

T.M. Brintnall & E. Powers Washing Machine.

No. 122,150.

Fig. 1.

Patented Dec. 26, 1871.

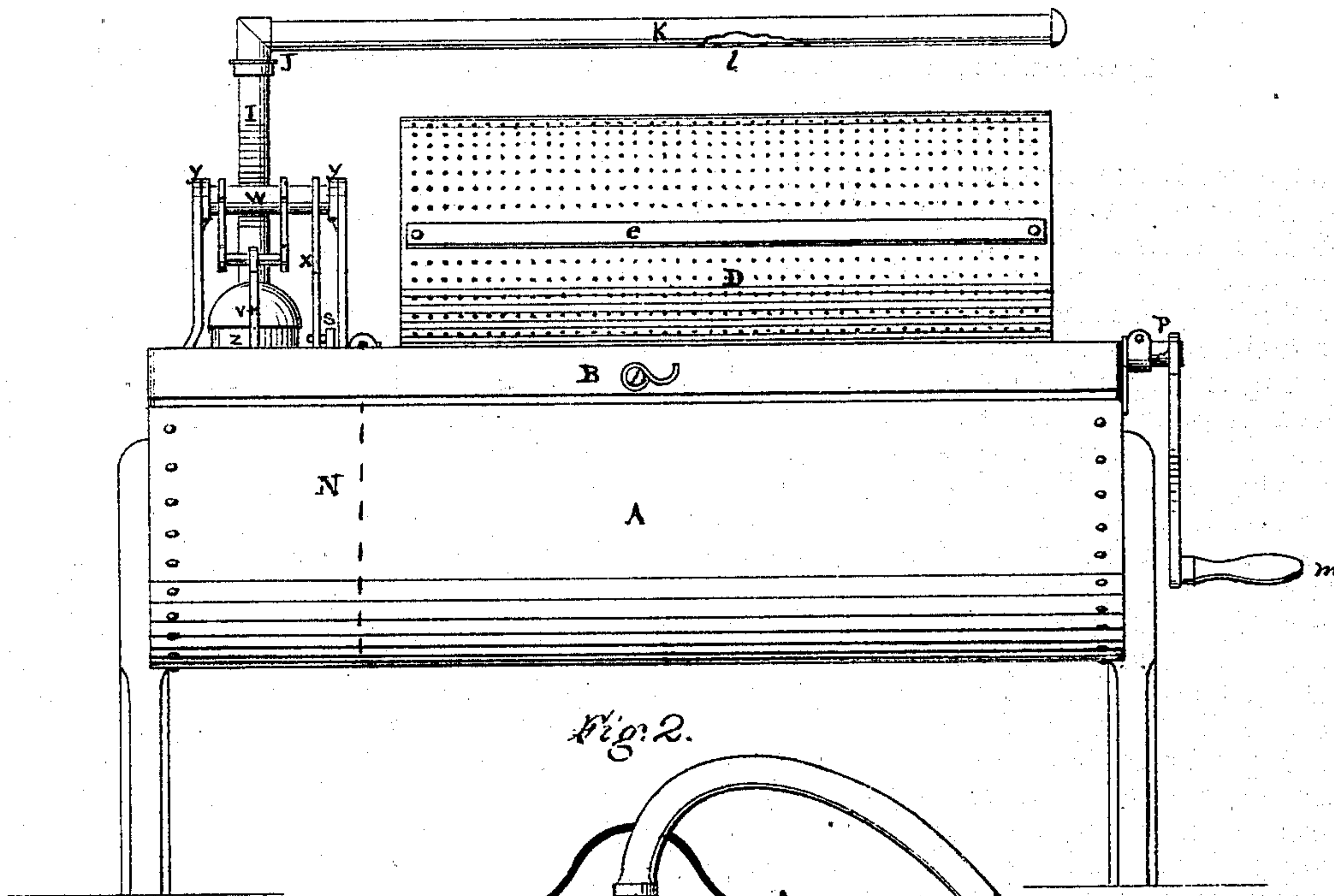
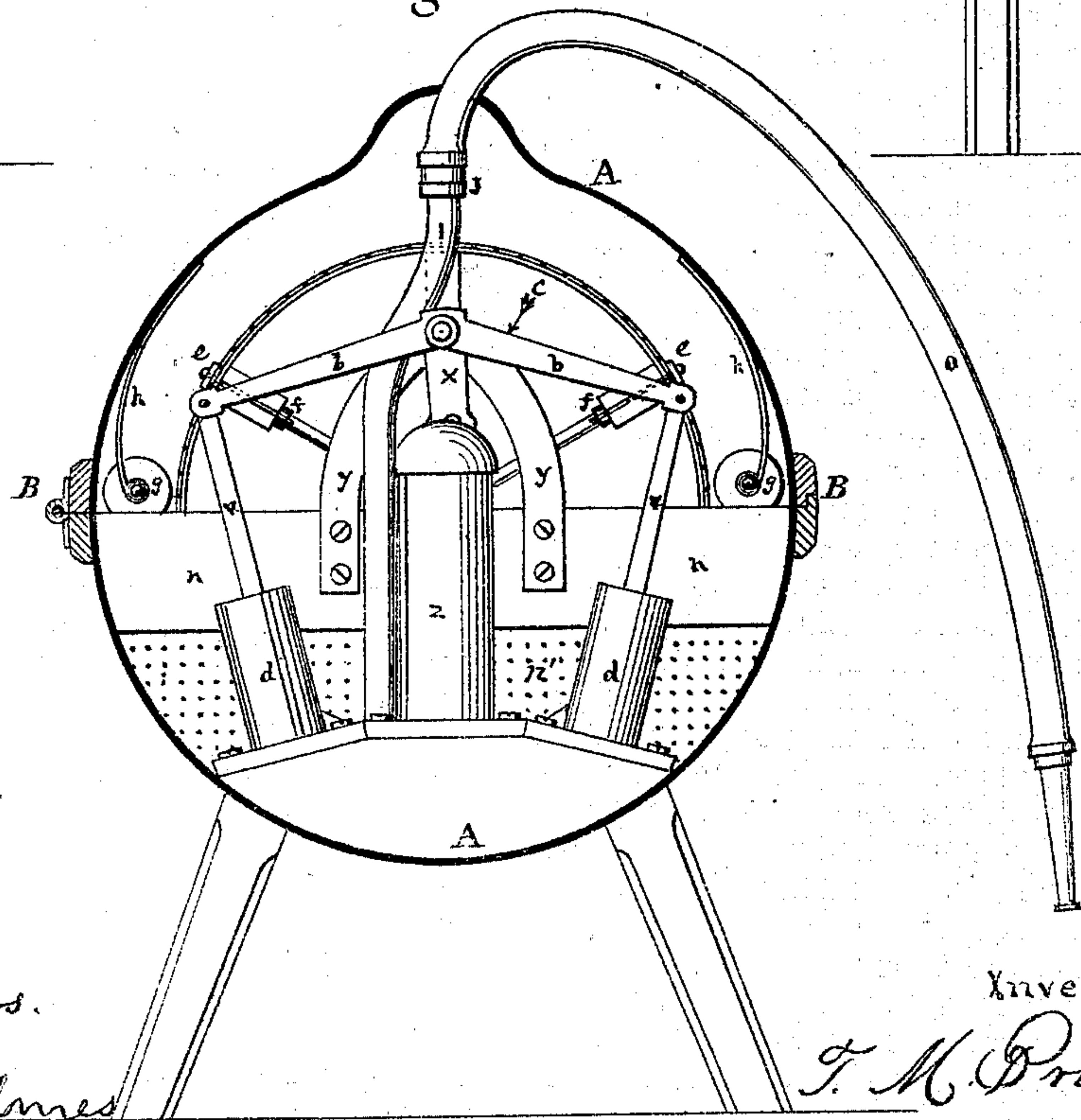


Fig. 2.



Witnesses.

Mr. H. Alden

N. D. Piper

Witnesses to
Signature of Powers.

Arthur Holmes

J. A. Palmer

Inventors.

T. M. Brintnall

Eugene Powers

UNITED STATES PATENT OFFICE.

THOMAS M. BRINTNALL, OF MEDINA, OHIO, AND WILLIAM EUGENE POWERS,
OF CORTLAND, NEW YORK.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 122,150, dated December 26, 1871.

To all whom it may concern:

Be it known that we, THOMAS M. BRINTNALL, of Medina, State of Ohio, and WILLIAM EUGENE POWERS, of Cortland, Cortland county, State of New York, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification, reference being had to the accompanying drawing, in which—

Figure 1 is a front-side elevation of the machine, the cover of the tank being opened and thrown back to show the interior works; and Fig. 2 is a left-hand end view of the same, the end plate of the tank being removed to show the force-pumps and operating mechanism.

In the drawing, A represents the vat, and A' the hinged cover of the same, both made of sheet metal, and B B strips of wood attached thereto. D is a perforated cylinder, to the periphery of which the clothes or articles to be washed are secured by means of a suitable number of slats, *e e*, which bear against said cylinder by a yielding pressure, governed by springs *f f*. *d d* are two force-pumps inside of the vat, near the end, which throw a continuous stream of water through pipe I into the horizontal pipe K, immediately over the perforated cylinder D, and down upon said cylinder through a series of perforations or slots, *l*, in the lower side of said pipe. *z* is an air-chamber connected with the force-pumps. The perforated cylinder D is rotated by a crank, *m*, on one end of its center shaft. The force-pumps are operated by a crank, *s*, on the reverse end of the cylinder-shaft, the pin of which passes through a long slot in a shaft, *x*, which depends from an oscillating beam, *w*, mounted in bearings *y y*. To the same beam *w* cross-arms *b b* are rigidly attached, to the ends of which the piston-rods *v v* are hinged. As the shaft of the cylinder D is rotated the pin of the crank *s*, moving in the slot of the pendent shaft *x*, gives it a vibratory motion, which causes the beam *w* to oscillate, carrying the cross-arms *b b* alternately up and down, and thus working the force-pumps. Attached to the inside of the cover A', by springs *h h*, are two express-rollers, *g g*, which bear against the cylinder D by a yielding pressure. A partition across the end of the vat A, as shown by dotted lines N, Fig. 1, and by *n n'*, Fig. 2, separates the force-pumps and the mechanism for operating the same from the rest of the vat. The cylinder-shaft has its bearing on said parti-

tion. The lower portion of this partition *n'* is perforated to prevent any undissolved dirt or other solid matter from entering the pumps.

The clothes or other articles to be washed are clamped to the exterior of the perforated cylinder D by a suitable number of slats, *e e*, held by spring pressure, as aforesaid. Said cylinder is then rotated by turning the crank *m*, which sets the force-pumps in motion, forcing the water or suds up through pipe I into horizontal pipe K and down upon the revolving cylinder D and the fabrics secured thereon with great force through the perforations or slots in the lower side of said pipe. As the fabrics pass under the express-rollers *g g* the water and dirt are squeezed therefrom, twice in each revolution of said cylinder. The tank A and its hinged cover A' are each a longitudinal section of a cylinder, except that the cover has a projecting ridge on its top to make room for the pipe K. When used for washing wool or any similar substance a piece of network or very open fabric should be used to bind the wool to the cylinder, the same passing under each of the holding-slats *e e* outside of the wool. By attaching a piece of hose to the pipe I at screw-joint J (as shown in Fig. 2) this machine may be used very effectively for throwing water to wash windows and the like.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination of the tank A, the perforated rotating cylinder D, the force-pumps, and the perforated or slotted pipe K, all constructed and arranged to operate substantially as described.

2. In combination with the perforated rotating cylinder, we claim the holding-slats *e e* with spring-attachments, substantially as described.

3. In combination with the tank A, hinged cover A', and rotating perforated cylinder, we claim the expressing-rollers *g g* attached by springs to cover A', substantially as and for the purpose described.

THOMAS M. BRINTNALL.
WM. EUGENE POWERS.

Witnesses to signature of EUGENE POWERS:
ARTHUR HOLMES,
J. H. PALMER.

Witnesses to signature of T. M. BRINTNALL:
DELOS BANDER,
GEO. H. JONES.

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