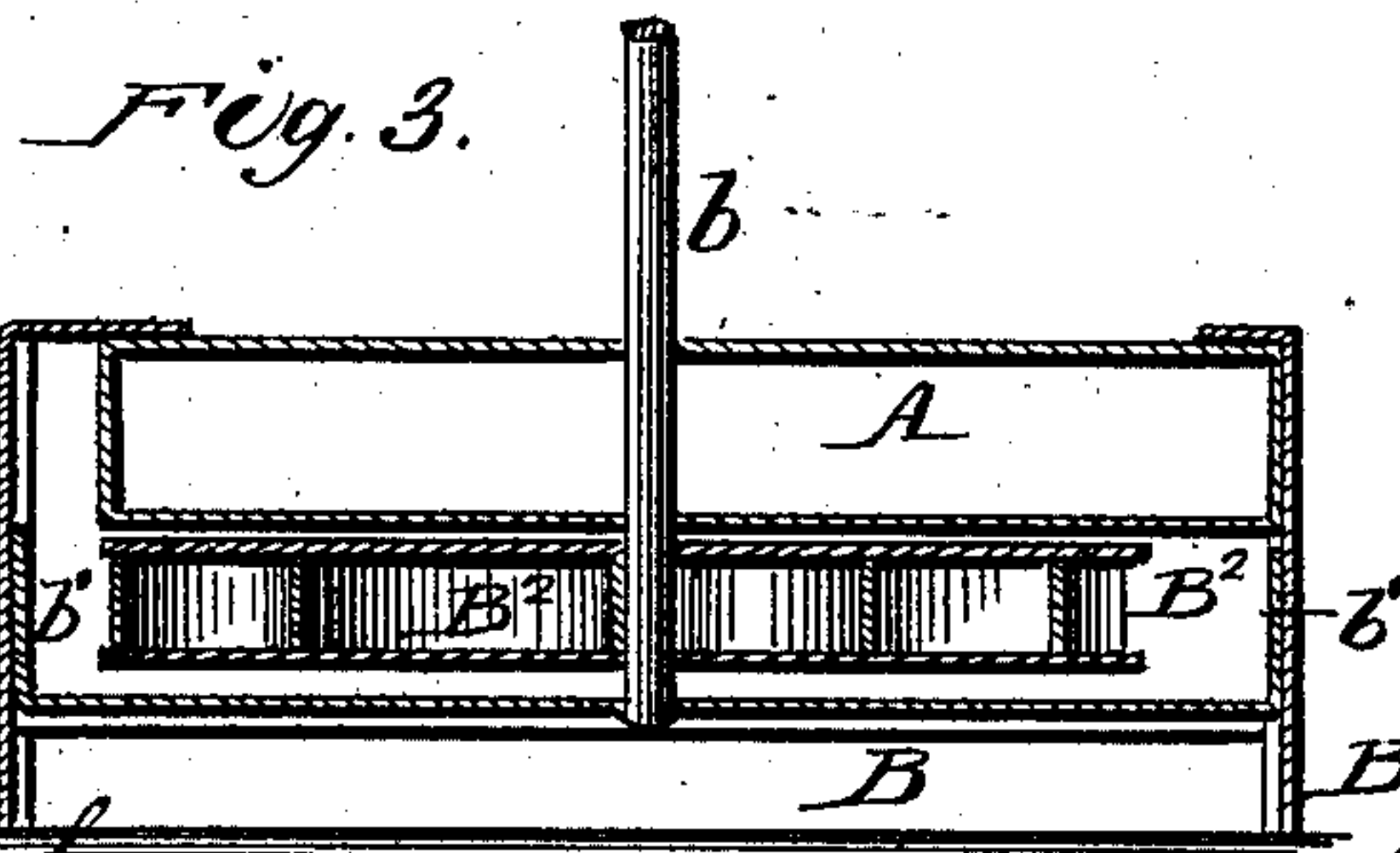
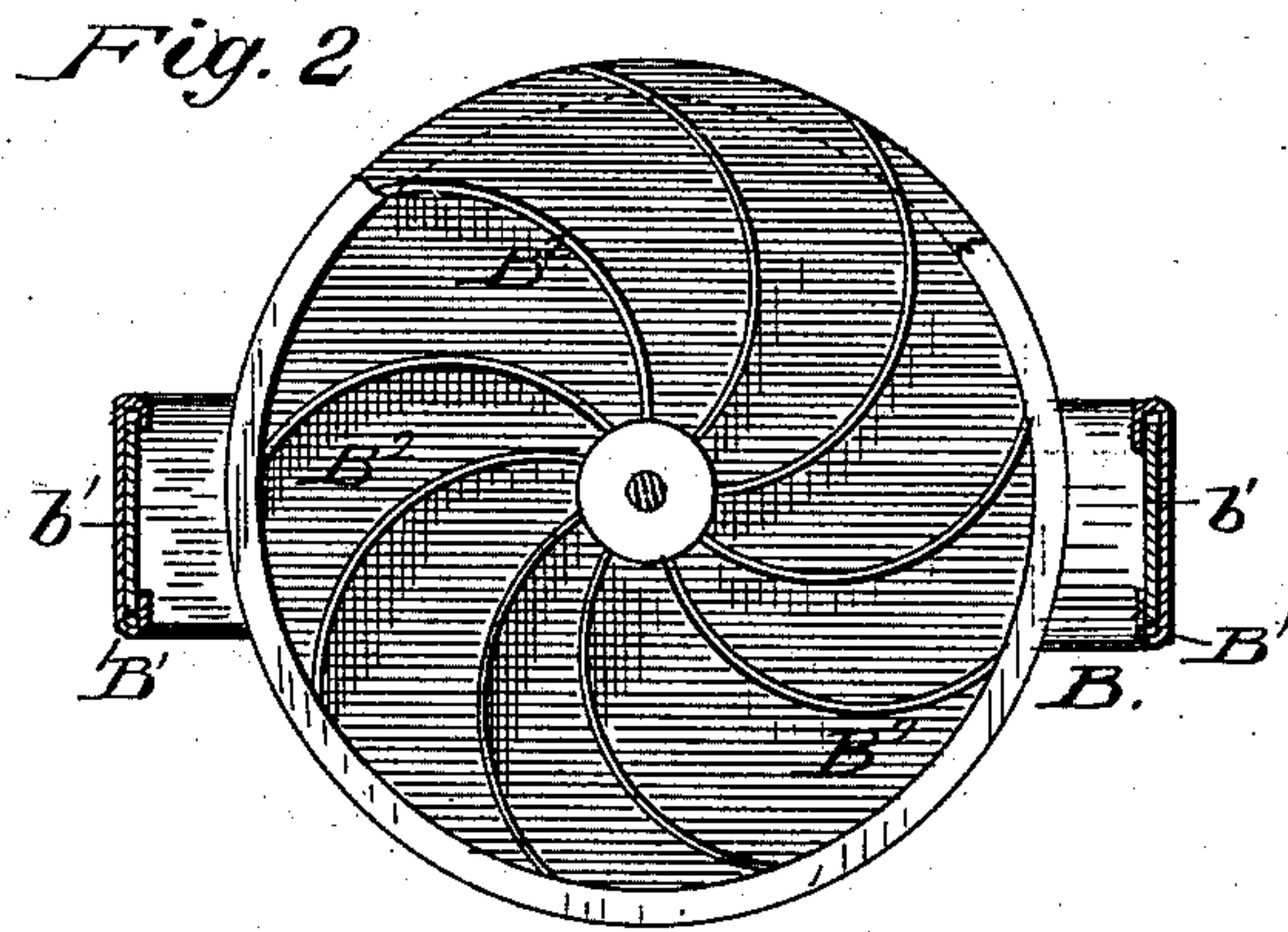
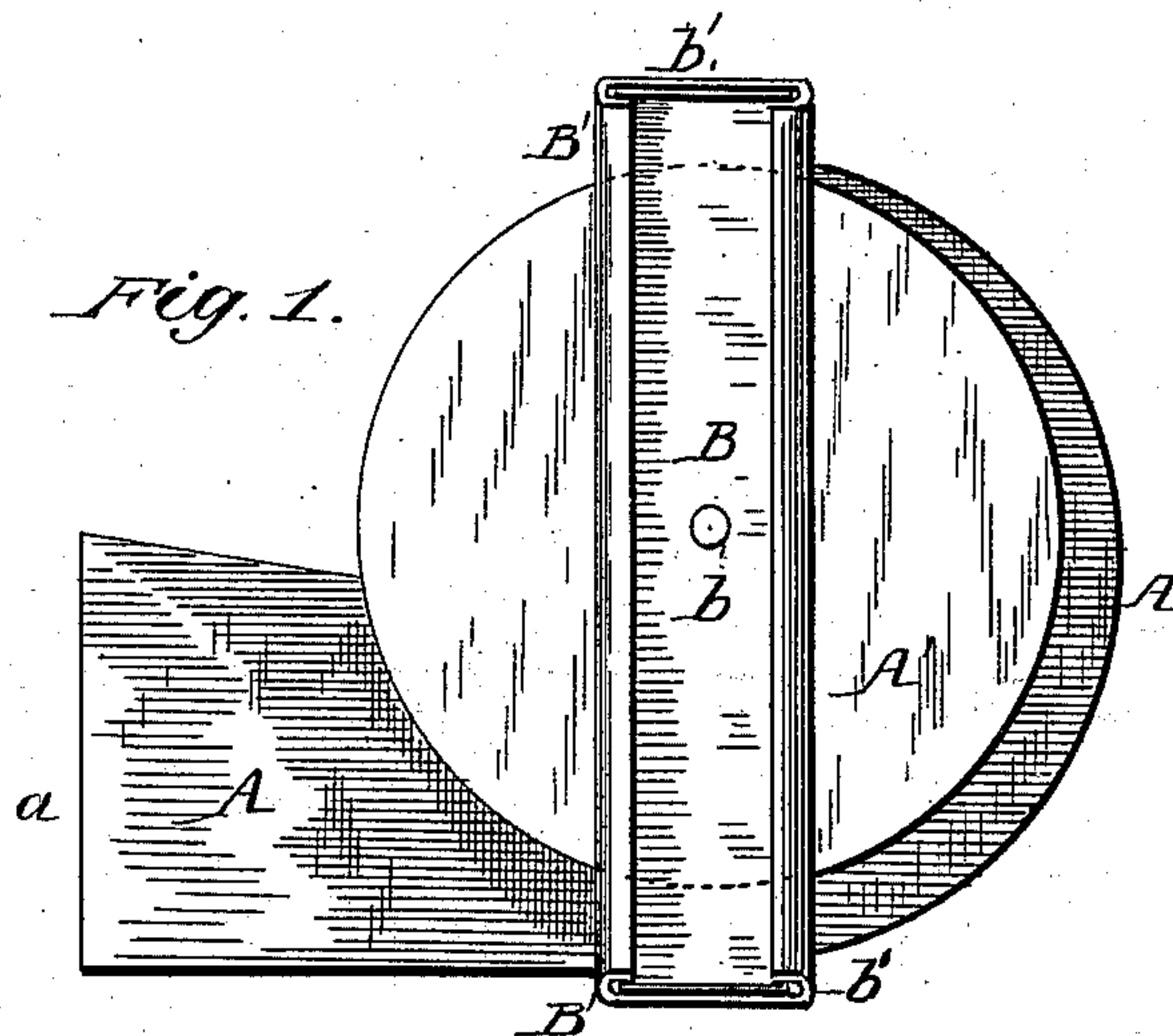


M. L. BYINGTON.
Turbine Water-Wheel.

No. 227,880.

Patented May 25, 1880.



Witnesses;
Fred G. Dieterich
J. R. Little,

Inventor,
M. L. Byington
by C. A. Snow & Co.
Attys.

UNITED STATES PATENT OFFICE.

MIRABEAU L. BYINGTON, OF MILLEDGEVILLE, GEORGIA.

TURBINE WATER-WHEEL.

SPECIFICATION forming part of Letters Patent No. 227,880, dated May 25, 1880.

Application filed December 14, 1878.

To all whom it may concern:

Be it known that I, M. L. BYINGTON, of Milledgeville, in the county of Wilkinson and State of Georgia, have invented certain new and useful Improvements in Turbine Water-Wheels; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a side view of my improved water-wheel, which partakes of the turbine type. Fig. 2 is a horizontal section thereof; and Fig. 3 is a vertical section of the same.

Corresponding parts in the several figures are denoted by like letters.

This invention relates to certain improvements in water-wheels of the turbine class; and they consist in the supporting of the wheel below a jacket with cleated brackets or pendants, within which fit arms on the wheel-shaft-supporting piece, substantially as hereinafter more fully set forth.

In the accompanying drawings, A refers to a jacket or inclosure, and A' the wheel, which jacket or inclosure is provided with a chute, *a*, through which the water for running the wheel is admitted to the latter. The bottom of the case or jacket A is left open to permit the inflowing water to pass into the wheel.

The wheel is arranged below the water-receiving jacket, with the open sides or entrances of the buckets next to the opening in the bottom of said jacket.

The shaft *b* of the wheel A' bears at its lower end in a cross-piece or bridge, B, having upwardly-projecting arms *b' b'*, which are confined in cleated brackets or pendants B' B', fastened to the case or jacket A.

The wheel A' is provided with a series of buckets, B² B², which radiate in a curvature from the center of the wheel, with their discharging ends widening or diverging at the periphery of the wheel to cause the water to pass out freely from the buckets and with greater force. This increases the power and speed of the wheel, and consequently enables it to perform more work, or imparts greater driving power to its shaft, through which the machinery is driven.

This wheel is also extremely simple, easily constructed, and cheap.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

The wheel, supported below the case A, provided with pendent arms, in combination with cross-piece or bridge B, having upwardly-projecting arms *b' b'*, arranged and confined in the pendent arms B' B' of the case A, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

M. L. BYINGTON.

Witnesses:

W. T. LOCKHART,
R. M. COUNCIL.