

(No Model.)

H. ROSE.
WASHING MACHINE.

No. 422,160.

Patented Feb. 25, 1890.

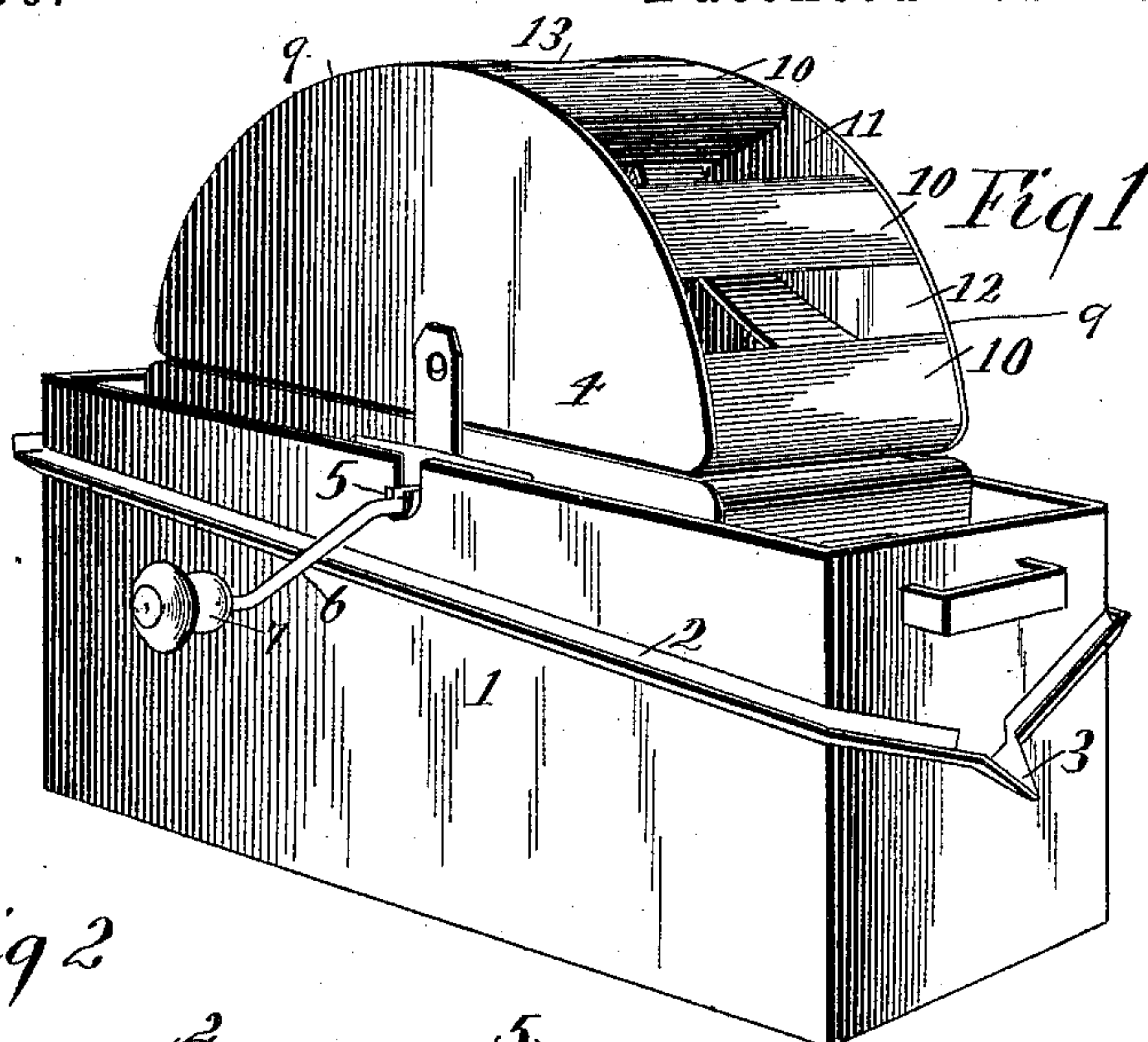


Fig 2

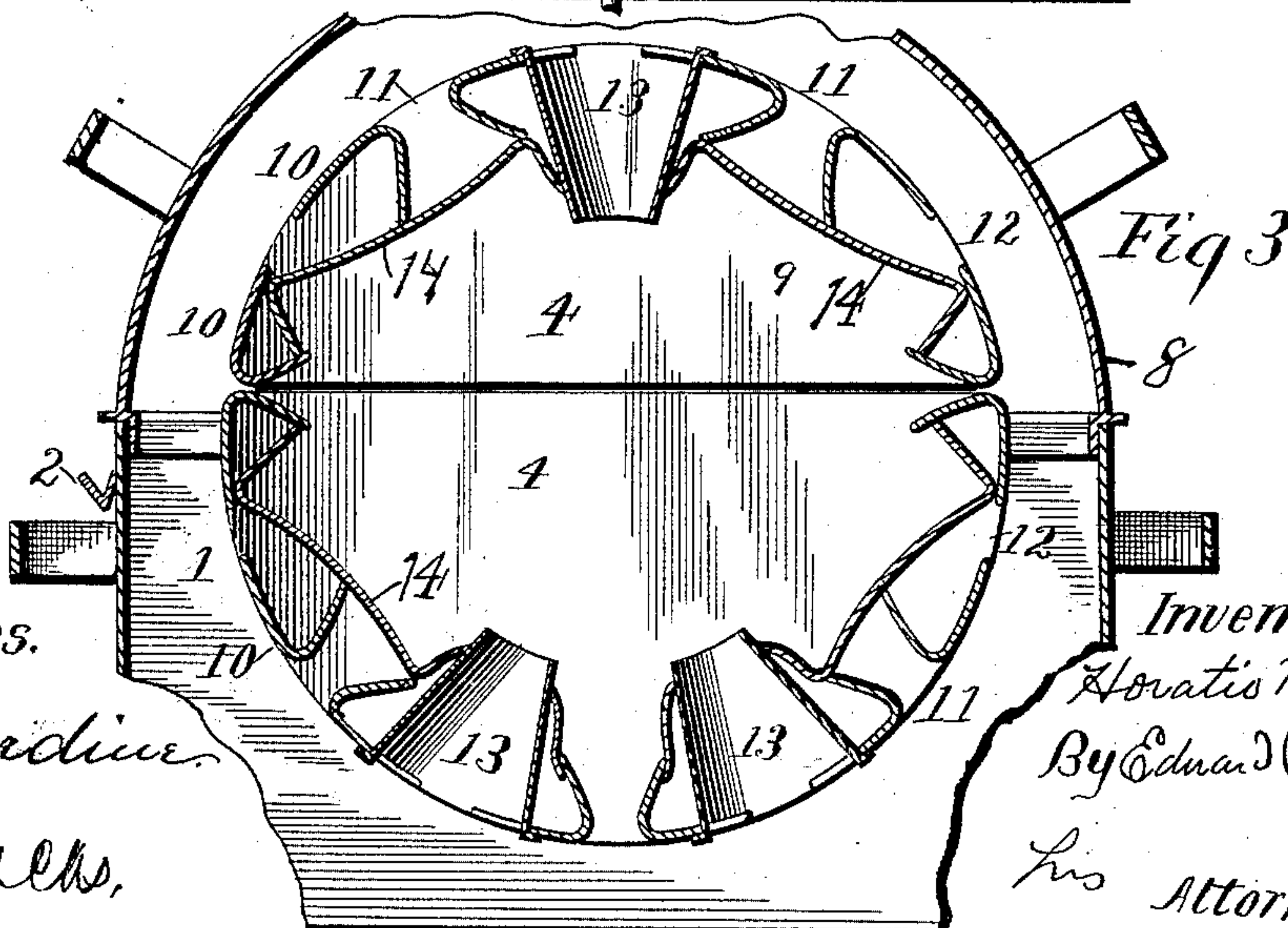
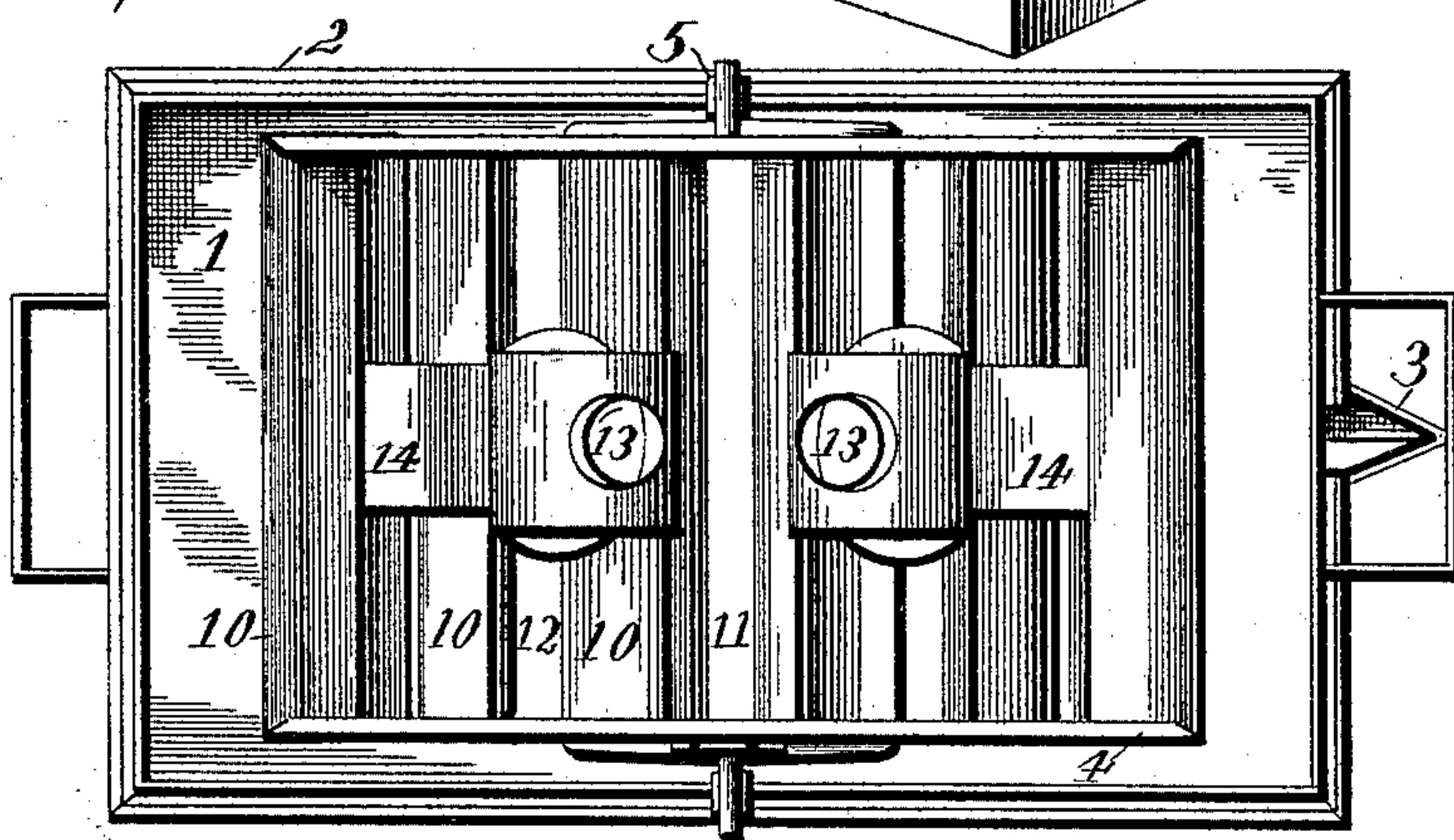


Fig 3

Witnesses.

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HORATIO ROSE, OF GLEN COVE, TEXAS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 422,160, dated February 25, 1890.

Application filed October 31, 1889. Serial No. 328,769. (No model.)

To all whom it may concern:

Be it known that I, HORATIO ROSE, a citizen of the United States, residing at Glen Cove, in the county of Coleman and State of Texas, have invented certain new and useful Improvements in Washing-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in washing-machines, and it relates more particularly to that class of machines in which the clothes are washed inside of a hollow cylinder hung so as to be revolved within a boiler; and it has for its object to generally improve upon the construction and render more efficient the operations of this class of washing-machines.

To the above ends and to such others as the invention may pertain the same consists in the peculiar combination and in the novel construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the figures of reference marked thereon, form a part of this specification, like figures of reference indicating like parts throughout the several views, and in which drawings—

Figure 1 is a perspective view of a washing-machine constructed in accordance with my invention, the cylinder being shown as in position in the boiler and the cover of the boiler removed. Fig. 2 is a plan view of the interior of one section of the cylinder. Fig. 3 is a central vertical section through the cylinder.

Reference now being had to the details of the drawings, 1 represents the boiler, which may be of any well-known construction, and is provided with an inclined trough or gutter 2, which entirely surrounds the outer face of the boiler a short distance below the point at

which the cover is attached. At the lowest point of incline the gutter is provided with an outlet-spout 3, by means of which any water which may escape from the boiler during the process of washing may be conducted away.

The cylinder 4 is made in two portions or sections, as shown, and is journaled within suitable journal-boxes 5 in the upper edge of the boiler and provided with a suitable operating-crank 6 and handle 7.

The boiler is provided with an oval or arched cover 8, which is adapted to be fitted upon the body of the boiler, thus serving to retain the steam and prevent the water being thrown from the boiler in operating the machine.

The cylinder 4 is made of sheet metal, and is provided with closed ends 9.

The outer periphery of the cylinder is composed of a series of transversely-arranged open troughs 10, which are of sheet metal. The ends of the troughs are soldered or otherwise secured to the inner faces of the cylinder-head. The several troughs are arranged in a continuous series, extending entirely around the circumference of the cylinder, the entrance to the several troughs being in the line of curvature of the cylinder and each trough opening in a direction opposite that of the next succeeding trough in the series, as shown. By this arrangement it will be seen that the series of troughs is divided into a series of pairs, the troughs in each pair opening toward each other, while one of the outer faces of each trough forms a portion of the outer curved surface of the cylinder. The several troughs are arranged at intervals, with an open space 11 intervening between each pair, while a narrower open space 12 separates the troughs constituting the pairs.

At intervals and upon a line extending centrally around the outer periphery of the cylinder are placed a series of open-ended tubes 13. These tubes extend for a considerable distance into the interior of the boiler and are soldered or otherwise secured in position. It will be observed that these tubes are funnel-shaped, with the smaller end of the tube at the end within the cylinder. Strips of heavy sheet metal 14 connect the several buckets in the series and serve to hold them rigidly in place.

It will be seen that by the construction above described, a very durable and serviceable machine is produced. The central strips 14, which connect the inner ends of the buckets, serve also to compress the mass of clothes into a compact mass in the central part of the cylinder, by which central compression the ends of the mass will be loosened, thus permitting a free ingress of water, which enters the cylinder through the open spaces between the troughs, while the steam and water entering the funnel-shaped tubes will be carried directly into the center of the mass of clothing, and by reason of the contracted end of the outlet-tubes, aided by the motion of the cylinder, will be carried with sufficient force to aid materially in the process of washing.

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

The herein-described washing-machine, the same comprising, in combination, a boiler, a

cylinder journaled therein and having closed ends, its outer periphery composed of a series of open troughs arranged in pairs, the troughs in each pair opening toward each other, a series of open-ended funnel-shaped tubes arranged in a line drawn centrally around the periphery of the cylinder, the said tubes extending inwardly from the outer face of the cylinder and having their contracted discharge ends near the center of the cylinder, a strip of sheet metal extending centrally around the interior of the cylinder and secured to the tubes, and an operating-crank attached to the cylinder, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

HORATIO ROSE.

Witnesses:

J. J. MARCUS,
M. F. HUGHES.