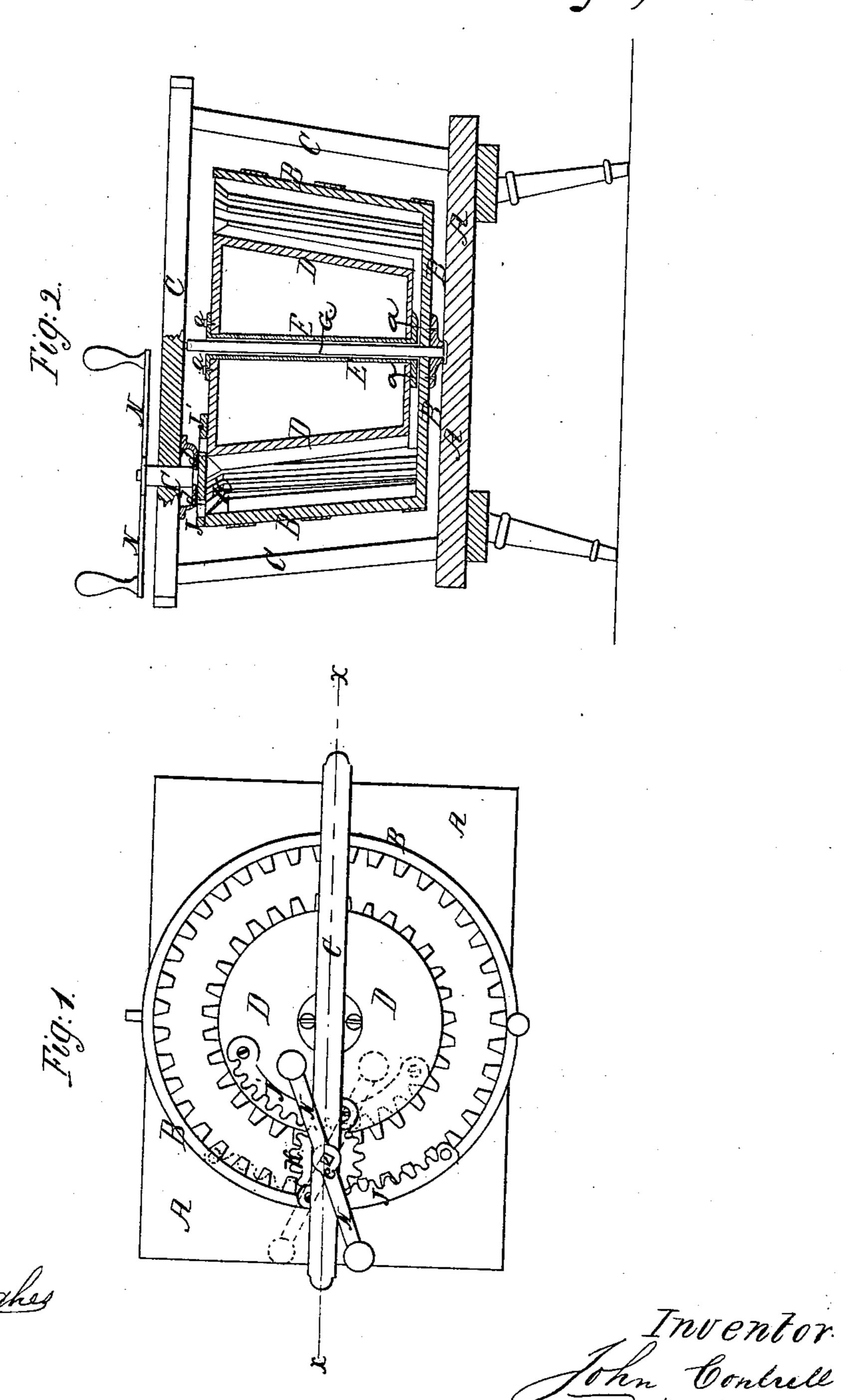
I. Contrell,

Washing Machine.

No. 29,121.

Patented July 10, 1860.



UNITED STATES PATENT OFFICE.

JOHN CONTRELL, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND JOSEPH CONTRELL, OF SAME PLACE.

WASHING-MACHINE.

Specification of Letters Patent No. 29,121, dated July 10, 1860.

To all whom it may concern:

Be it known that I, John Contrell, of the city, county, and State of New York, have invented a new and Improved Washing-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, represents a top view of my improved washing machine showing the cylinder in two positions. Fig. 2, is a vertical diametrical section taken through the machine, as indicated by the red line x, x,

15 Fig. 1.

Similar letters of reference indicate cor-

responding parts in both figures.

To enable those skilled in the art to fully understand my invention, I will proceed to describe its construction and operation.

In the drawings, A, represents a stand for supporting the tub B, on which stand is erected a frame C, and within this frame is placed the tub B, and conical rubber D.

Through the cone D, which may be either hollow or solid, passes a metal cylinder E, with a flanged collar a, at the top and bottom, which flanges are secured tightly to top and bottom of the cone, the cylinder or tube E, being passed through the axis of the cone as clearly shown. This tube E, with the manner of securing it to the cone heads prevents water from entering the cone should it be made hollow, which in practice will be the best way to make it.

G, is a solid shaft that projects up through the center of the tub B, is fixed to the bottom of the tub and projects slightly through the bottom of the tub. This shaft 40 has a step bearing in the table A, and an upper bearing in the cross bar of frame C. On this shaft G is placed the inverted conical rubber D, which is the frustum of a cone, and around this shaft the rubber is made to move back and forth, describing about a quarter revolution. The teeth and rubber are thus supported by one shaft G, and each

are capable of a rotary motion about their common axis. J, J', are rack sectors which are secured to the top edge of the tub and 50 to the circumference of the top of the conical rubber, respectively, the curves of both of which are described from the axis of the central shaft G. Between these two racks J, J', is placed a pinion spur wheel K, the 55 teeth of which wheel engage with both racks. This wheel is hung on the end of a short vertical shaft c, that has its bearing in a bracket piece d, which is secured to the underside of the cross bar C. On the top of 60 the shaft c, a double crank lever N, is placed which is held by the hands in operating the machine, the handles of which may be made to turn loosely if desirable.

Now from this description, it will be seen 65 that by moving the pinion wheel to the right and left alternately, the conical rubber and tub itself will be simultaneously moved in opposite directions and the inside surface of the tub, which like the cone should be 70 armed with slats or corrugations in the usual manner, will be converted into a rubbing surface like that of the cone. In this manner and with such a simple and cheap attachment to the ordinary machines of this 75 peculiar construction, the articles submitted to them may be rubbed on both sides by two opposite moving rubbing surfaces, the action of the rubbing surface on the tub being precisely the same as that on the cone.

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

The employment of the rack sectors J, J', and intermediate oscillating pinion K, gear- 85 ing with both of said sectors, in combination with the oscillating rubbing tub B and conical rubber D, as and for the purposes herein shown and described.

JOHN CONTRELL.

Witnesses:

CHARLES HUGHES, B. GIROUX.