

(No Model.)

2 Sheets—Sheet 1.

N. F. HURDEL.
CONVERTIBLE BATH AND WASH TUB.

No. 469,570.

Patented Feb. 23, 1892.

Fig. 1.

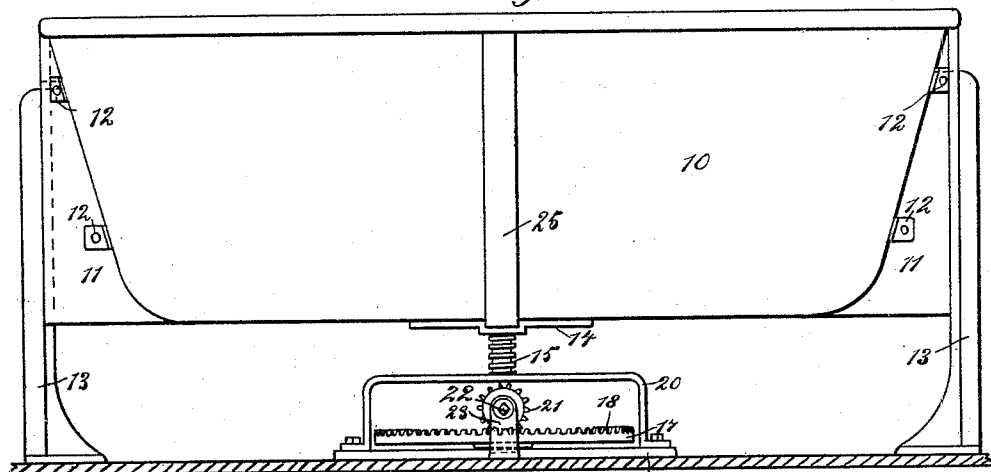


Fig. 2.

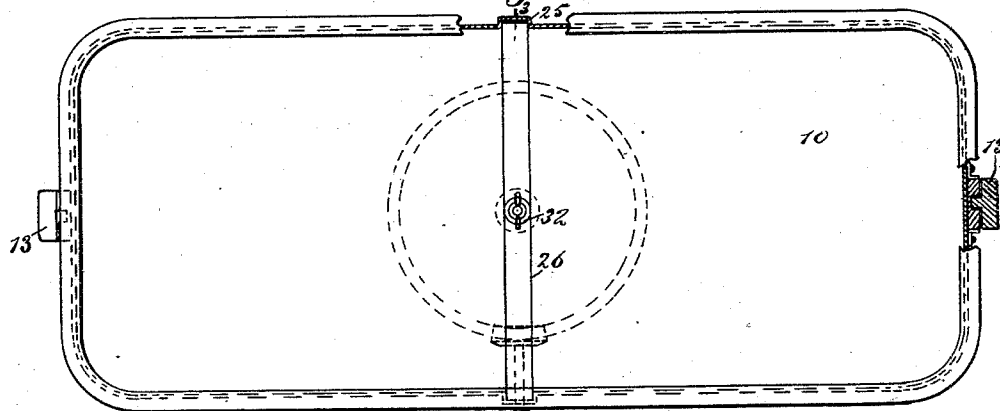


Fig. 4.

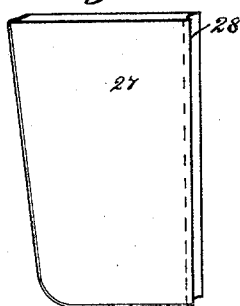


Fig. 3.

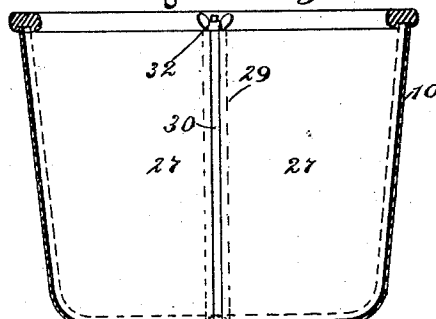
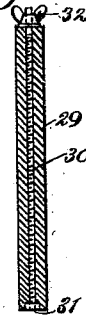


Fig. 5.



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Fig. 6.

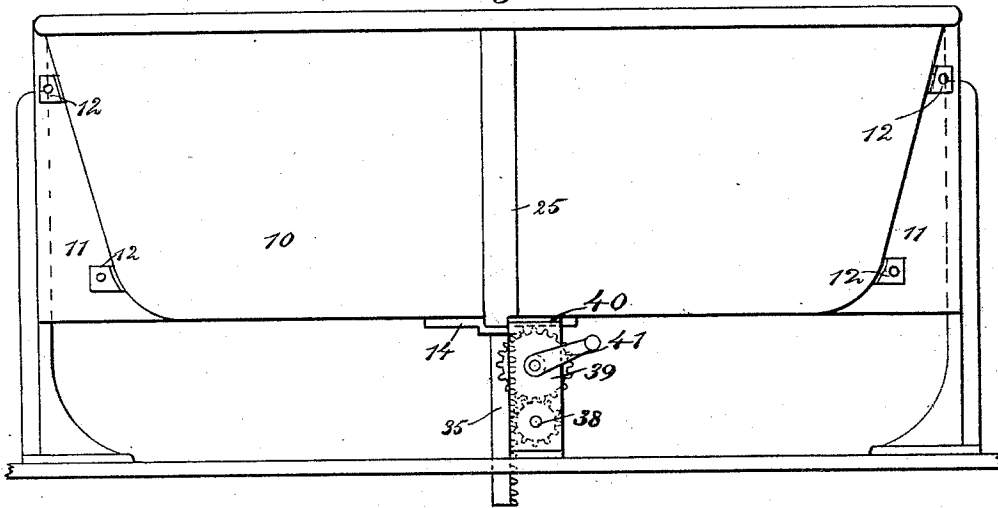


Fig. 7.

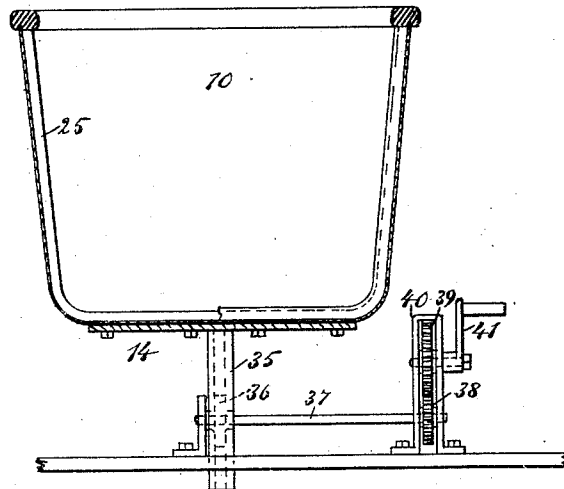


Fig. 9.

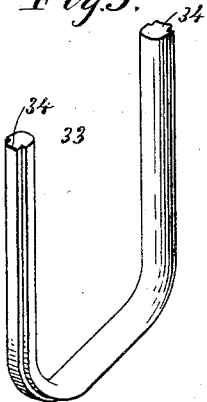
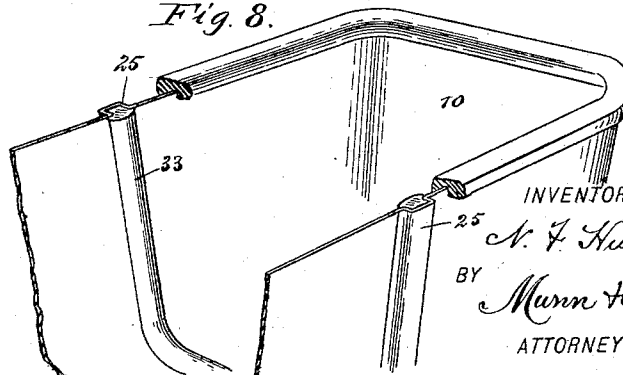


Fig. 8.



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UNITED STATES PATENT OFFICE.

NELLIE F. HURDEL, OF NEW YORK, N. Y.

CONVERTIBLE BATH AND WASH TUB.

SPECIFICATION forming part of Letters Patent No. 469,570, dated February 23, 1892.

Application filed April 3, 1891. Serial No. 387,514. (No model.)

To all whom it may concern:

Be it known that I, NELLIE F. HURDEL, of the city, county, and State of New York, have invented a new and useful Improvement in Bath-Tubs and Wash-Tubs, of which the following is a full, clear, and exact description.

My invention relates to improvements in the construction of bath-tubs and wash-tubs; and the object of my invention is to produce a tub which may be quickly adjusted for use as a bath-tub and which may be as quickly changed to form two wash-tubs, and also to provide means for adjusting the device vertically, according to the use to which it is to be put.

To this end my invention consists in certain features of construction and combinations of parts, as will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the invention. Fig. 2 is a broken plan view of the same, partly in section and with the central partition in place. Fig. 3 is a vertical cross-section on the line 3 3 of Fig. 2. Fig. 4 is a detail perspective view of one leaf of the central partition of the tub. Fig. 5 is a detail sectional view of the expansible post of the central partition. Fig. 6 is a side elevation of the tub provided with a modified means of adjusting it. Fig. 7 is a broken cross-section of the same. Fig. 8 is a broken perspective view of the tub when adapted for use as a bath-tub, showing the filling for the central groove; and Fig. 9 is a detail perspective view of the filling, which is placed in the groove of the tub when it is used as a bath-tub.

The tub 10 is shaped in the main like an ordinary bath-tub, and may be made of any desired size and of any suitable material, and secured to the ends of the tub are strips 11, the strips and tub being attached together by means of metallic straps 12. The strips 11 are shaped so that their inner edges will conform to the shape of the tub ends, and the outer edges of the strips are made vertical and are grooved, as shown in Fig. 2, so as to receive the tongues

of vertical posts 13, which posts are arranged that at each end of the tub. It will thus be seen the tub may be moved vertically and that the tongues and grooves will prevent it from tipping. A plate 14 is fixed to the center of the tub on the bottom, and extending downward from this plate is a screw 15, which screw fits the elongated vertical threaded hub 16 of a wheel 17, and beneath the wheel is a socket 15^a, into which the screw may be moved when the tub is lowered. The wheel 17 is provided with teeth 18 around its outer edge and on its upper side, and it rests upon a support 19, which is secured to the floor, and fixed to this support is an inverted U-shaped frame 20, which extends over the plate, connects with the upper end of the sleeve or hub 16, and serves to steady the same. The wheel 17 is turned by means of a pinion 21, which meshes with it, and this pinion is secured to the inner end of a shaft 22, which is mounted in a support 23 and is turned by means of a crank-handle 24. It will thus be seen that by turning the crank the wheel 17 will be revolved and that the screw and tub will be raised or lowered, according to the direction in which the crank is turned. The tub 10 is provided on its inner side with a transverse groove 25, and a partition 26 is adapted to fit in the groove and divide the tub into two compartments, and it is then adapted to be used for wash-tubs. The partition 26 is composed of the two side leaves 27, which are shaped to fit closely in the grooves and are provided with a suitable packing to render them water tight, the inner edges of the leaves being concaved, as shown at 28 in Fig. 4, and a central expansible post 29, which extends centrally between the leaves and fits the grooves therein, the said post being preferably composed of hard rubber. A screw 30 extends vertically through the post 29, the said screw having its lower end entered in a nut 31, which is fixed to the bottom of the tub, and having its upper end provided with a thumb-nut 32. It will thus be seen that when the post is in position in the tub, as shown in Fig. 2, with the leaves on either side of it and entering the groove 25, if the thumb-nut is turned down so that it will press upon the post it will compress

the post lengthwise and cause it to expand laterally, and the expansion of the post will force the leaves tightly into the groove 25, thus forming a water-tight partition.

5 When the tub is to be used as a bath-tub, the central partition is removed and a filling 33 is inserted in the groove 25 to prevent the edges of the groove from injuring the skin of a person bathing. This filling is preferably
10 made of rubber and is provided on its outer side with a tongue 34, which fits nicely in the groove 25, the inner portion of the filling being rounded slightly and made to overlap the edges of the groove, as best shown in Fig. 8.
15 In Figs. 6 and 7 I have shown a modified means of adjusting the tub 10, and in these views a rack 35, having teeth on one side, is shown secured to the under side of the plate 14 as a substitute for the screw 15. This rack
20 35 meshes with a gear wheel or pinion 36 on the inner end of a shaft 37, which shaft is mounted in suitable bearings beneath the tub, and the outer end of the shaft is provided with a pinion 38, which meshes with a
25 gear-wheel 39, carried in a support 40 above the pinion, and the gear-wheel is turned by means of a crank 41, and by turning the crank and gear wheel the pinion 38, shaft 37, and pinion 36 will be moved and the rack 35, which
30 carries the tub, will be raised or lowered, as the case may be.

When the tub is to be used as a bath-tub, it is let down so that it rests upon the frame 20, and when it is to be used for wash-tubs
35 the central partition is inserted therein and the tub is raised to a desired height. It will be found extremely convenient for use as wash-tubs, for the reason that it may be quickly adjusted to suit the height of a per-
40 son washing.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

45 1. A combined bath-tub and wash-tubs consisting, essentially, of a vertically-adjustable

tub and a removable central partition for the same, substantially as described.

2. The combination, with a main tub having a removable central partition, of a gear mechanism for adjusting the tub vertically, 50 substantially as described.

3. A bath-tub having vertical end guides and a raising and lowering mechanism beneath the tub, whereby when raised the tub may be used as a wash-tub, substantially as 55 set forth.

4. A combined bath-tub and wash-tubs comprising a main tub having a central groove and having end guides in which it slides vertically, a central removable partition to fit 60 the groove, and a gear mechanism for adjusting the tub, substantially as described.

5. A combined bath-tub and wash-tubs comprising a main tub having grooved strips secured to its ends, which strips slide upon 65 vertical posts, the tub having also a central transverse groove, a removable adjustable partition to fit the groove in the tub, and a gear mechanism for adjusting the tub, substantially as described. 70

6. A tub having a partition-groove and a removable open or U-shaped filling-strip provided on its outside between its edges with a tongue to fit the groove, the edges of the strip overlapping the edges of the groove to 75 render the interior surface of the tub practically unbroken, substantially as set forth.

7. The combination, with a main tub having a central groove therein, of a removable partition consisting of two side leaves adapted to fit the groove, a central expansible post arranged centrally between the leaves, and a screw extending longitudinally through the post and provided with nuts at each end, sub- 80 stantially as described.

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Witnesses:

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