone is especially adapted to this use, because while it takes a smooth surface very readily and is easily worked and handled, it has exceptional resisting qualities to moisture, and hence is not so liable as stones generally to become foul by reason of the moisture absorbed. But above all it is not affected by heat or hot water, and will endure protracted use with all the sudden changes of temperature and alternations of cold and heat that wash tubs usually are subjected to by change of water.

The front A, the back B, the ends and partitions C, and the bottom D are all made of stone. The bottom is set into grooves or channels in the front and rear walls, as clearly seen in Fig. 2, and the rods and partitions are similarly set into the said walls and the bottom, as seen in Fig. 1. The means for holding these parts together are exceedingly simple and effective, and consist of the metallic straps, plates, or standards E and F, front and rear respectively, and the tie rods H and K above and below. These straps are of special construction, each adapted to the particular use for which they are designed, and, when tied together by the connecting rods make a rigid structure and keep the tub absolutely tight at all points.

It will be noticed that the front A of the tub inclines outward, and hence the strap or plate E has its inward projecting head formed or bent, first, at right angles to its body, as at e , and then slightly down from this angle, as at e' , Fig. 4. The portion e has a recess e^2 on its under side, fitting the top edge of the slab or side A, and the portion e' is constructed to rest upon the edge of the walls C, and an angle flange e^4 is provided to bear against both slabs A and E. The rear strap or plate F is similarly constructed, except that the entire head f thereof is bent at right angles to the body, and angle flanges f' are formed in said head to engage the sides of slabs B and C, the same as at front. The tie rods H pass through these heads, which have grooves e^5 and f^2 respectively on top to accommodate said bolt, while the said heads otherwise rest flat and close upon the said slabs, so as to leave no open space for moisture and dirt to accumulate. The cleanliness of this kind of tub is one of the things which requires special consideration, and this construction has in view an article of manufacture which is peculiarly free from objection on this account. Hence all the parts are made to fit closely and are as smooth as possible at the joints where offensive accumulations are liable to occur.

The rods H are slightly bent at the front end to conform to head e of plate E, and lie immediately on the top of the wall C. This serves to hold the said wall down notwithstanding its natural tendency to rise and loosen because of the inclined front. Another

advantage of this location of rod H is that it leaves the sides of the wall free and clear, and affords a place on said walls to fasten the wringer. This would not be practicable if the rod H were at the sides of the wall.

Both plates E and F have slots e^6 and f^3 respectively at their lower ends for the passage of rod K, and plate F has an open slot with ribs f^4 on its side deepening toward the bottom or end of the plate, so that the nut or rod K bearing against these ribs will tend to rise rather than fall, and keep rod K up against bottom D.

The tub may be built of one or more compartments, and of any suitable stone or other suitable material.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In laundry tubs, the body of the tub composed of stone or the like, front and rear straps having flanged heads over-lapping the joint between the division walls and the front and

rear sides thereof, and upper and lower tie rods, substantially as described.

2. The tub herein described consisting of stone, the front supporting straps E, having over-lapping heads e and corner flanges e^4 and rod grooves e^5 , and the rear straps F having heads f and corner flanges f' , and rod grooves f^2 , the tie rods H resting in said grooves and on the top of the walls C of the tub, and the lower tie rods h , substantially as described.

3. In a laundry tub, the sides and walls thereof, the front supporting straps E having inward projecting heads e and corner flanges e^4 and slotted lower ends, and the rear straps F having heads f and corner flanges f' and slotted lower ends with ribs f^4 at the side of the slot deepening toward the bottom, substantially as described.

EDWARD C. BRUNNER.
WILLIAM J. RENKEL.

Witnesses:

H. T. FISHER,
GEORGIA SCHAEFFER.