

J. L. AUSTIN.
Washing-Machines.

No. 151,264.

Patented May 26, 1874.

Fig. 1

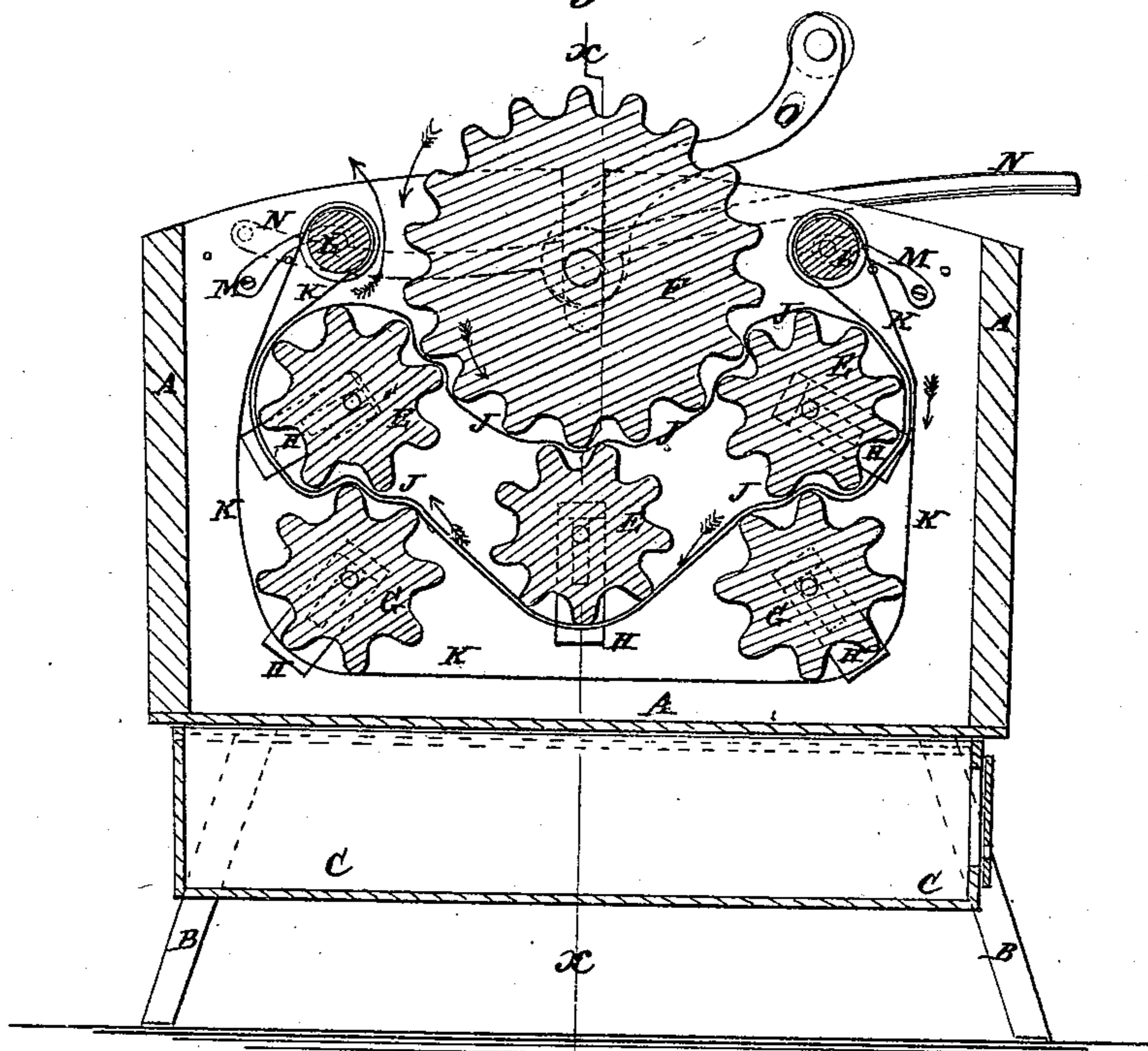
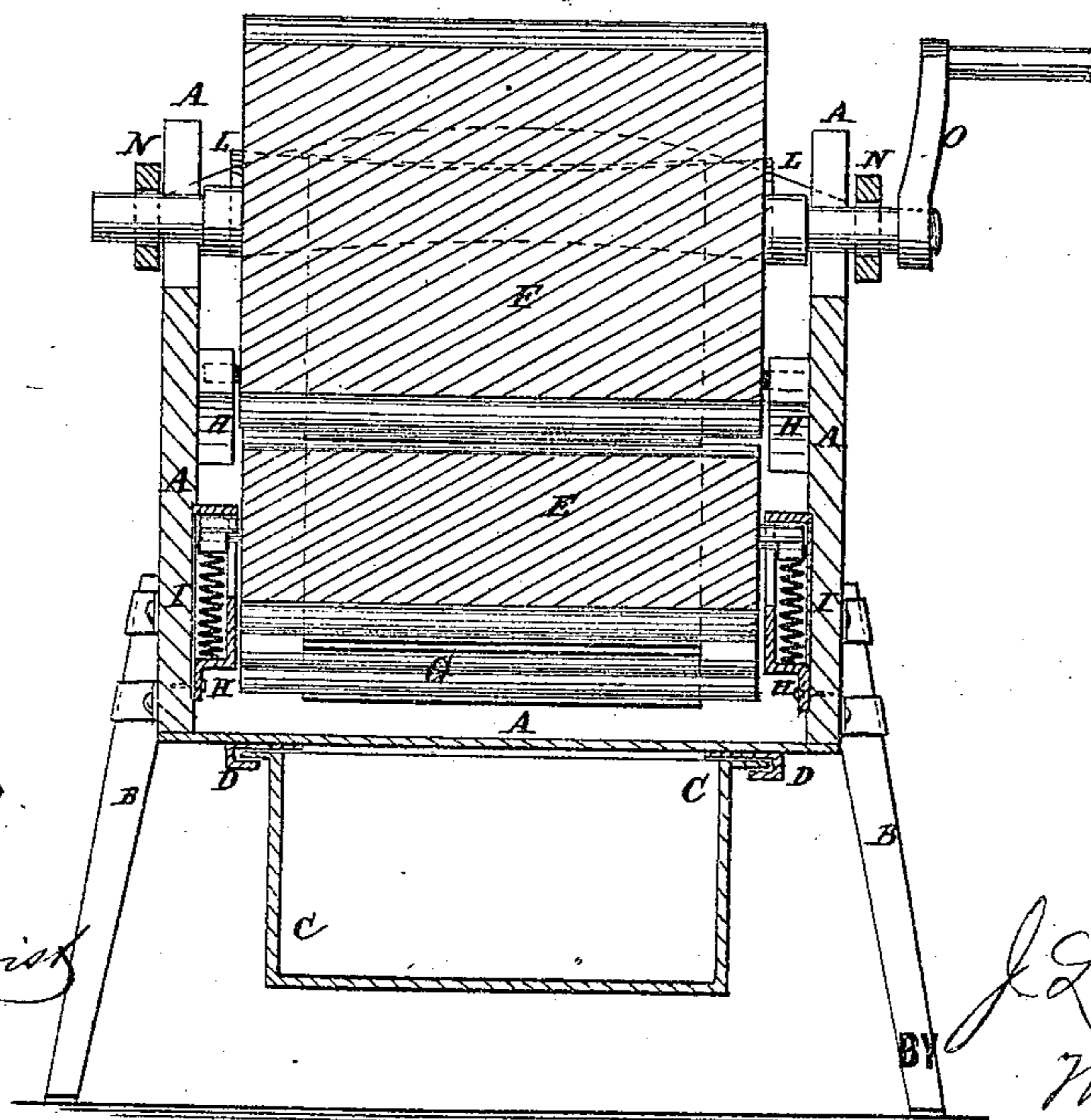


Fig. 2



WITNESSES:

A. W. Almqvist
O. Edqvist

INVENTOR:

J. L. Austin
BY *Mumford*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES L. AUSTIN, OF LITTLE ROCK, ARKANSAS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **151,264**, dated May 26, 1874; application filed February 7, 1874.

To all whom it may concern:

Be it known that I, JAMES L. AUSTIN, of Little Rock, in the county of Pulaski and State of Arkansas, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification:

Figure 1 is a detail vertical cross-section of my improved machine. Fig. 2 is a vertical longitudinal section of the same taken through the line *xx*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention consists in an arrangement of rollers and endless aprons, as hereinafter described.

A is the suds-box, which is supported upon legs B, of such a length as to raise the machine to a convenient height, and allow space beneath the bottom of the box A for the furnace C, the smoke-pipe of which may be connected with a stove, a fire-place, or a chimney-flue, as may be convenient. The top of the furnace C is made with projecting side flanges which rest upon cleats D attached to the bottom of the suds-box A. The bottom of the suds-box A should be metallic, to prevent it from being burned or injured by the heat from the furnace. E are three corrugated rollers, which are placed in the middle part of the box A in the arc of a circle, so that that they may all bear against the lower half of the driving-roller F. The rollers E are placed at a little distance from each other, so that the suds may have a free circulation. G are two corrugated rollers, placed directly beneath, and in contact with, the two side rollers E. The journals of the five rollers E G revolve in boxes H attached to the sides of the suds-box A, and which are placed radial with respect to the axis of the driving-roller F. The journals of the rollers E G are held forward toward the roller F by coiled springs I placed in the boxes H. The upper ends of the boxes H are closed with a button or catch, so that the rollers may be conveniently detached when desired. J is an endless apron of duck, or other suitable material, which passes around the three rollers E, as shown in Fig. 1. K is an endless apron of duck, or other suitable material, which passes around

the two guide-rollers L. The journals of the guide-rollers L revolve in bearings in the ends of short bars M, the other ends of which are pivoted to the sides of the suds-box A, so that the said rollers L may be turned forward into the position shown in Fig. 1, or turned back toward the ends of the box A, their movement in either direction being limited by stop-pins attached to the sides of the box A, as shown in Fig. 1. The journals of the roller F pass through short vertical slots in the sides of the box A, and revolve in bearings in the levers N, the inner ends of which are pivoted to the sides of the suds-box A. The other ends of the levers N project at the other end of the box A, and are connected by a round or bar, which serves as a handle in applying pressure to the clothes, and in raising and lowering the said roller F. To one of the journals of the roller F is attached a crank, O, by means of which the machine is operated, the rollers E G being revolved by the revolution of the said roller F.

In using the machine the roller F is raised out of the suds-box A by means of the levers N, and the clothes to be washed are spread upon the exposed part of the endless apron J, and the roller F is lowered upon them, or the clothes may be fed in at the forward side of the roller F. As the roller F is revolved the clothes are carried between the aprons J K and the two sets of rollers E G. When the rollers L are turned inward the clothes will pass beneath the roller F and be again carried in between the endless aprons J K, and will thus continue to circulate until thoroughly cleansed. By swinging the rollers L outward the clothes will not pass in beneath the roller F, but may be removed from the machine.

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

The combination of the rollers E F G, endless aprons J K, and guide-rollers L with the suds-box A, substantially as herein shown and described.

JAMES LING AUSTIN.

Witnesses:

E. H. ENGLISH,
F. A. TERRY.