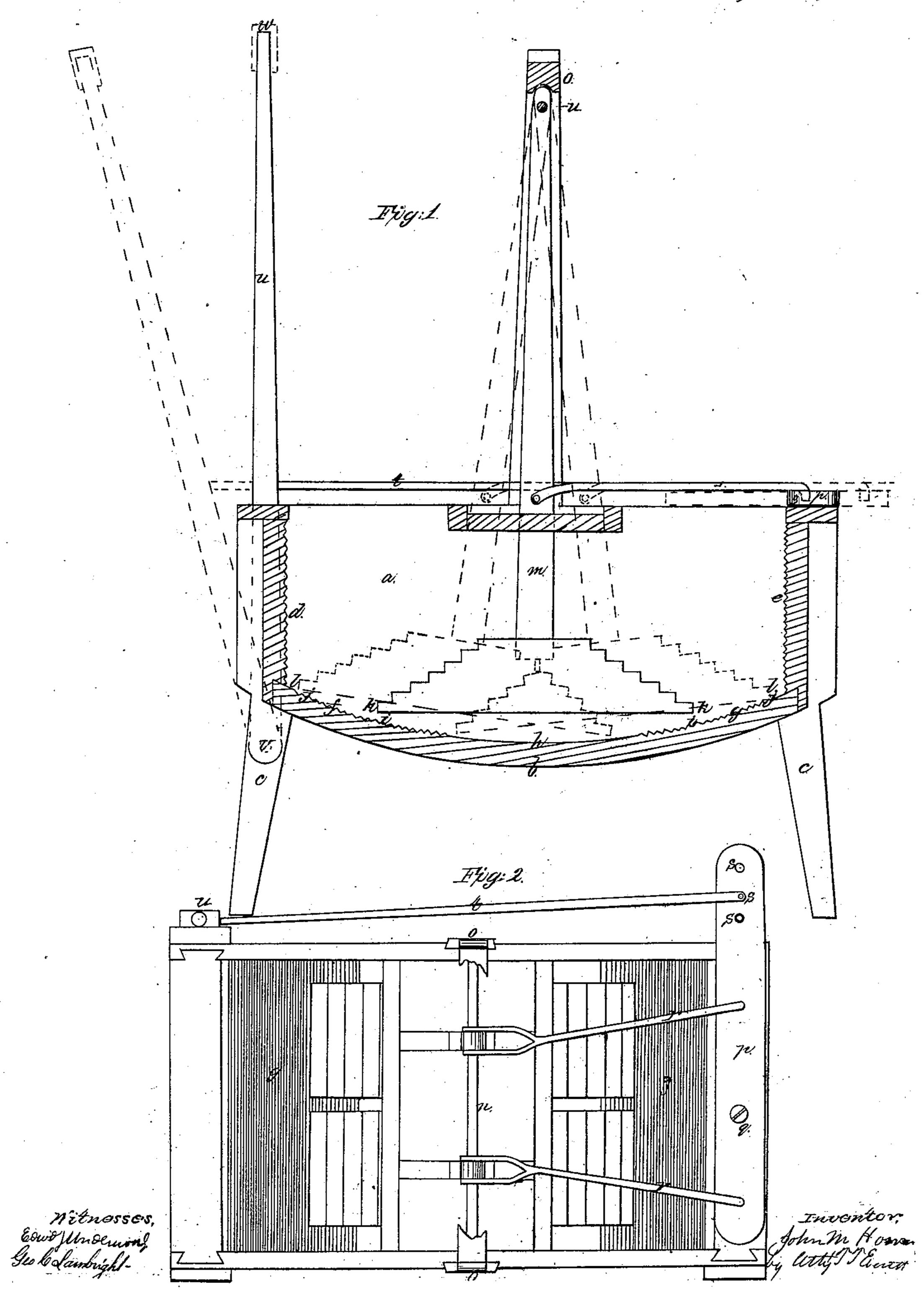
I M. Horner,
Washing Machine.

N 38,900.

Patented June 16, 1863.



## United States Patent Office.

JOHN M. HORNER, OF SAN JOSÉ MISSION, CALIFORNIA.

## IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 38,900, dated June 16, 1863.

To all whom it may concern:

Be it known that I, John M. Horner, of San José Mission, in the State of California, have invented a certain new and useful Improvement in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters and marks thereon.

The drawings forming part of this specification represent a washing-machine having my improvement, Figure 1 thereof being a view by longitudinal section, and Fig. 2, a top view of the machine.

In both of these figures, where like parts are shown, like marks and letters are used to in-

dicate the parts.

The box or washing-reservoir a of the machine is of rectangular form, with a curved bottom, b, and is supported on legs c. The ends of this reservoir, on the inner surfaces, d and e, are corrugated, as is also the adjoining portions f and g of the bottom. About onethird of the middle portion of the bottom his not corrugated. This middle portion, therefore, will allow more water or suds to be below the "mauls" than there can be below them on the corrugated surface of the bottom; and while this middle portion will serve as the draining or drawing off point of the bottom, it will also allow the mauls to have fuller action on the suds or water at this point, and thus produce more motion or agitation. It will be seen that the line of the curve of the corrugated portions increase from the points i i to the points jj, so that while the end kof the maul will be, say, one and one-half inch from the bottom of the reservoir—the point at about which the maul first acts on the clothes—the end l of the maul will be but three-quarters of an inch from the bottom of the reservoir. This difference of the relation of the mauls at the two points named to the bottom of the reservoir produces a squeezing of the clothes, which assists greatly in the cleansing of them, and is not so likely to tear the clothes as when the space between the mauls at the bottom is uniform throughout, or as when the rubbing of the clothes

only is effected. Uprights m m are attached to the manls, they (the uprights) being suspended on a rod, n, affixed in the ends of the vertical bars o. These uprights m and the mauls derive their motion from a horizontal compound lever, p, whose fulcrum is at q, rods r r being connected at one end to the lever p and at the other to the uprights m. The long end of the horizontal lever p has in it three or more holes, sss, into either one of which may be fitted the end of the horizontal rod t, so that this rod may be thus adjusted to the lever p. The rod t is connected at its other end to the vertical lever u, the fulcrum of the lever u being at v. On the upper end of this lever u there is a weight, w, which aids materially in the easy working of the machine, as it will be noticed that the influence of this weight commences at about the period of time when the maul of the one side or the other is about to commence the squeezing part of the operation, the ends k of the mauls being at the point i when the lever u is on the vertical line.

The arrangement of the levers herein described, it will readily be seen, is an excellent one for producing an easy and full movement of the mauls, and the relation of the mauls to the bottom of the reservoir or washing-chamber is such that very complete and perfect washing may be economically produced.

What I claim as my invention, and desire

to secure by Letters Patent, is-

1. The bottom of the reservoir or washing-chamber, having the plain central and the curved end corrugated portions, as recited, in combination with and in relation to the mauls, as set forth.

2. The arrangement of the vertical weighted lever u, the horizontal rod t, the horizontal lever p, and rods r, for operating the uprights and mauls, as herein described.

This specification signed this 26th day of February, 1863.

JOHN M. HORNER.

Witnesses:

WM. HOPKINS, WM. Y. HORNER.