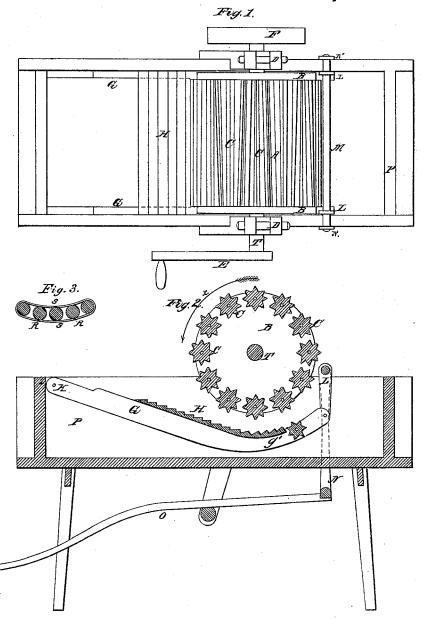
## W. Kienderdine,

## Washing Machine,

Nº53,626,

Patented Apr. 3, 1866.



Witnesses Wilms Mkinson

Edn Brown

Hatton Kenderdine

## UNITED STATES PATENT OFFICE.

WATSON KENDERDINE, OF LUMBERVILLE, PENNSYLVANIA.

## IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 53,626, dated April 3, 1866.

To all whom it may concern:

Be it known that I, WATSON KENDERDINE, of Lumberville, Bucks county, Pennsylvania, have invented a new and Improved Washing-Machine; and I do hereby declare the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in a rotary cylinder having its surface composed of cone-shaped fluted rollers. The said cylinder is rotated over a concave wash-board, and the clothes are inserted between the cylinder and the wash-board.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 is a plan of the machine. Fig. 2 is a longitudinal section.

Similar letters on each refer to the same

A is the cylinder, having two ends, B B. Round the periphery of the cylinder are placed rollers running on pins in each end B B. These rollers (marked C) may be cylindrical and plain, but I prefer to make them cone shaped and fluted, as this form not only gives the required rubbing, but causes the fabrics to be drawn gently through the machine at the same time. The cylinder A is mounted on a centerpin, T, in bearings D, which are fixed to the sides of the wash-tub P. The cylinder is rotated in the direction of arrow X, either by the handle E or pulley F.

G is the concave wash-board with its corrugated surface H. This board is hinged at

one end, K, and at the other end it is connected, by rods L, cross-bar M, and rod N, to lever O. By pressing on the end of lever O the concave wash-board may be raised or lowered to suit the thickness of fabric or the pressure required, thus placing it immediately under the control of the operator.

Fig. 3 shows an alteration of the wash-board which I use for washing heavy fabrics.

The rollers R R run on pins in the side frames, G, of the wash-board, and a continuous canvas belt is carried over the two end rollers. This arrangement is inserted beneath the cylinder A in the part of the concave marked g'.

The operation is obvious without much explanation. The clothes are inserted at H, and the cylinder turned in the direction of arrow X. The clothes are washed by the action of rollers C upon them, the pressure required being caused by pressing on lever O and elevating the concave G.

I do not claim a segment of a cylinder having a rocking motion given to it

ing a rocking motion given to it.
What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the rotary cylinder A, with its surface of cone-shaped fluted rollers C, and the adjustable concave G, operating substantially as described.

2. Raising the concave G by means of the lever O, rods N and L, and cross-bar M, or their equivalents, substantially as described.

WATSON KENDERDINE.

Witnesses:

John E. Kenderdine, John B. Pugh.