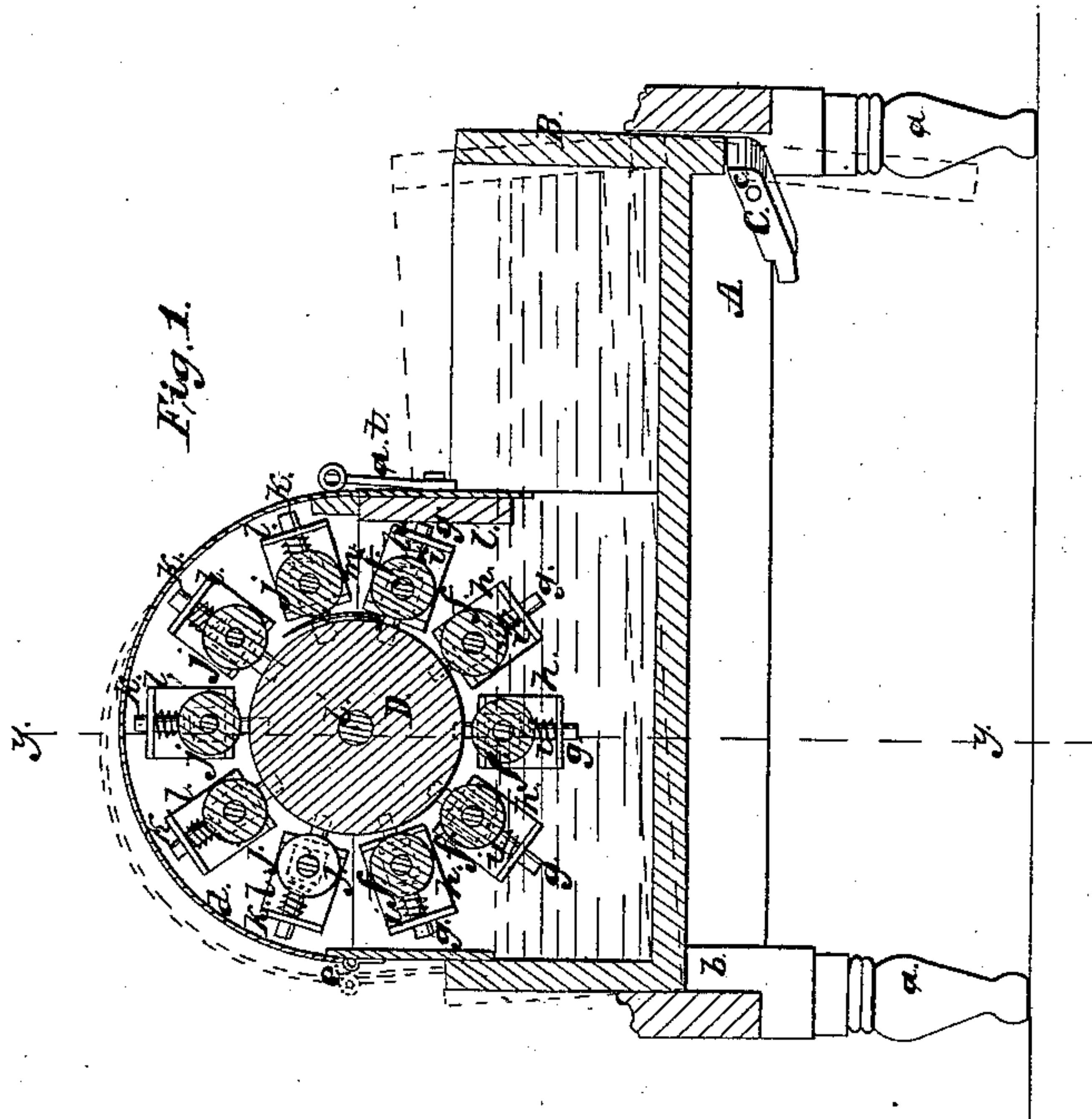
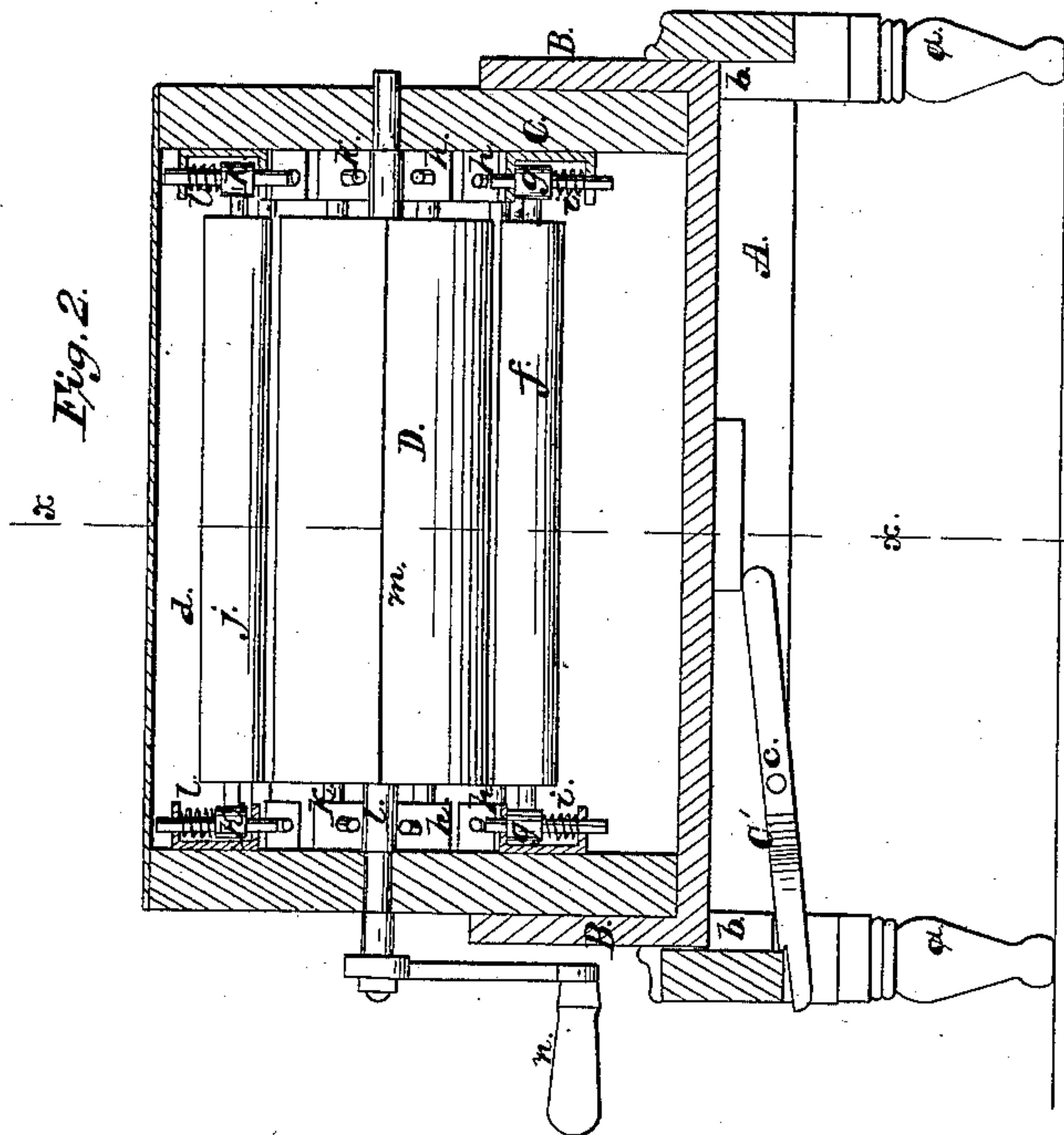


B. Illingworth,
Washing Machine,
No 22,728, *Patented Jan. 25, 1859.*



Attest:

Daniel Powell
Edgar A. Hazen

Inventor:

Benjamin Illingworth

UNITED STATES PATENT OFFICE.

BENJN. ILLINGWORTH, OF FREEPORT, ILLINOIS.

WASHING-MACHINE.

Specification of Letters Patent No. 22,728, dated January 25, 1859.

To all whom it may concern:

Be it known that I, BENJAMIN ILLINGWORTH, of Freeport, in the county of Stephenson and State of Illinois, have invented
5 a new and Improved Clothes-Washing Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a vertical section of my invention taken in the line x, x , Fig. 2. Fig. 2, is also a vertical section of do., taken in the line y, y , Fig. 1, the two planes of section
15 crossing each other at right angles.

Similar letters of reference indicate corresponding parts in the two figures.

To enable those skilled in the art to fully understand and construct my invention I
20 will proceed to describe it.

A, represents a rectangular frame which is supported at a suitable height by legs a , and B, is a box which is fitted within the frame A, and rests on shoulders b , at the upper end of each leg a . Within the frame A,
25 at one end a lever C' , is secured by a fulcrum pin c .

The box B, is open at the top and in one end of the box a case C, is placed. This case
30 is simply a frame having a semi-cylindrical cap d , hinged to it as shown at e . The case C, is open at the bottom so that it may communicate with the box B.

Within the lower part of the case C, a series of rollers f , are placed, in semi-circular form. These rollers have their bearings in rods g , which are fitted in plates h , attached to each end of the case and around each rod
35 g , a spiral spring i , is placed. These springs
40 i , have a tendency to press the rollers f , inward or toward a point at each end of the rollers which is the center of the circles of which the rods g , form a part as regards position, the rods g , forming radii of said
45 circle.

In the cap d , a series of rollers j are placed. These rollers are arranged precisely similar to the rollers f , being fitted in rods k , having spiral springs l , around them.
50 The rollers j , are placed in semi-circular form, but in a reverse position to the rollers f , so that when the cap d , is closed down on the case C, the two sets of rollers will form a hollow cylinder as shown clearly in Fig. 1.

D, is a cylinder the journals of which are
55 fitted in the upper part of the case C, and when the cap d , is closed down on the case the cylinder D, will be encompassed by two rollers f, j . The peripheries of the cylinder D, and rollers f, j , may be smooth or corrugated. To the periphery of the cylinder D,
60 an apron m , is attached, said apron being formed of any textile fabric. To one end of the shaft l , of the cylinder a crank n , is secured.

The operation is as follows:—The box B, is supplied with a requisite quantity of suds, and the clothes are placed underneath the apron m , on the cylinder D, the cap d , being raised to permit the clothes being adjusted
65 to the cylinder. The cap is then turned down on the case and secured in a closed state by a catch a' , and the cylinder rotated and the rollers f, j , subject the clothes to the requisite degree of friction and rubbing.
70 The clothes are allowed to be more or less saturated with suds by regulating the position of the box B, by means of the lever C' . This is an important feature of the invention for to cleanse clothes perfectly they
80 should be subjected to the action of soap sufficiently before being too much saturated with water. By doing this the dirt in the clothes will be sufficiently softened so that the water will take it out readily. In fact
85 by tilting the box B, more or less, the cylinder D, and the clothes therein may be brought in contact with the suds more or less as desired. By this tilting of the box also, the clothes after being cleansed may, by being subjected to a dry pressure of the rollers
90 f, j , by properly adjusting the box B, be thoroughly “wrung” or have all moisture expressed from them, and in many cases the articles will be mangled so as to render iron-
95 ing unnecessary.

Having described my invention, I claim and desire to secure by Letters Patent, as an improved article of manufacture:

A washing machine having a tilting box
100 B, cylinder D, spring rollers (f, j), and otherwise constructed as herein shown and described.

BENJAMIN ILLINGWORTH.

Witnesses:

DANIEL POWELL,
EDGAR A. HAZEN.