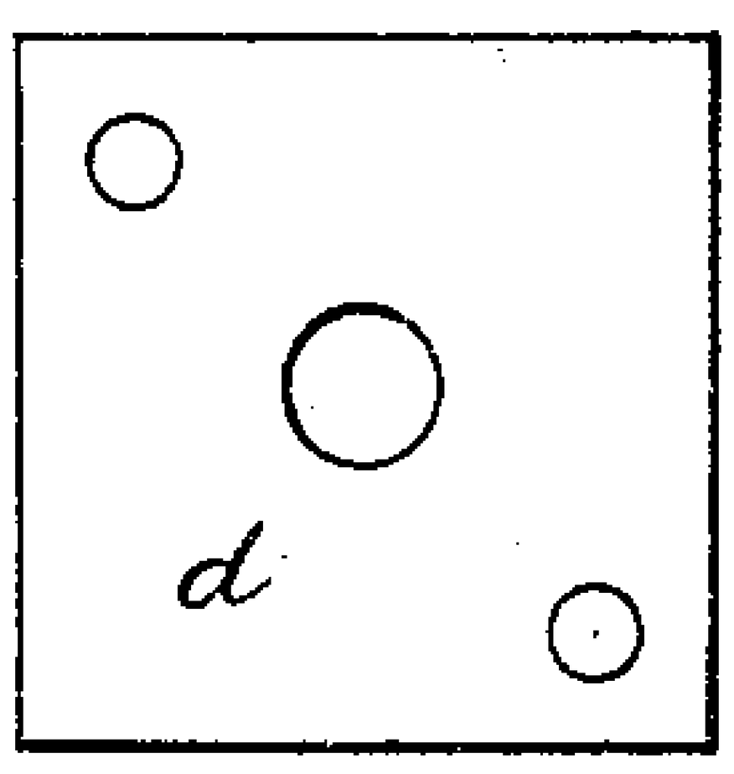
D. B. POND.

Washing-Machines.

No. 138,928. Patented May 13, 1873.

Fig. 1.

Fig. 3.



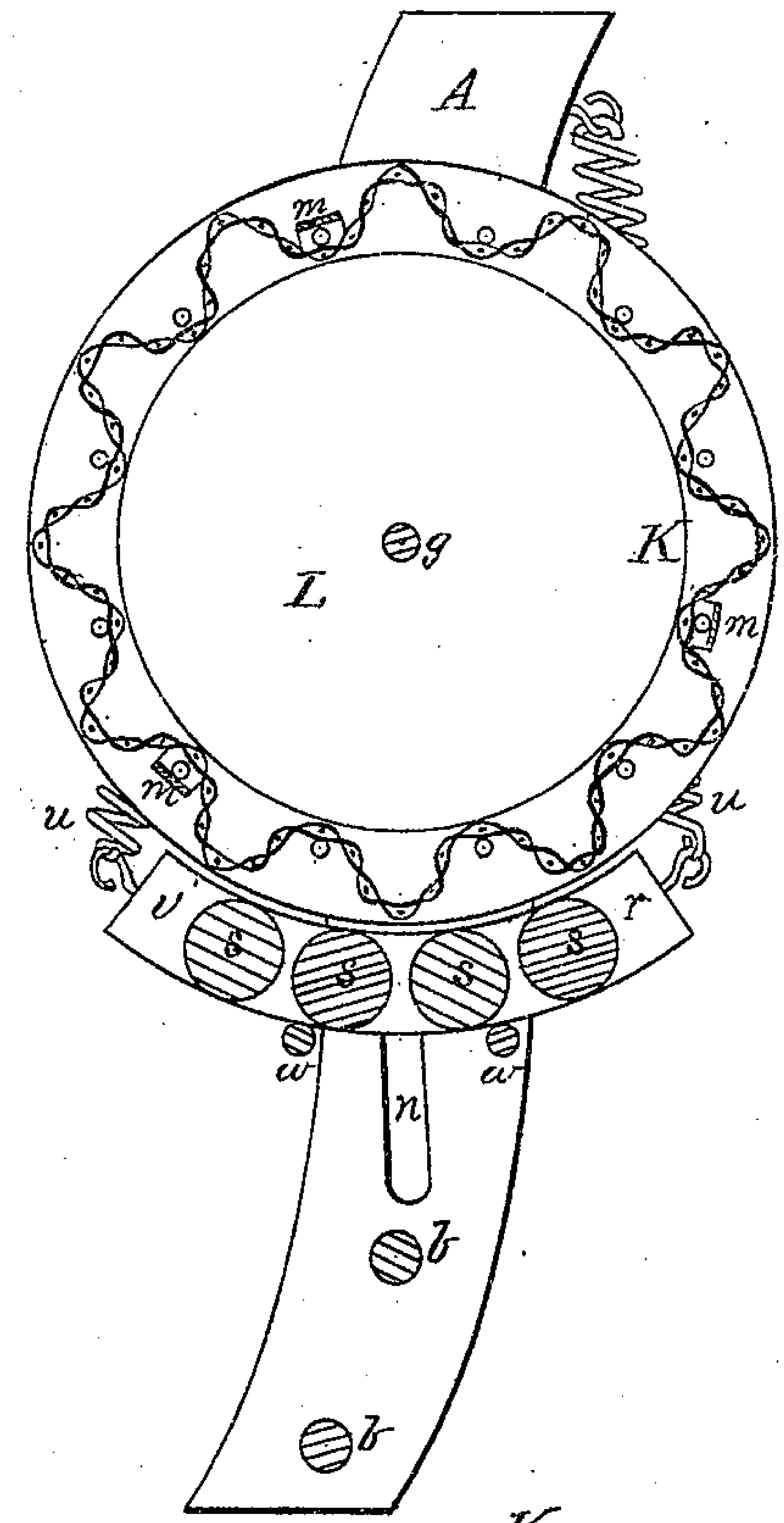


Fig. 4.

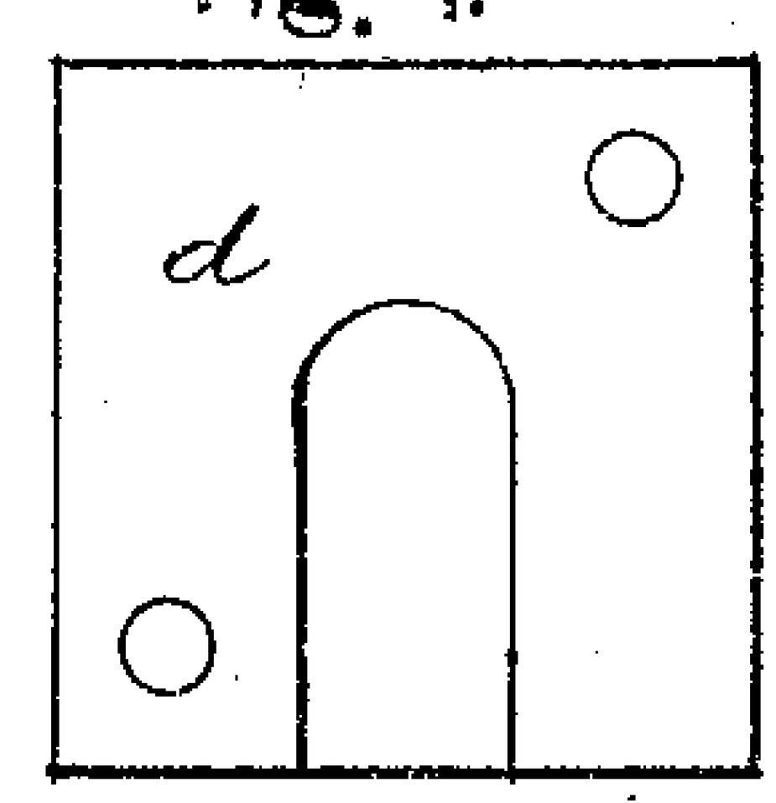
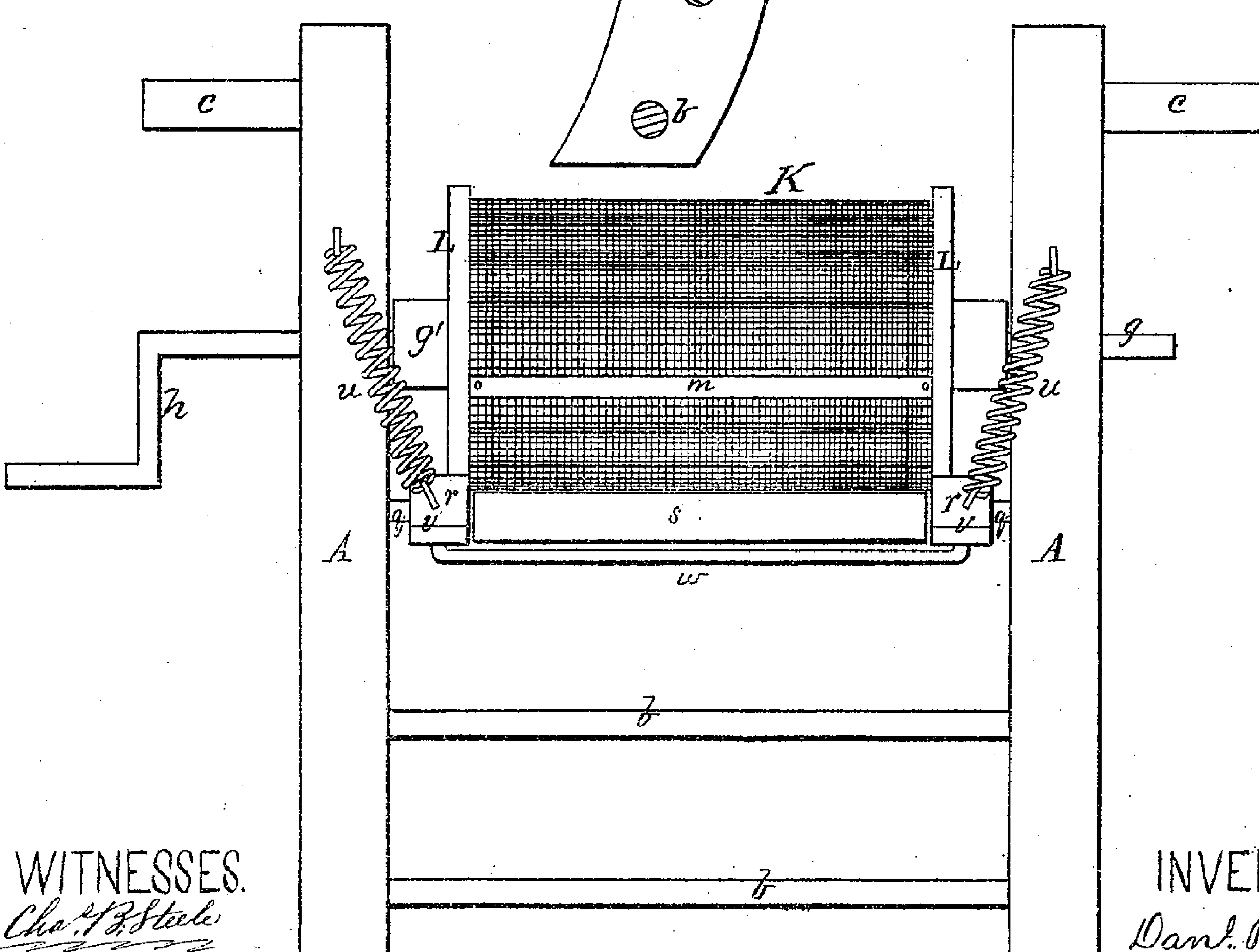


Fig. 2.



WITNESSES.
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E. A. Bates.

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AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

DANIEL B. POND, OF WOONSOCKET, RHODE ISLAND.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **138,928**, dated May 13, 1873; application filed April 12, 1873.

To all whom it may concern:

Be it known that I, DANIEL B. POND, of Woonsocket, in the county of Providence and State of Rhode Island, have invented a new and valuable Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a sectional view of my washing-machine. Fig. 2 is front view of the same. Figs. 3 and 4 are details.

This invention has relation to washing-machines, and it consists in the construction and novel arrangement of the flexible corrugated cylinder, having meshes or interstices through its wall for the passage of the water, and in connection therewith of the spring-rolls and frame.

In the accompanying drawing the letter A designates the side bars of the frame, which are connected by suitable transverse rounds or bars, *b*. From the ends of the side bars extend outward the journals *c*, by which the frame is secured to the tub, suitable eye-pieces, *d*, being attached to the walls thereof for this purpose. The cylinder-shaft *g* is designed to extend through and beyond the side-pieces, and is furnished with a crank, *h*, at one end. The cylinder K is formed by securing wire-cloth or other suitable meshed or flexible interwoven or perforated material to the shouldered edges of the heads L, thus forming a fluted or corrugated cylinder of such material, through the interstices of which the suds will freely pass. Stretched longitudinally from head to head along the outside wall of the cylinder K are the leading tapes *m*. These are preferably arranged in the depressions or hollows of the corrugations, and serve to lead the goods between the cylinder and the rolls. A slot, *n*, is made lengthwise in each side bar, A, near its middle portion, serving to receive the projection or journal *q*, of the frame *r*, of the rolls *s*. This frame extends across the side bars and is attached by each end thereto by means of suitable springs, *u*. The frame of the rolls consists of the side bars *v* and the bent connecting-rods *w*, which extend parallel with the rolls, which are journaled to the side bars *v*, and underneath the same.

This washing-machine operates with advantage. The pressure upon the rolls is not rigid but flexible, giving to the goods when they are packed together, and at the same time pressing outward against the goods when the folds do not lie so thickly. The interstices readily permit the passage of the suds and of the particles of soil, and the latter are, therefore, not liable to be ground into the goods. By means of the tapes the goods may be advantageously arranged with reference to the length of the cylinder. In washing, the goods can be led through between the cylinder and rolls, and then, the motion being reversed, can be untwined or carried in the opposite direction without entanglement. Thus both sides of the goods are arranged to be operated on with certainty.

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

The washing-machine having the spring-rollers and the cylinder K, consisting of the shouldered ends and the wire-cloth, or similar meshed flexible material connecting said ends, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

DANIEL B. POND.

Witnesses:

AMOS SHENMAN, JR.

S. S. COOK.