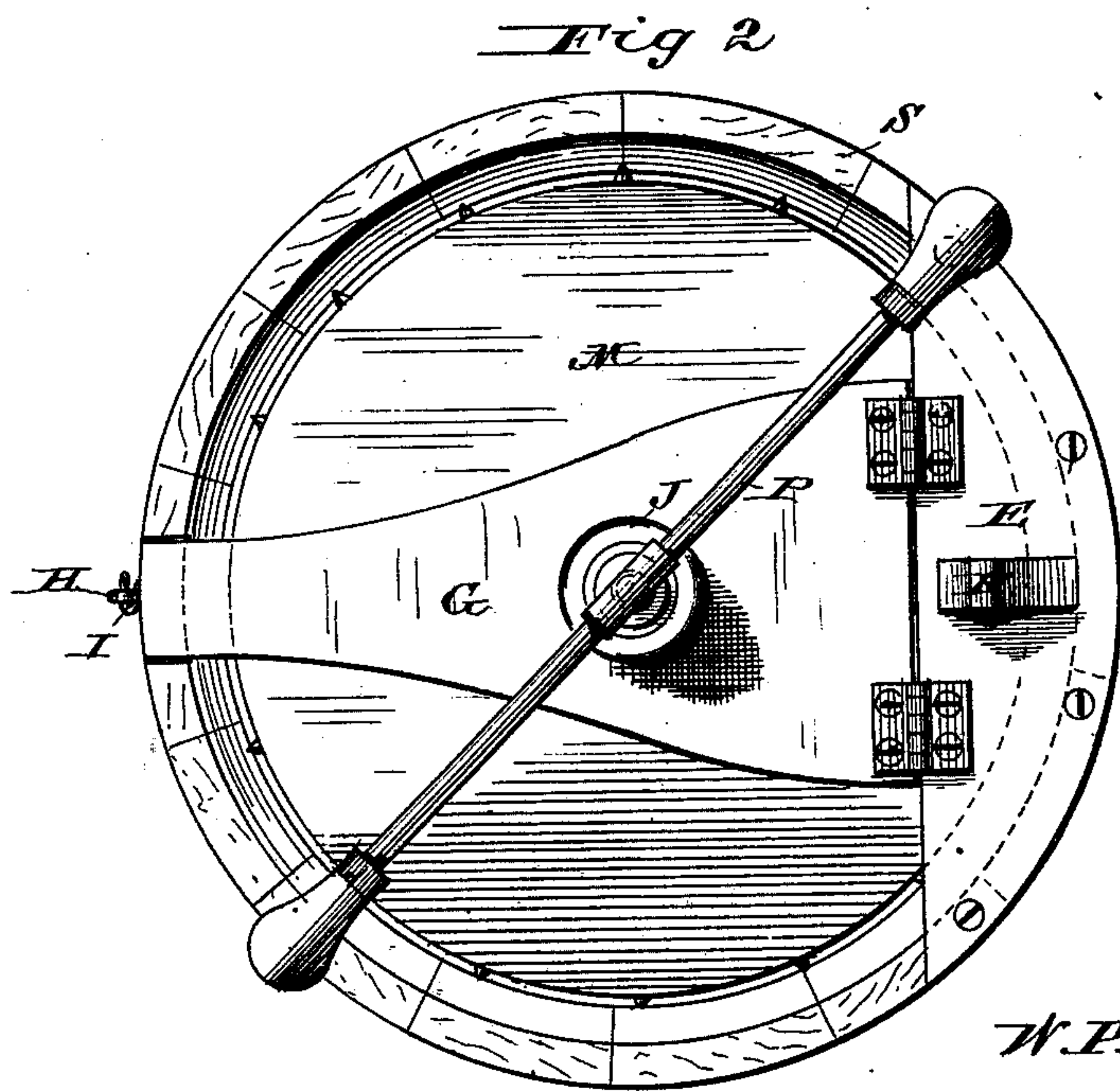
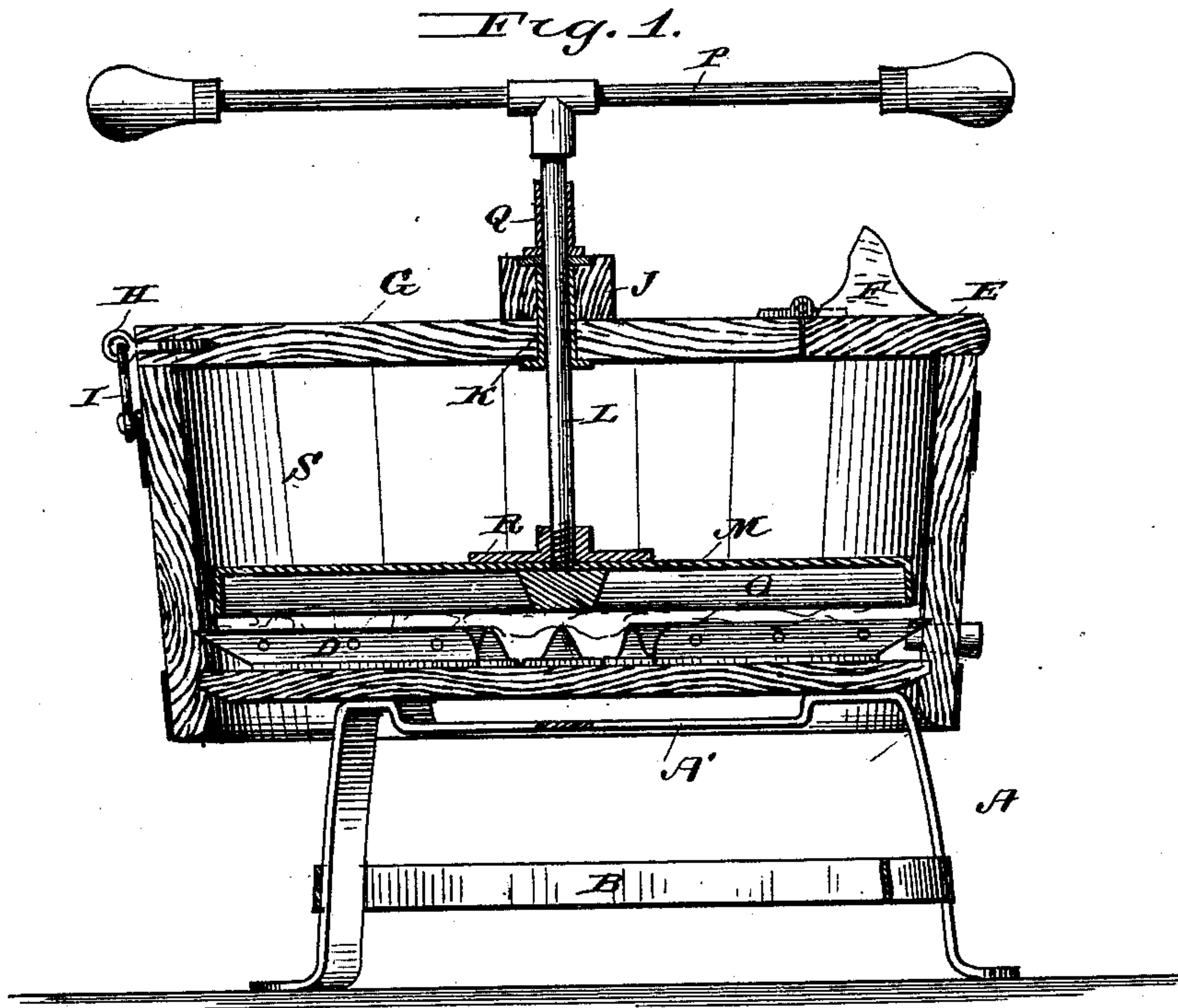


W. P. BROOKS.  
Washing-Machines.  
No. 222,236. Patented Dec. 2, 1879.

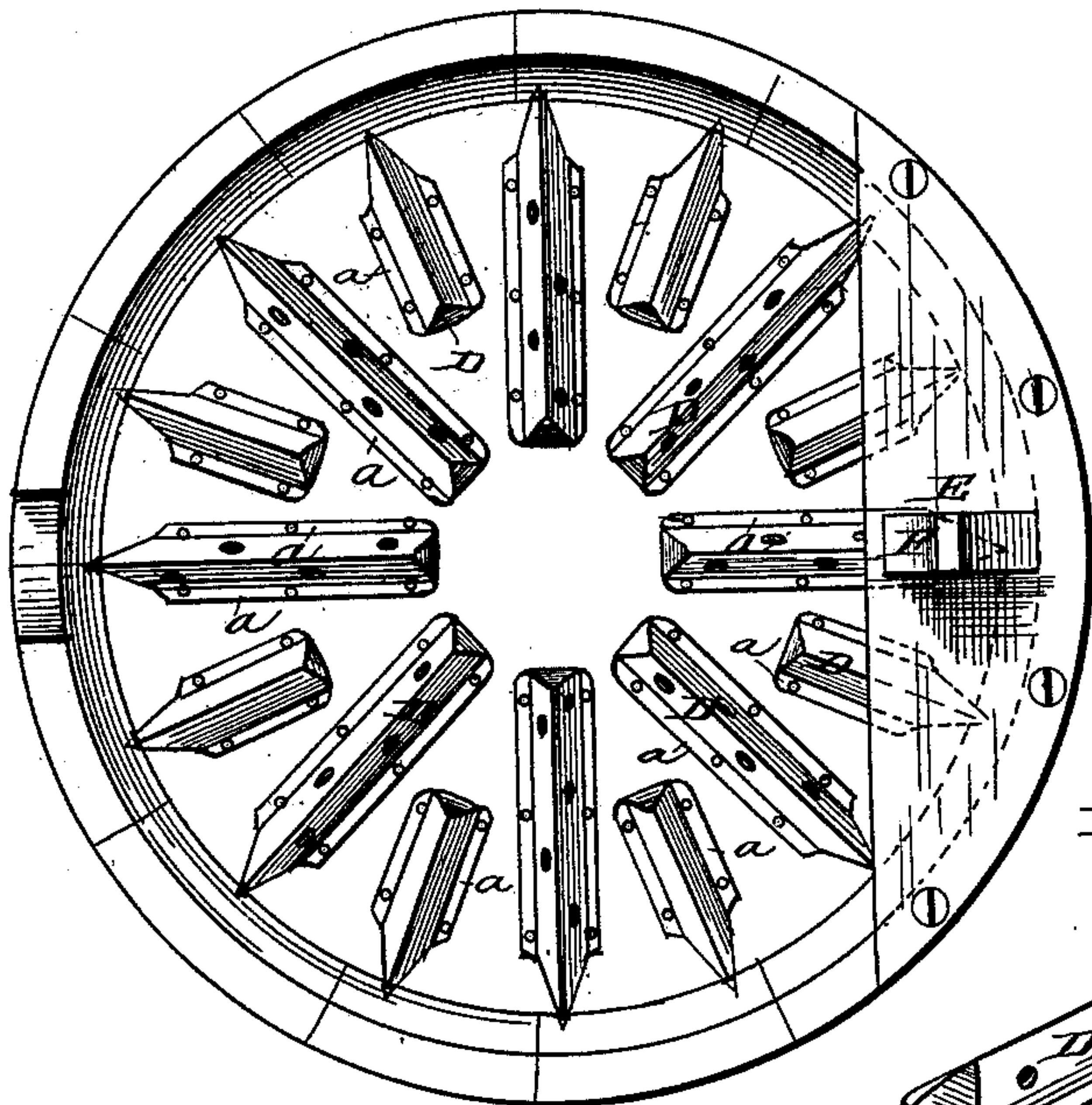


W. P. Brooks.  
Inventor.

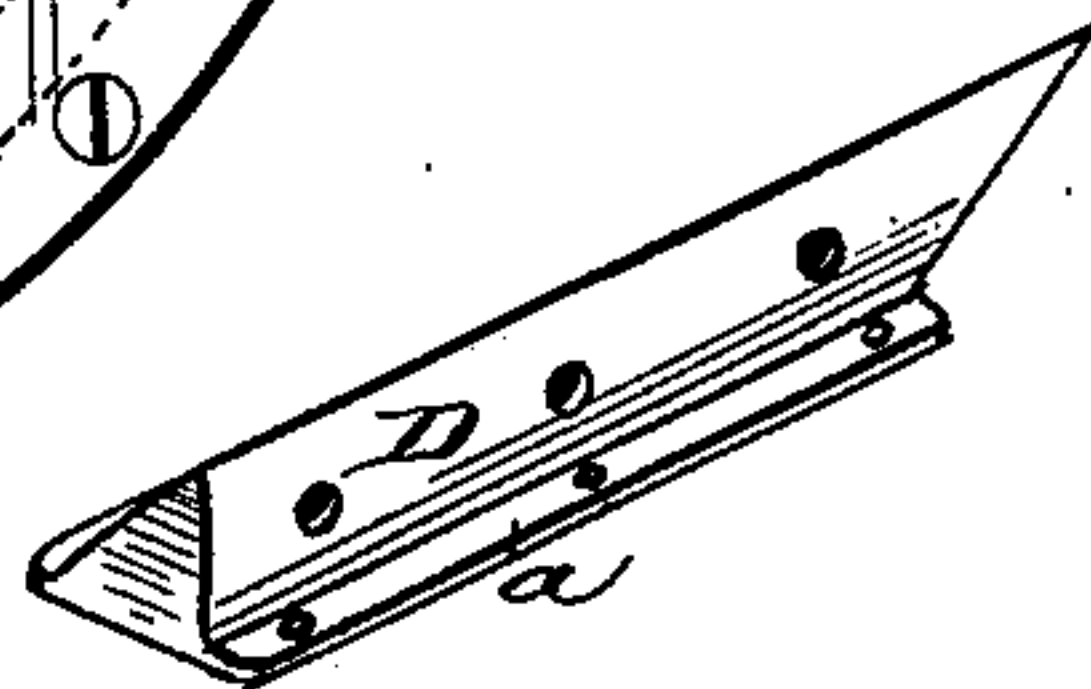
Attest:  
H. E. Perrie  
A. M. Long.

A. J. Abbott.  
Atty.

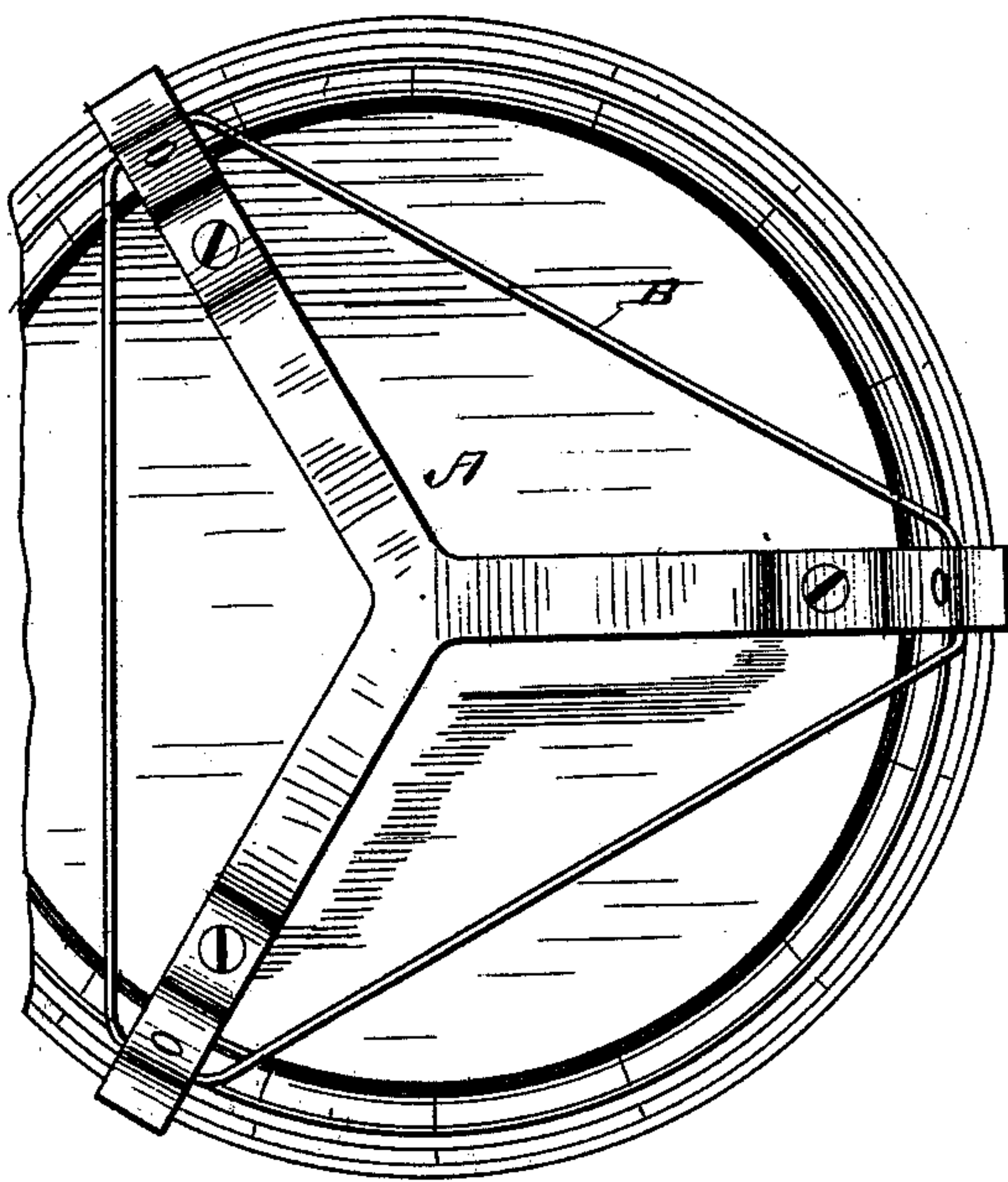
W. P. BROOKS.  
Washing-Machines.  
No. 222,236. Patented Dec. 2, 1879.  
*Fig. 3.*



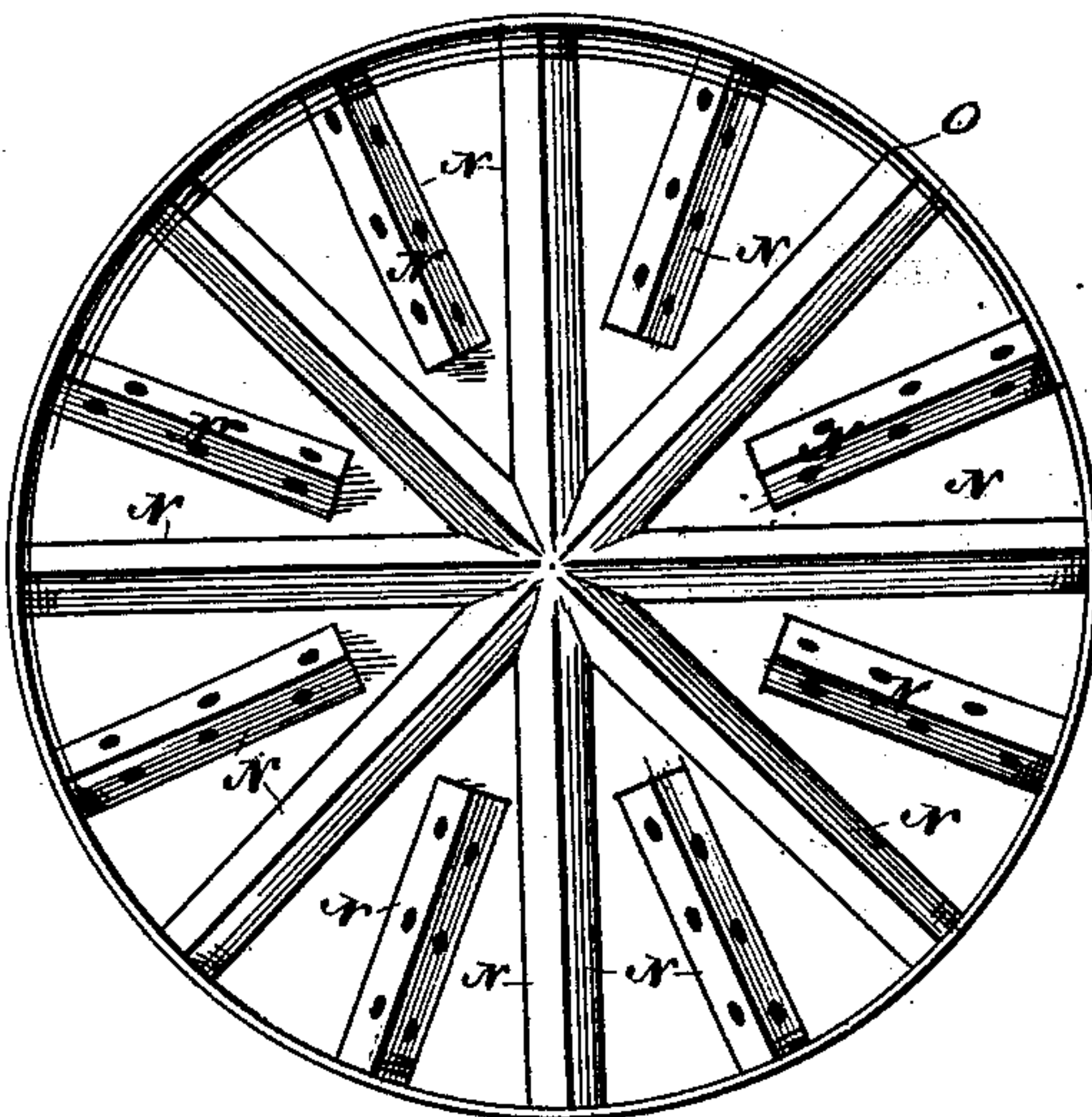
*Fig. 6.*



*Fig. 4.*



*Fig. 5.*



W. P. Brooks.  
Inventor.

Attest:  
H. D. Perine,  
A. M. Loug.

By *H. J. Abbot.*  
Atty.



# UNITED STATES PATENT OFFICE.

WILLARD P. BROOKS, OF TOPEKA, KANSAS.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 222,236, dated December 2, 1879; application filed August 28, 1879.

*To all whom it may concern:*

Be it known that I, WILLARD P. BROOKS, of Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a vertical section of the tub; Fig. 2, a plan view; Fig. 3, a plan view of the bottom of the tub from the inside, the top and rubber being removed; Fig. 4, a bottom view of the tub, showing the stand or tripod; Fig. 5, a plan of the face of the rubber-plate, and Fig. 6 a perspective of the perforated rib.

My invention relates to rotary-rubber washing-machines; and it consists in the construction and combination of parts hereinafter particularly described, and pointed out in the claims.

In the accompanying drawings, the letter A indicates the tripod or stand for the tubs, the legs thereof being braced by the bands B, and the several parts being made of metal or other suitable material. This tripod may be made of three pieces, held together at the center by a rivet. The top bars, A', of the tripod are higher at the corners next to the legs than at the center, thus strengthening the stand, and at the same time forming a firm support for the tub to rest on, while the band B holds together and braces the legs. This tripod is usually screwed to the bottom of the tub in order to prevent the latter from slipping thereon; but it need not be so secured, and when not, one tub can be lifted therefrom and another, or any other receptacle, set thereon.

A number of ribs, D, are secured to the bottom of the tub S, inside the same, and are placed so that they shall radiate from near the center of the bottom toward the walls of the tub, leaving an open space at about the center of the bottom. These ribs are usually of a wedge shape, the base resting on the bottom, and, when of sheet or cast metal, are almost always made with flanges a, so that

screws or nails may be driven therethrough into the bottom, securing the ribs thereto.

The ribs are made and placed in position so that they will be alternately long and short, every other rib being perforated, so that water may pass from one side to the other, the short ribs allowing the water to flow from one long rib to the other.

A portion of the top edge of the tub is cut away, so that the plate E may be set therein, it being screwed or nailed to the tub, and its upper surface being on a level with the edge of the tub. This plate is provided with a stud, F, and a frame, G, is hinged thereto, the other end of the frame having an eye, H, screwed into it, so that a hook, I, pivoted to the tub, may engage therewith and hold the frame in position.

The rubber is journaled in a hub, J, on the frame G, the hub being held in place by a flanged tube, K, which affords a metal bearing for the rubber-shaft, and the stud F constitutes a rest for the frame G when the latter is thrown back for the introduction or removal of clothes.

The rubber consists of a shaft, L, which passes through the frame G, and a disk or a plate, M, of zinc, sheet or other metal, or other suitable material, to which the shaft by its lower end is rigidly secured by any suitable means. Usually the shaft is screwed or passed through the plate R, and its end headed, so that it cannot be withdrawn, and the plate is screwed or bolted to the disk M and soldered around its edges, so that water will not work its way between the plate and disk. This is one way of securing the handle in place, and a very good one, as the plate stiffens or strengthens the disk. To the under side or face of this disk M there are soldered or otherwise secured numerous ribs, N, alternately long and short, all of them radiating toward the periphery of the disk, the short ribs being perforated for the passage of water through them, and both the long and short ones being soldered to a flange, O, projecting from the periphery of the disk. The function of this flange is to strengthen the rubber and to prevent the clothes from working up onto the top of the disk.

The rubber is worked through the means of



a T-handle, P, secured to the shaft in any well-known way that will prevent it from turning thereon, and around the shaft, between the handle and the frame G, there is fitted a collar, Q, which is free to slide up and down the shaft. It is designed to prevent the ribs on the disk and those on the bottom of the tub from striking and rubbing against each other when no clothes are in the tub.

The shaft L is allowed an up-and-down play in its bearings, in order that the rubber may be self-adjusting to the quantity of clothes in the tub.

To operate the machine the frame G is thrown back until it rests on the stud F. The water and clothes are next introduced, the frame, and with it the rubber, next lowered down, and the frame locked, after which the handle is grasped and the rubber turned to the right and left, and in a short time the clothes will be found in condition to be removed.

The device is simple in its several parts, and therefore constructed at a small cost, and at the same time it is very effective in its working.

Having described my invention, what I claim is—

1. The tub S, provided with alternately long and short radiating ribs D, the long ribs perforated, in combination with disk or plate M, provided with alternate long and short radiating ribs N, the short ribs perforated, the rotating shaft L, a handle thereto, and frame G, as and for the purpose set forth.

2. The plate or disk M, provided with long and short radiating ribs N, and flange O, to which the radiating ribs are attached, substantially as and for the purpose set forth.

3. The tripod A, having the legs thereof braced by bands B, and the top lower in the center than next to the legs, as and for the purpose described, in combination with the tub S, as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand.

WILLARD P. BROOKS.

Witnesses:

J. H. MOSS,

SIMON GREENSPAU.