

L. F. Muhlinghaus,

Washing Machine.

No. 93635.

Fig. 1.

Patented

Aug. 10. 1869.

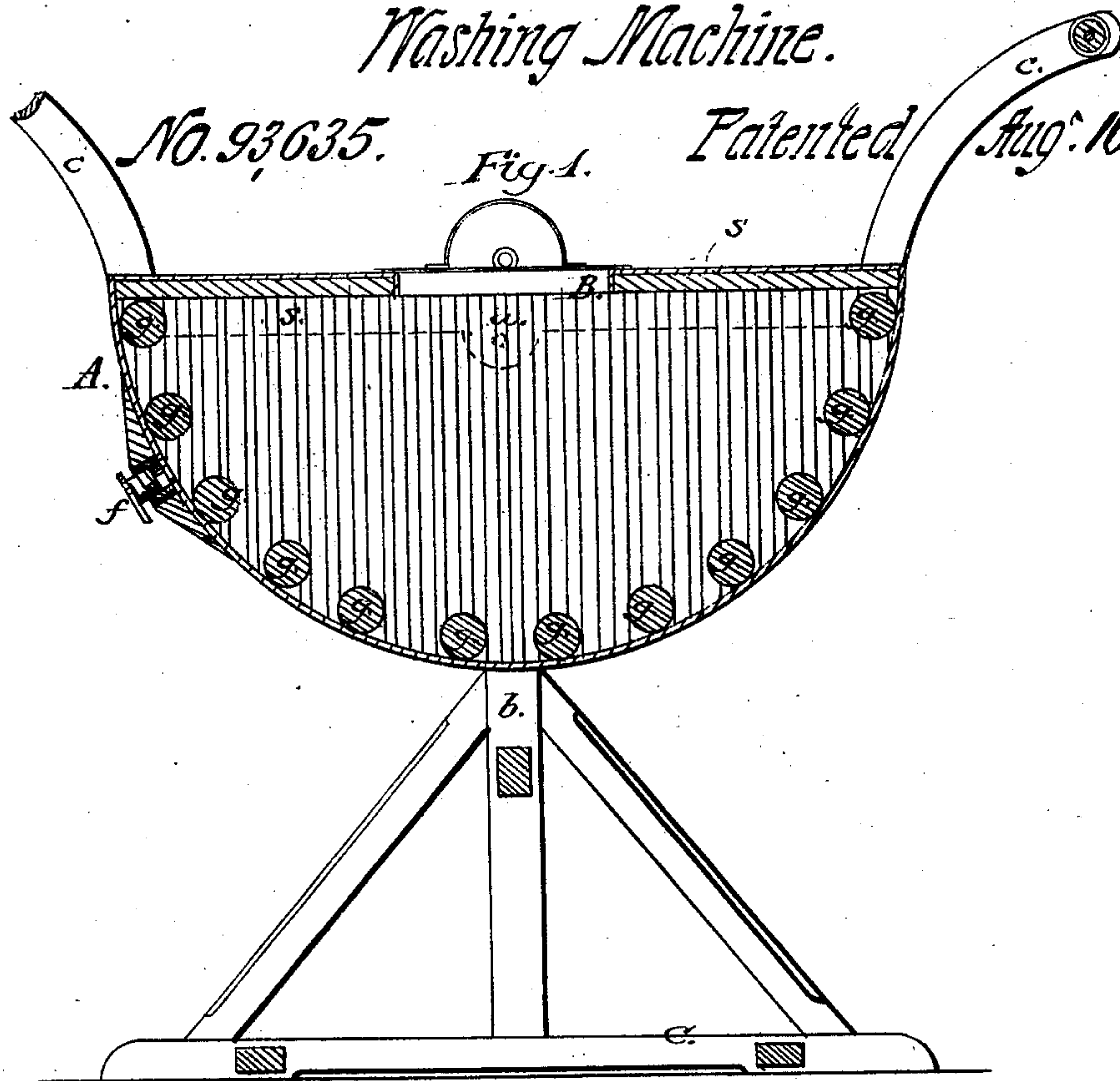
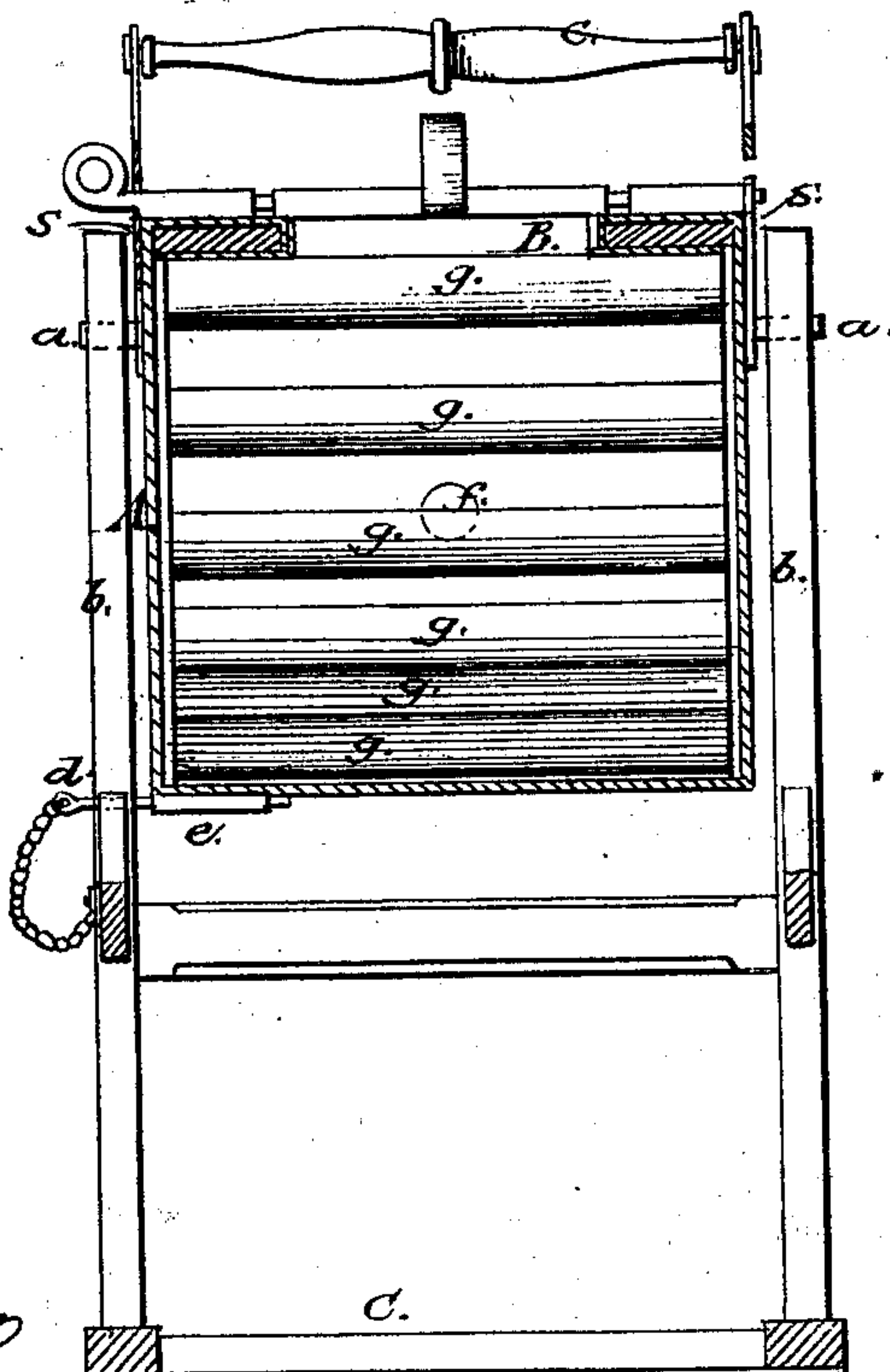


Fig. 2.



Witnesses:
C. Wahlers
E. F. Kastenhuber

Inventor:
L. F. Muhlinghaus
PER.
Wm. S. Wood & Harff
attorneys

United States Patent Office.

L. F. MUHLINGHAUS, OF BROOKLYN, E. D., NEW YORK.

Letters Patent No. 93,635, dated August 10, 1869.

IMPROVEMENT IN WASHING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, L. F. MUHLINGHAUS, of Brooklyn, in the county of Kings, State of New York, have invented a new and improved Washing-Machine; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a longitudinal vertical section of this invention.

Figure 2 is a transverse section of the same.

Similar letters indicate corresponding parts.

This invention relates to a washing-machine, which consists of a semi-cylindrical tub, hung on gudgeons, and provided with handles, and with a closely-fitting cover, so that when the clothes to be washed and the soap-suds have been introduced, and the cover is closed, the washing is effected by imparting to said tub an oscillating motion on its gudgeons.

The operation of washing is facilitated by a series of round bars or traverses, extending across the tub at a slight distance from its smooth concave bottom, in such a manner, that the clothes, by being caused to rub against said traverses, are readily and quickly washed, and, at the same time, by tilting the tub up, the water and soap-suds discharge without difficulty from the smooth bottom of the tub. The sides of the tub are also corrugated.

In the drawing—

The letter A designates a tub, which is semi-cylindrical, and made of sheet-metal, or any other suitable material.

The top of this tub is flat, and it is provided with an aperture, through which the clothes to be washed and the water and soap-suds can be introduced, and which can be hermetically closed by a cover, B, held in position by a rod or bridge, or by any other suitable means, and so constructed that it fits tight against packing-strips, secured to the sides in the aperture of the top, and that it prevents the water from leaking out, when the tub is set in motion.

From the sides of the tub project two gudgeons, *a*, which have their bearings in standards *b*, rising from the frame C; and two handles *c*, extending from the ends of the tub, serve to impart to the same an oscillating motion.

When it is desired to retain the tub firmly in position, a pin, *d*, is introduced through a hole in one of

the standards, into a socket or loop, *e*, fastened to the bottom of said tub, as shown in fig. 2.

The sides of the tub are corrugated, the corrugations being produced either in the metal from which the tub is made, or by fastening to the metal, strips of wood.

The concave bottom of the tub is smooth, so that when the tub is tilted up, the water and soap-suds will readily discharge through the spout *f*, which is closed by a plug or stop-cock.

In the interior of the tub, and at a short distance from its concave bottom, is secured a series of traverses, *g*, by preference made of cylindrical bars of wood, and these traverses are placed at suitable distances apart, so that when an oscillating motion is imparted to the tub, the clothes to be washed will pass with a jumping motion from one traverse to the other, whereby the operation of washing is materially facilitated.

It will be seen that the handles are secured to metal strips *s*, which extend longitudinally along the sides of the tub, and serve to strengthen said tub.

The gudgeons *a* are secured to these strips, so that the tub is not pierced or perforated, and thereby weakened.

By placing the traverses at a certain distance from the bottom of the tub, the water and soap-suds are left free to discharge, when the tub is tilted, and no trace of water remains, while with similar tubs having corrugated bottoms, it is difficult to discharge all the water, and such tubs are liable to corrode, by the water retained between the corrugations.

I do not claim broadly, as my invention, a semi-cylindrical tub, hung on gudgeons, and so arranged that an oscillating motion can be imparted to it; but

What I claim as new, and desire to secure by Letters Patent, is—

The construction and arrangement of the tub A, having its bottom of a single piece of metal, with internal corrugated sides, and braced by the longitudinal strips *s*, to which the handles and gudgeons *a* are secured, in connection with rolls *g g g*, arranged in relation to the curved bottom with a space between them, combined for the purpose described.

L. F. MUHLINGHAUS.

Witnesses:

W. HAUFF,
C. WAHLERS.