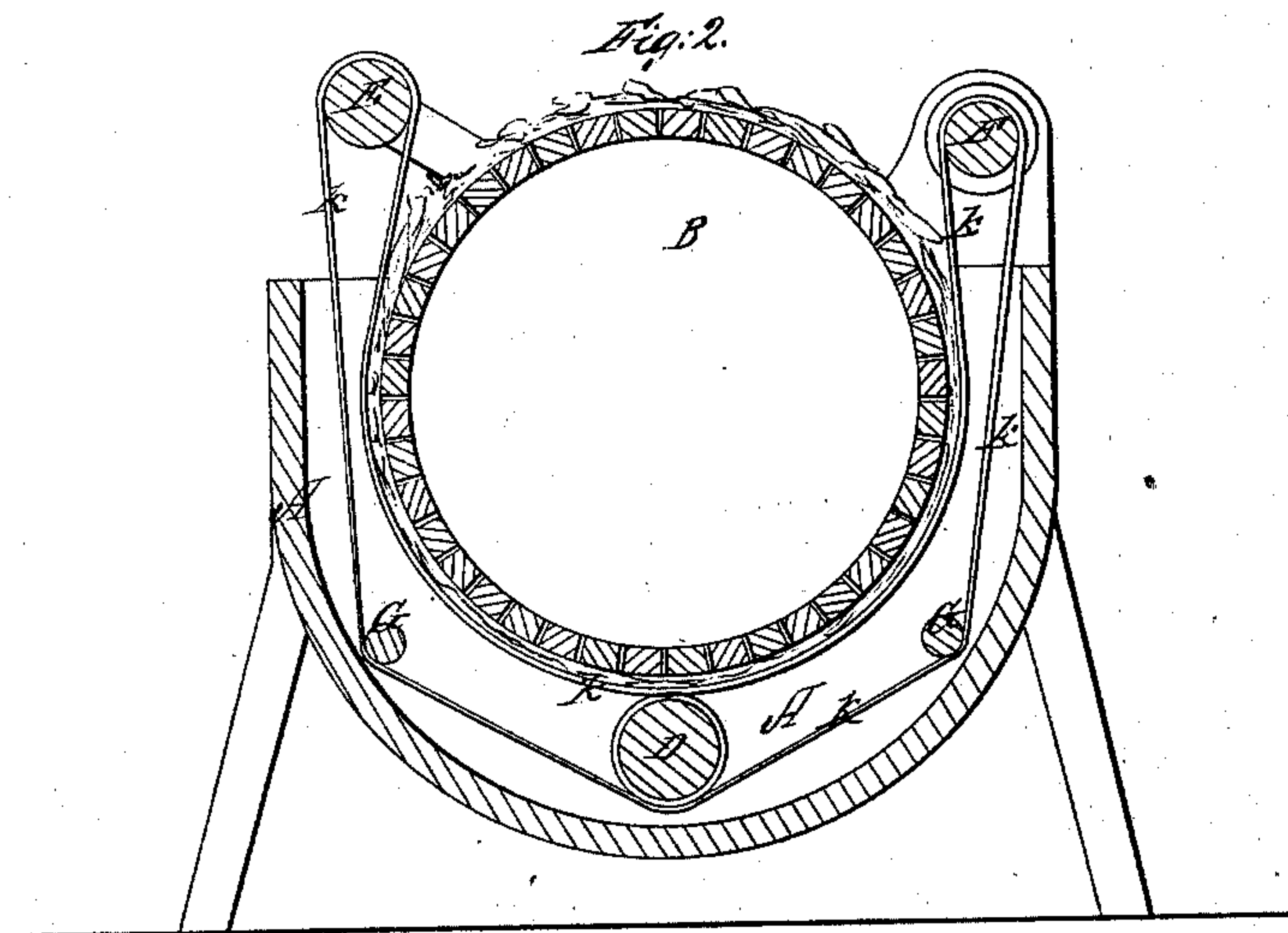
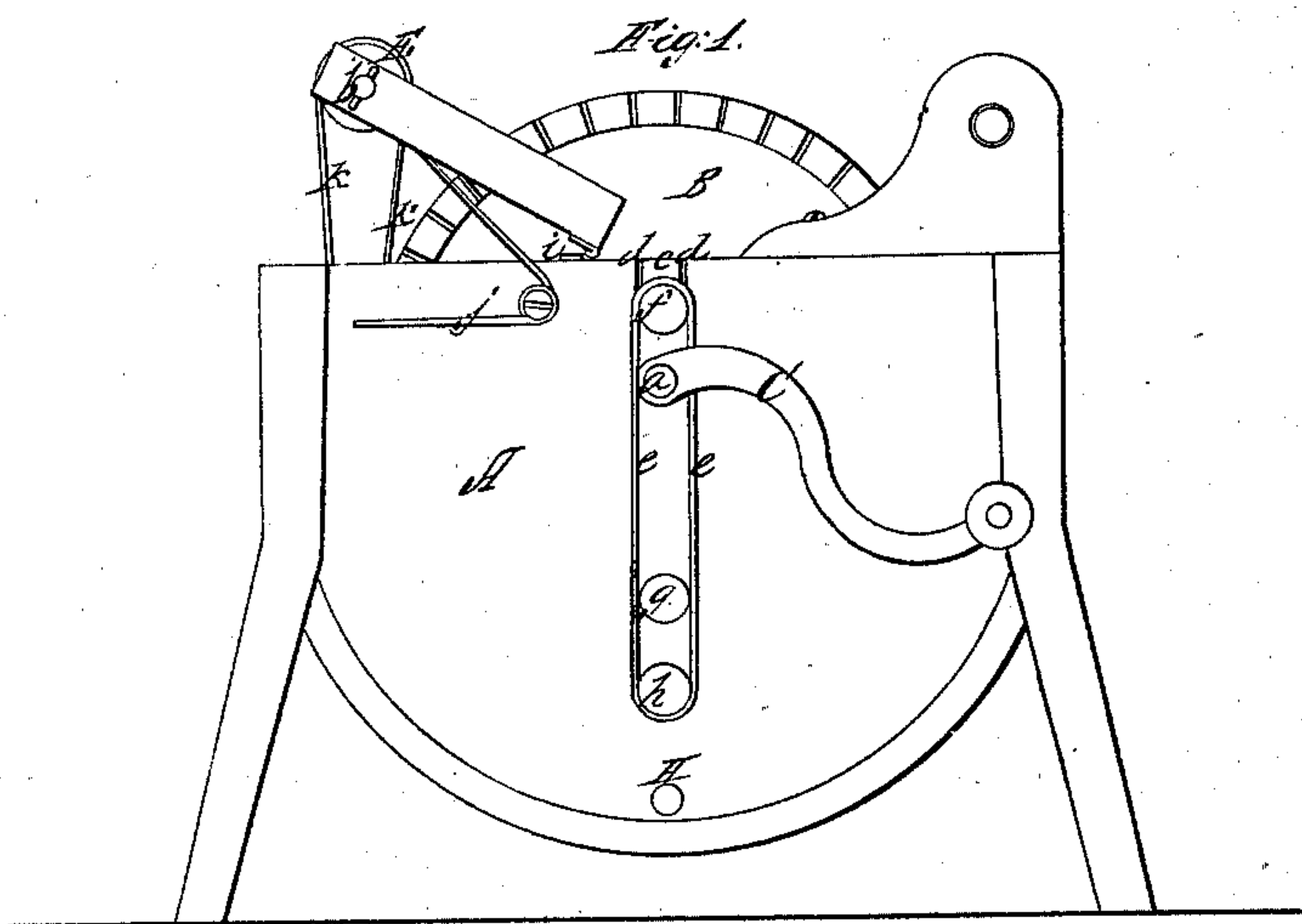


D. C. Baker,

Washing Machine,

No. 77,861,

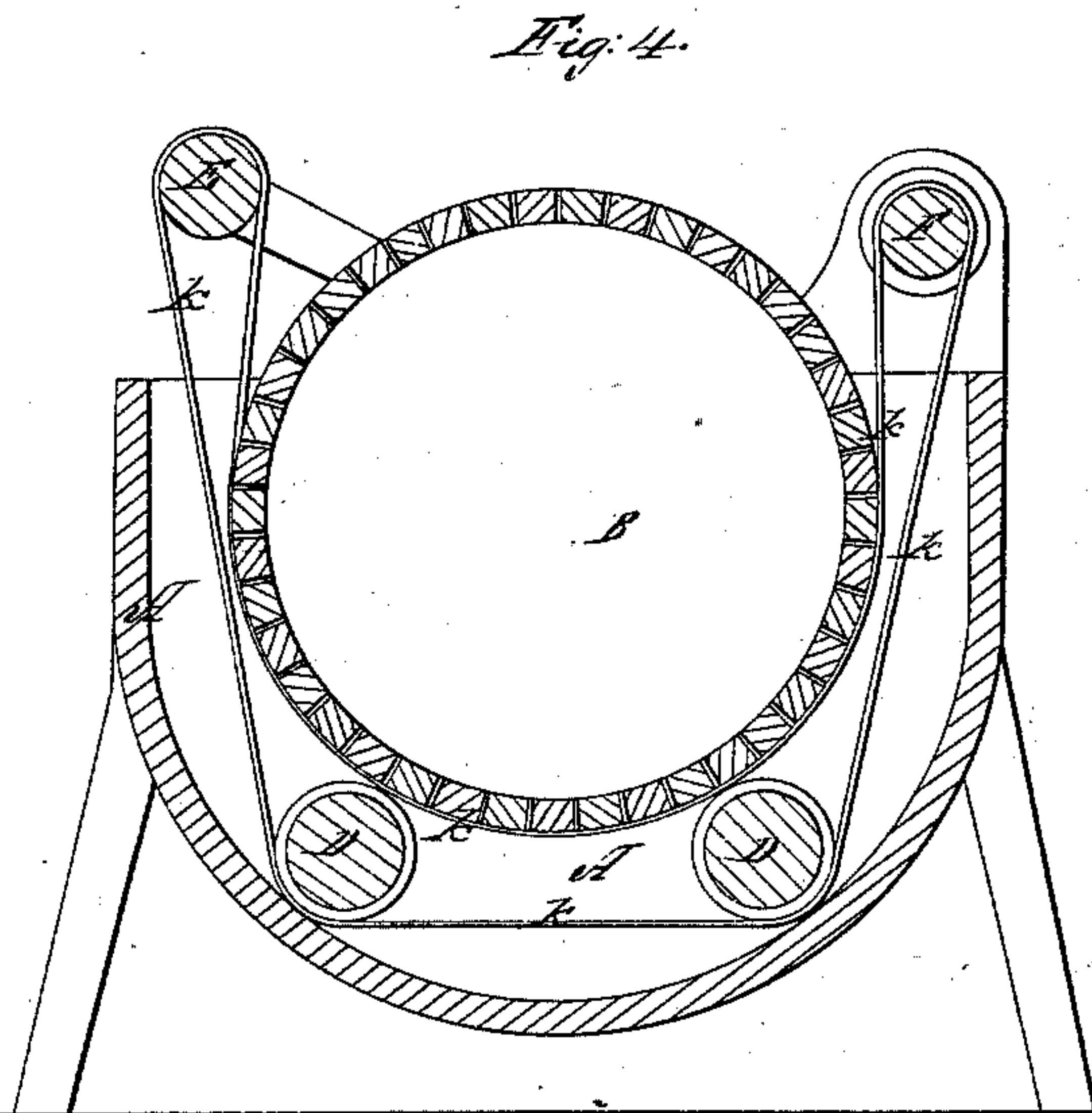
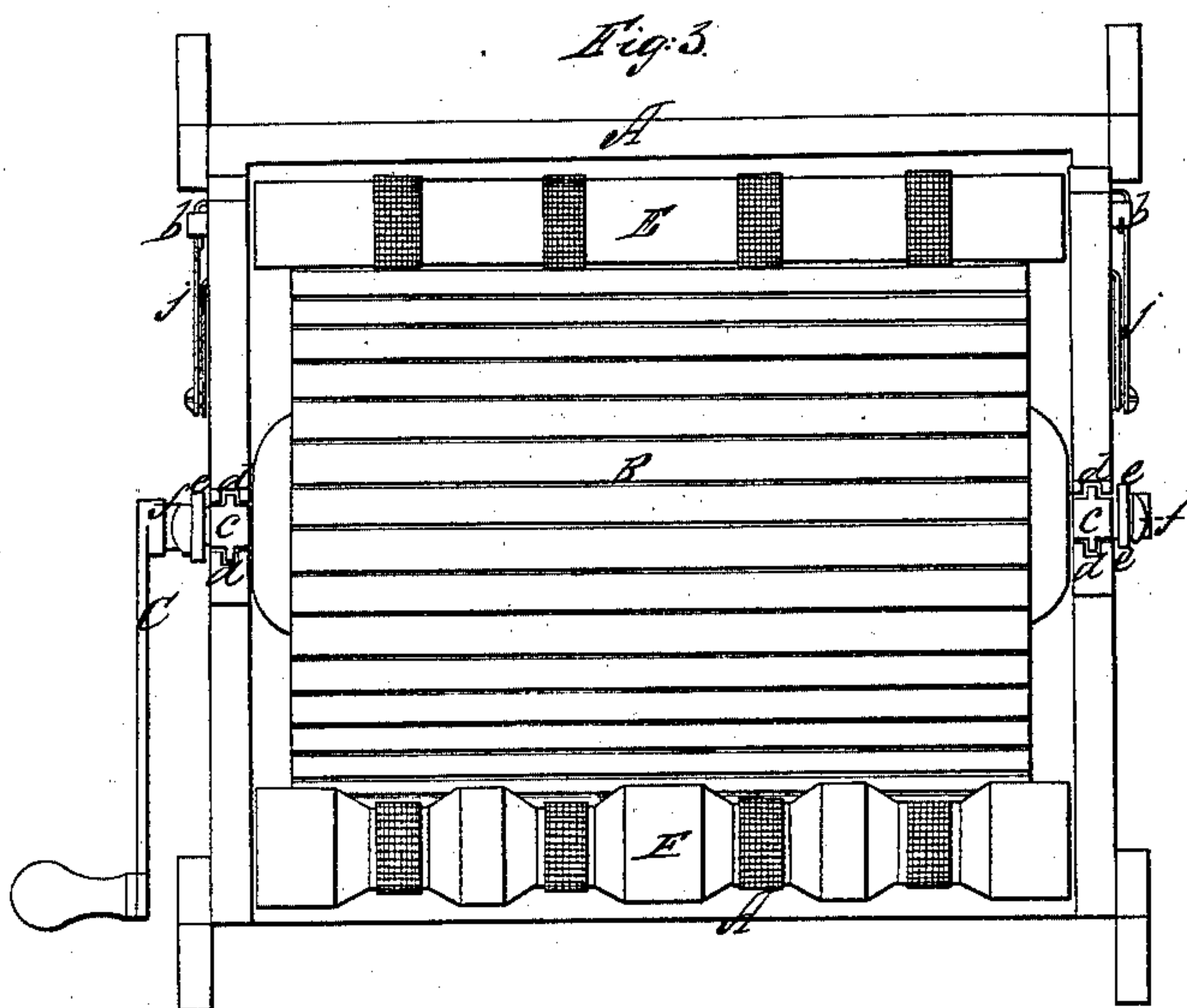
Patented May 12, 1868.



Witnesses:
J. R. Drake
Geo. W. Mott

Inventor:
D. C. Baker
By J. Fraser & Co.
attys.

D. C. Baker,
Washing Machine,
N^o 77,861, Patented May 12, 1868.



Witnesses:

J. R. Dille
Geo. W. Matt

Inventor:

D. C. Baker.
By J. Fraser & Co.
Atty

United States Patent Office.

D. C. BAKER, OF BUFFALO, NEW YORK.

Letters Patent No. 77,861, dated May 12, 1868.

IMPROVED WASHING-MACHINE.

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, D. C. BAKER, of Buffalo, in the county of Erie, and State of New York, have invented certain new and useful Improvements in Combined Washing, Rinsing, and Wringing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an end elevation.

Figure 2 is a vertical cross-section.

Figure 3, a plan.

Figure 4, a section, showing the cylinder when operating in connection with two rubber rollers.

Like letters of reference indicate corresponding parts in all the figures.

My invention consists in the combination, with a slatted cylinder, of a roller or rollers beneath, and a series of endless bands passing over a spring-bearing and under the cylinder, the whole so arranged that the clothes placed on the cylinder are retained by the bands in close contact therewith, and are carried around continually, receiving thereby an alternate filling and expressing-action best adapted to removing the dirt.

The invention further consists in the arrangement of boxes resting upon the axis of the cylinder, and spring-bands holding said boxes down, the whole as hereinafter set forth.

In the drawings, A represents the tub or suds-box, in which the slatted cylinder B is arranged, revolving on a horizontal axis, *a*, driven by crank C. *c c* (figs. 1 and 3) are sliding boxes, resting in grooves *d d*, and holding down on the axis, being retained in place by rubber bands *e e*, which allow the boxes to rise in proportion to the amount of clothes around the cylinder. A peg, *f*, attached to boxes *c c*, and corresponding pegs *g* and *h*, attached near the bottom of suds-box, hold the rubber bands, and allow any necessary degree of adjustment as the bands expand or stretch. D is a roller, preferably of rubber, under the cylinder B. If desired, two rubber rollers, at suitable distance apart, as shown in fig. 4, may be employed. This is more especially desirable for laundry and hotel purposes. E is a spring-roller, running in bearings, *b b*, hinged at *i i*, with springs *j j*, to hold them up. *k k k* are endless aprons or bands passing around the rollers. This spring-roller allows the placing of a large quantity of clothes on the cylinder, as the bands *k k*, which hold the clothes against it, press the roller down, allowing the necessary expansion for the desired amount of clothes to be washed at once. These bands *k k k*, which retain the clothes in place against the cylinder, pass around the spring-roller E, as before described, thence down under cylinder B, coming up on the opposite side, and passing over a spool, F, thence down into suds-box, and tightly under rubber roller or rollers D D, up over spring-roller again, being thus continuous. As many of these bands may be used as the size of the machine renders necessary. G G are wooden rollers, to separate the aprons and keep them from wearing by friction. H is a plug or faucet for letting off the water.

The arrangement above described leaves the top of the cylinder entirely open and unobstructed, so that the clothes can be easily placed therein even when under motion. As the clothes pass around, they are held to the cylinder by the bands *k k*, so that they cannot become disarranged. In going down, they become filled or soaked with water, and, in passing through the rollers D, this water is expressed, when they fill again. In thus passing around, the clothes become bedded to the cylinder, as shown in fig. 2, and the motion of the cylinder gives the alternate action of filling and squeezing so rapidly, that the result is as effective in removing dirt as in the use of the ordinary wash-board, when the operator alternately dips beneath the water and then rubs.

The spring *j* of roller E allows the bands to admit any desired quantity of clothes either uniformly over the whole surface, or unevenly, as the case may be. It will also be noticed, that the cylinder itself will adapt to the quantity or position of the clothes by means of the sliding boxes *c c* and the rubber bands *e e*, which stretch for the purpose. These bands, in this form, serve a better purpose than metallic springs, which rust and break, or rubber blocks, which have but little elasticity. The pegs *f*, *g*, *h* allow any degree of adjustment.

This arrangement of the bands *k*, whereby they hold the clothes to the cylinder, and at the same time

leave the top unobstructed, so that clothes can be inserted under motion, in connection with the cylinder and expressing-rollers, forms the essential feature of my invention.

When the washing is accomplished, the rinsing is performed by drawing off the water and admitting fresh water, while the cylinder is agitated a suitable length of time. When this is accomplished, the wringing is done by tightening the cylinder down by the rubber bands *e e*, and then running the clothes on the cylinder through the roller or rollers *D*, which thoroughly expresses the water. The holding of the clothes to the cylinder, by the bands *k k*, while this is being performed, is manifestly a very great advantage, as the whole body of clothes can be expeditiously wrung by one operation.

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

The combination and arrangement of the slatted cylinder *B*, one or more rollers *D*, the series of aprons *k k k*, and spring-roller *E*, when employed in the manner and for the purpose herein specified.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

D. C. BAKER.

Witnesses:

J. R. DRAKE,
SAMUEL LAKE.