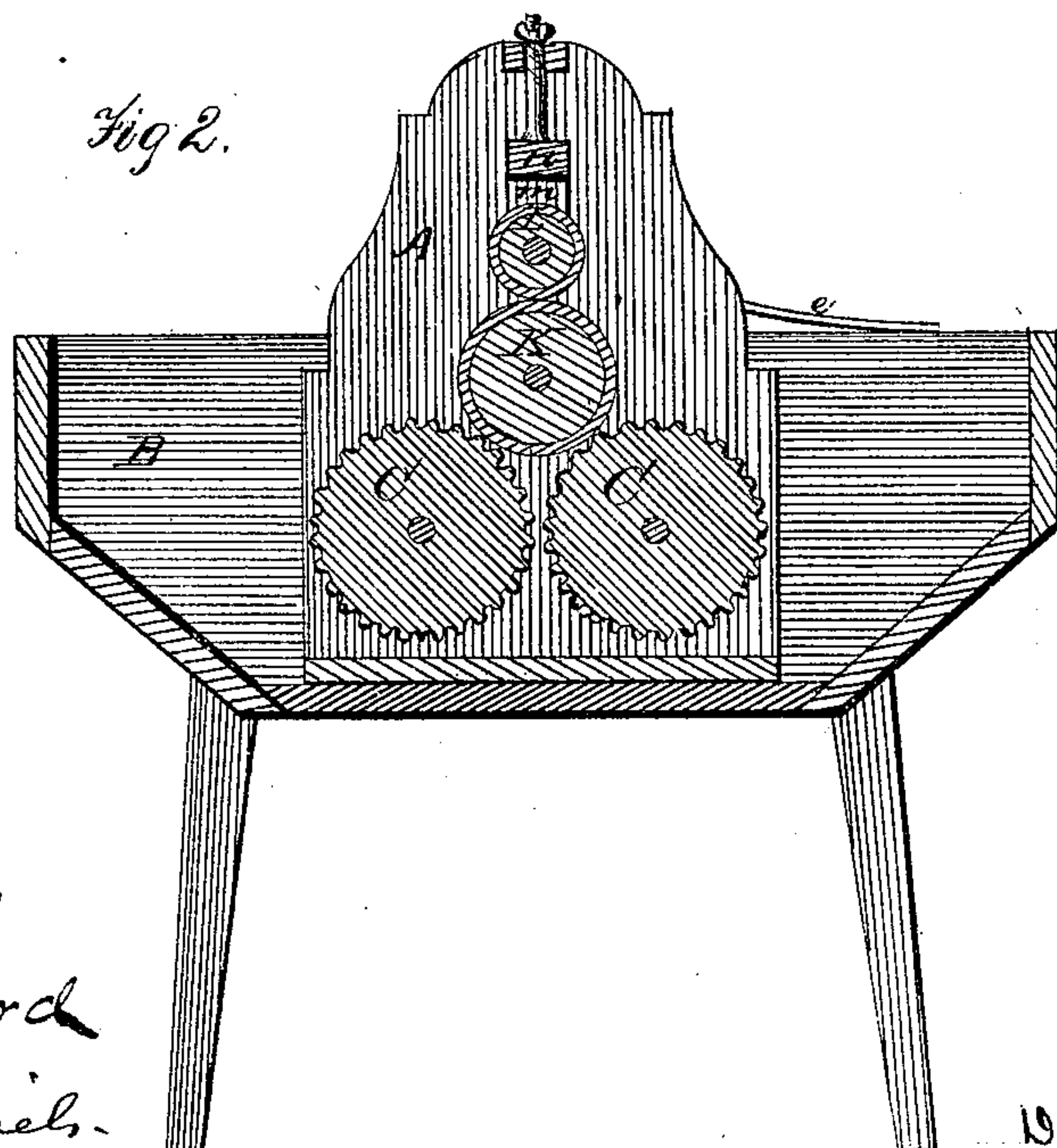
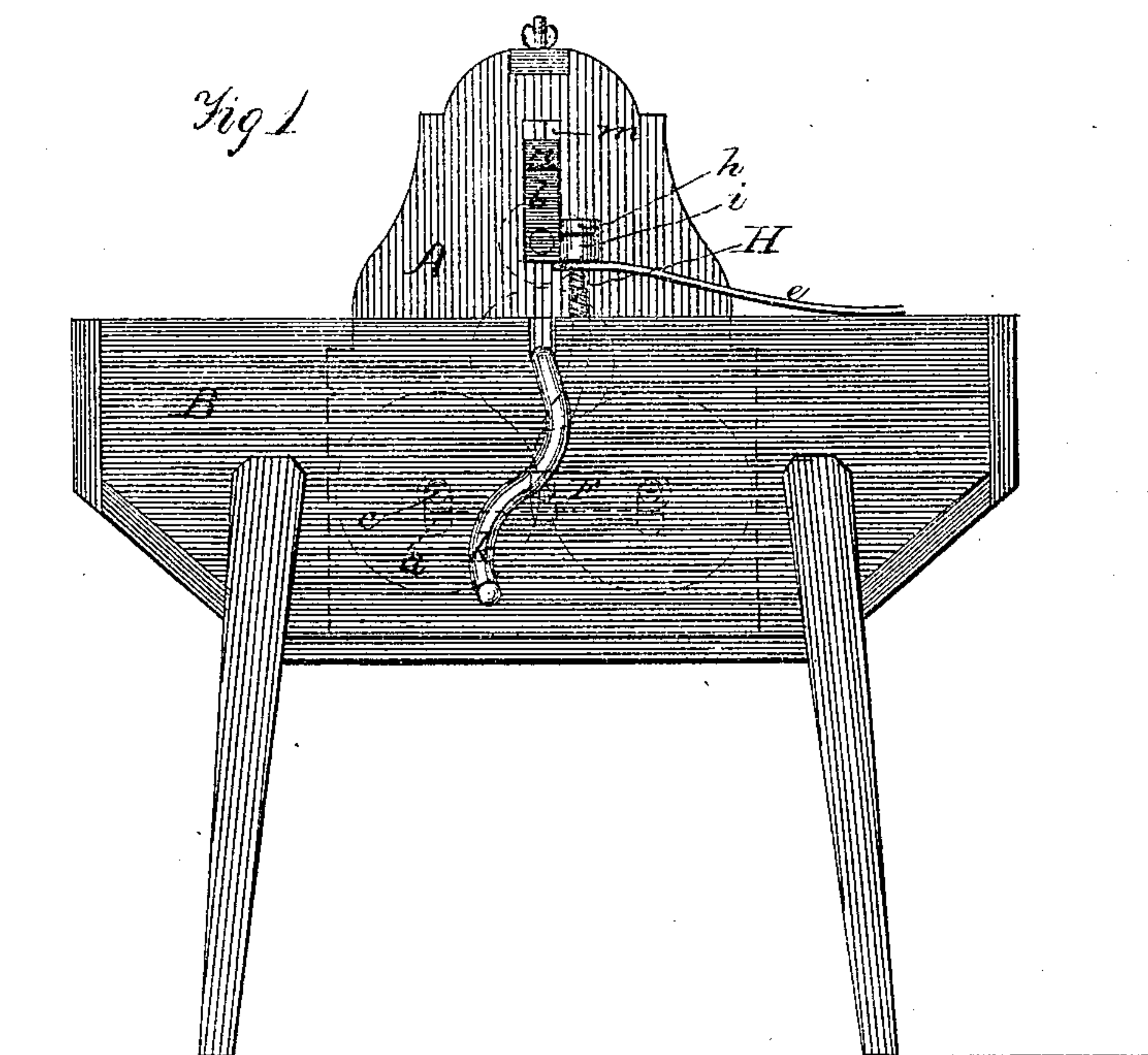


D. B. SMITH.

Improvement in Combined Washer and Wringer.


No. 133,176.

Patented Nov. 19, 1872.



Witnesses :
W. Bradford
H. A. Daniels.

Inventor:


Daniel B. Smith
 Chas S. Whitman.
 Attorney

UNITED STATES PATENT OFFICE.

DANIEL B. SMITH, OF BINGHAMTON, NEW YORK.

IMPROVEMENT IN COMBINED WASHERS AND WRINGERS.

Specification forming part of Letters Patent No. 133,176, dated November 19, 1872.

To all whom it may concern:

Be it known that I, D. B. SMITH, of Binghamton, in the county of Broome and State of New York, have invented certain Improvements in Washing-Machines and Wringers; and the following description, taken in connection with the accompanying drawing hereinafter referred to, forms a full and exact specification, wherein are set forth the nature and principles of the invention, by which the same may be distinguished from others of a similar class, together with such parts thereof as are claimed as new and are desired to be secured by Letters Patent of the United States.

My invention relates to that class of washing-machines in which revolving fluted rollers are made use of; and the nature thereof consists in certain modifications in the details of the construction of the same, hereinafter described and shown.

In the accompanying drawing, which illustrates my invention and forms a part of the specification thereof, Figure 1 is a side elevation, and Fig. 2 is a longitudinal vertical section.

The construction and operation of my invention are described as follows:

The frame, designated A, is secured to the bottom of the trough or tub B, and is provided with elongated apertures *a*, through which pass the shafts *c*, upon which revolve the fluted rollers C. The said shafts have their bearings in

the ends of the bars F, the centers of which are pivoted to the perpendicular rods H, which are secured to the springs *e* by means of the burrs or nuts *h*, between which and the said springs are placed the tubular washers *i*, for the purpose of preserving the said bars on the said rods. The fluted rollers C are rotated by means of the cylindrical rubber roller K, operated by the crank *k*, and it is evident that when one of the fluted rollers is forced down the other is raised and pressed more firmly against the said rubber roller. The upper rubber roller L has its bearings in the wooden pieces *l* arranged in the slots *m*, and secured to the cross-piece *n*, and the two rubber rollers together form an efficient wringer.

Having thus described the construction and operation of my invention, I will state what I claim, and desire to secure by Letters Patent in the following clause; that is to say, I claim—

A washing-machine consisting of the fluted rollers, rubber rollers, springs, horizontal bars pivoted to vertical rods, and tubular washers, all combined and operating together as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of August, 1872.

DANIEL B. SMITH.

Witnesses:

WM. M. CROSBY,
F. G. BISHOP.