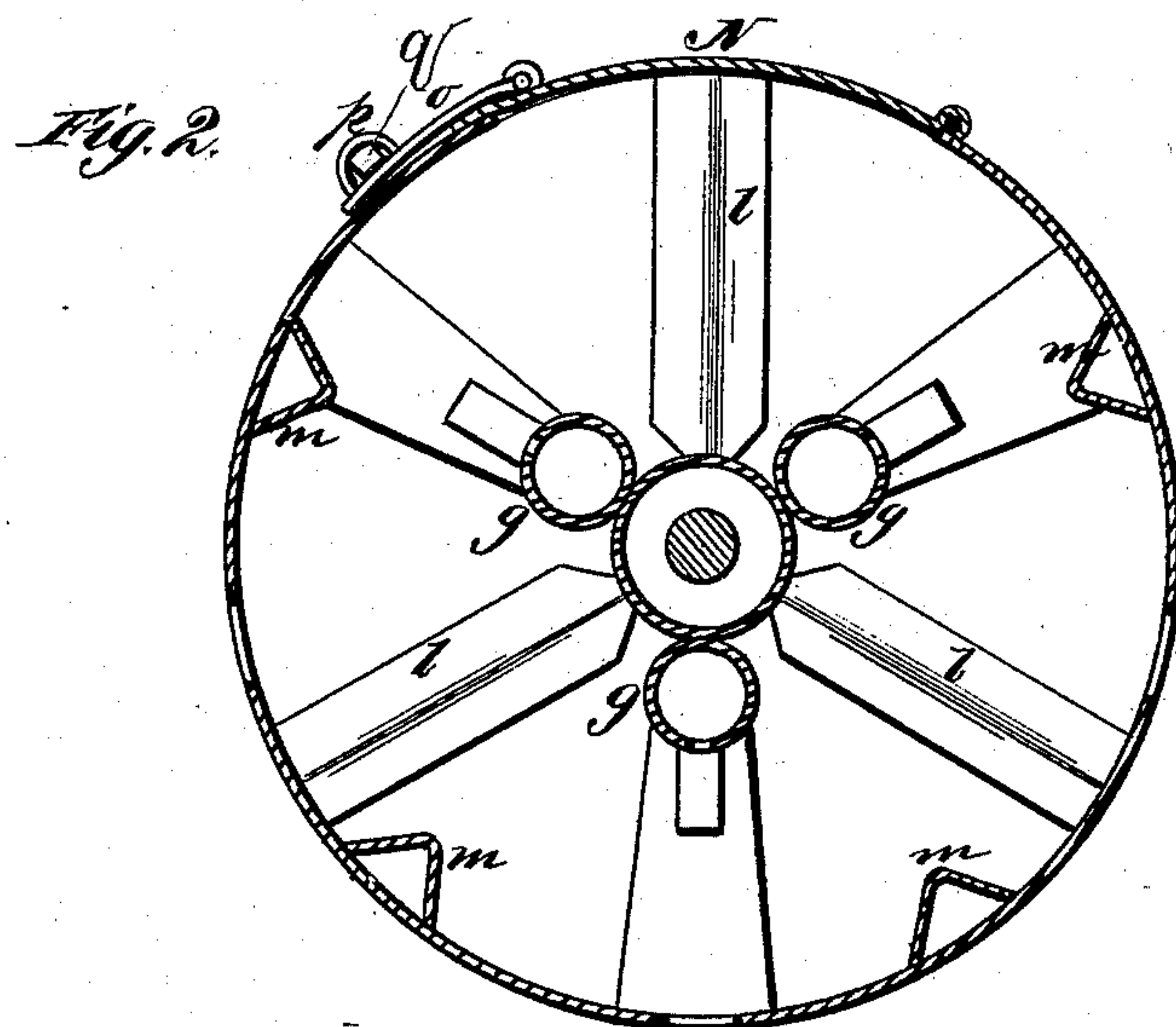
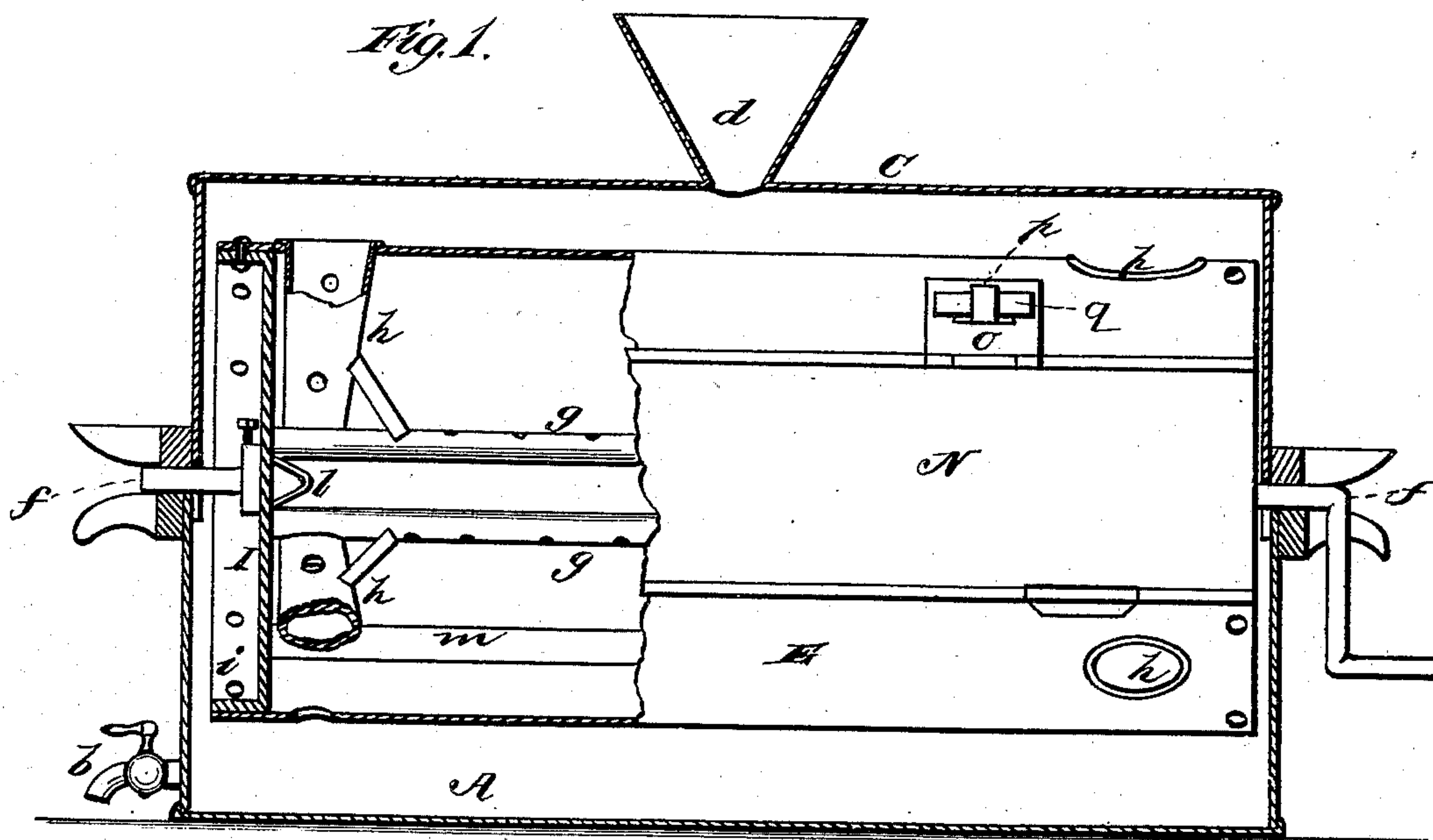


W. W. HOLLOWAY & J. A. McCAIN.
Washing-Machine.

No. 224,689.

Patented Feb. 17, 1880.



WITNESSES

Robert Everett
James J. Sherry

INVENTOR

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UNITED STATES PATENT OFFICE.

WILLIS W. HOLLOWAY AND JOHN A. McCAIN, OF CARROLLTON, GEORGIA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 224,689, dated February 17, 1880.

Application filed August 2, 1879.

To all whom it may concern:

Be it known that we, WILLIS W. HOLLOWAY and JOHN A. McCAIN, of Carrollton, in the county of Carroll and State of Georgia, have invented certain new and useful Improvements in Washing-Machines; and we 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 drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal section of our washing-machine, and Fig. 2 is a vertical sectional view of the same.

This invention relates to an improvement in boiler washing-machines, such as that shown in Patent No. 208,990; and it consists in the construction and arrangement of parts as will be hereinafter described and claimed.

The object in view is to strengthen the heads of the rotary cylinder, and also, by a novel arrangement of ribs and tubes, to facilitate the washing of clothes.

Let A designate the boiler; *b*, the stop-cock for drawing off the suds; C, the boiler-cover, and *d* the funnel located in the upper portion of said cover.

The rotary cylinder E is suitably mounted upon a shaft, *f*, which is provided with a crank-handle, as usual. The pipes *g* are perforated, as usual, but, instead of passing through the heads of the cylinder, connect at their ends with the funnel-shaped tubes *h*,

which are set against the inner faces of the cylinder-heads and open at the periphery or outer face of the cylinder, as herein shown.

Each one of the heads I is made of cast-iron or equivalent metal, with a flange, *i*, and to these flanges the cylinder is bolted along its end edges, whereby broad bearing-surfaces are afforded for the cylinder ends and all liability of the heads becoming twisted off or loosened avoided.

Within the cylinder and upon the interior faces of the heads I secure or form the V-shaped ribs *l*, said ribs radiating from the shaft, as shown. These ribs tend to increase the washing capabilities of the machine, and are found to be valuable auxiliaries to the longitudinal ribs *m*, which are secured to the interior wall of the cylinder.

N represents the usual door of the cylinder, and *o p* the hasps and staples, pins or keys being provided for locking the same together.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

In a boiler washing-machine, the funnel-shaped tubes *h*, extending from the perforated tubes *g* to the face of the cylinder, as specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

WILLIS WARNER HOLLOWAY.

JOHN ALAXZANDER McCAIN.

Witnesses:

OSCAR REESE,

D. B. JUAN.