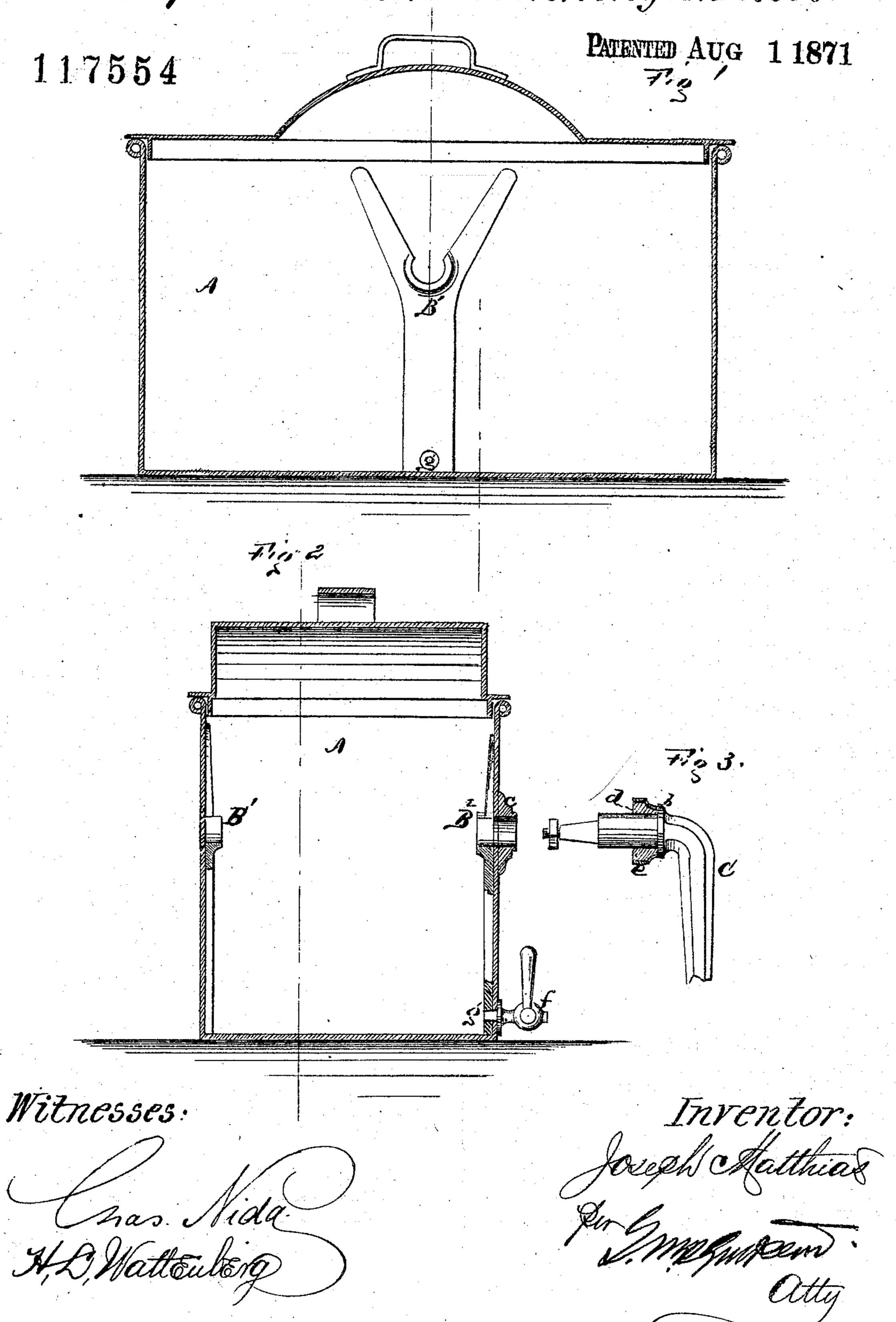
Joseph Mutthias' Washing Mach.



UNITED STATES PATENT OFFICE.

JOSEPH MATTHIAS, OF NEW YORK, N. Y.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 117,554, dated August 1, 1871.

To all whom it may concern:

Be it known that I, Joseph Matthias, of the city, county, and State of New York, have invented a new and Improved Washing-Machine; and that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon, making a part of this specification.

The object of this invention is to improve upon the washing-machine heretofore patented by William H. Welch, on the 9th day of August, 1870. In the machine so patented no provision is made for easily adjusting the journals of the cylinder into their bearings in the boiler, and the bearing for the crank is defective and unserviceable; besides, the appliance for drawing off the water from the boiler is unsatisfactary. This invention consists in providing the boiler of the washingmachine patented by William H. Welch, on the 9th day of August, 1870, with bearings for the cylinder-journals, so made as to easily guide said journals to their bearings, and also in forming on the outer side of the boiler a solid and substantial bearing for the crank to turn in, providing said crank with a rubber bearing inclosed in a metallic cap, and furnishing the bottom of the boiler with a faucet, substantially secured to the boiler, through which the water may be drawn off when necessary.

In the accompanying drawing, Figure 1 represents a horizontal section of boiler, showing my improved bearing; Fig. 2, a cross-section of same; Fig. 3, a view of crank, showing rubber packing and metallic cap in section.

Similar letters of reference indicate like parts

in the several figures.

A represents the boiler of a washing-machine, which, being the same as that patented by William H. Welch, on the 9th day of August, 1870, needs no further description. To the inner side of the boiler I affix, in any suitable manner, the bearings B1 B2, which, as will be seen, spread out in the shape of the letter V, the object of which is to enable the sides of the V to act as guides, for the purpose of guiding the journals of the

washing-cylinder into their bearings B1 B2 without trouble, which heretofore has been a great drawback to the use of the Welch washing-machine. In order to form a good solid bearing for the crank C, which passes through the side of the boiler A, I attach around the opening a a substantial metallic collar, c, of such proportions as will afford a firm bearing for the journal of the crank; and in order to make a tight joint between the collar c on the side of the boiler and the collar b on the crank, I slip over the journal of the crank a rubber packing, d, and to prevent said packing from spreading and becoming inoperative, I inclose it in a metallic cap, e, which confines the packing in place, besides giving it a good finish. In the machine as patented by William H. Welch, on the 9th day of August, 1870, no suitable provision is made for drawing off the water, for the reason that the sides of the boiler, as formerly constructed, did not afford sufficient support for applying such means. In my improved boiler, by extending the lower part of the V before referred to to the bottom of the boiler, and making an opening, g, therein, I obtain a solid and substantial means for attaching the faucet f thereto, through which the water may be drawn off with facility, and without fear of scalding the operator.

In order to cheapen the construction of my boiler, and at the same time to render it strong and serviceable, I make it of sheet-iron, and afterward have it suitably zinked or tinned. I do not, however, wish to confine myself to making my boiler of tin or zinked iron alone; but it may be made of brass, or copper, or any other suita-

able material.

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

A metallic boiler, provided with bearings B1 and B2, crank C, and faucet f, constructed and arranged substantially as and for the purpose set forth.

Witnesses: JOSEPH MATTHIAS.

H. L. WATTENBERG, G. M. PLYMPTON.