

No. 817,546.

PATENTED APR. 10, 1906.

B. B. BUSH.
WATER MOTOR WHEEL.
APPLICATION FILED FEB. 23, 1905.

Fig. 1.

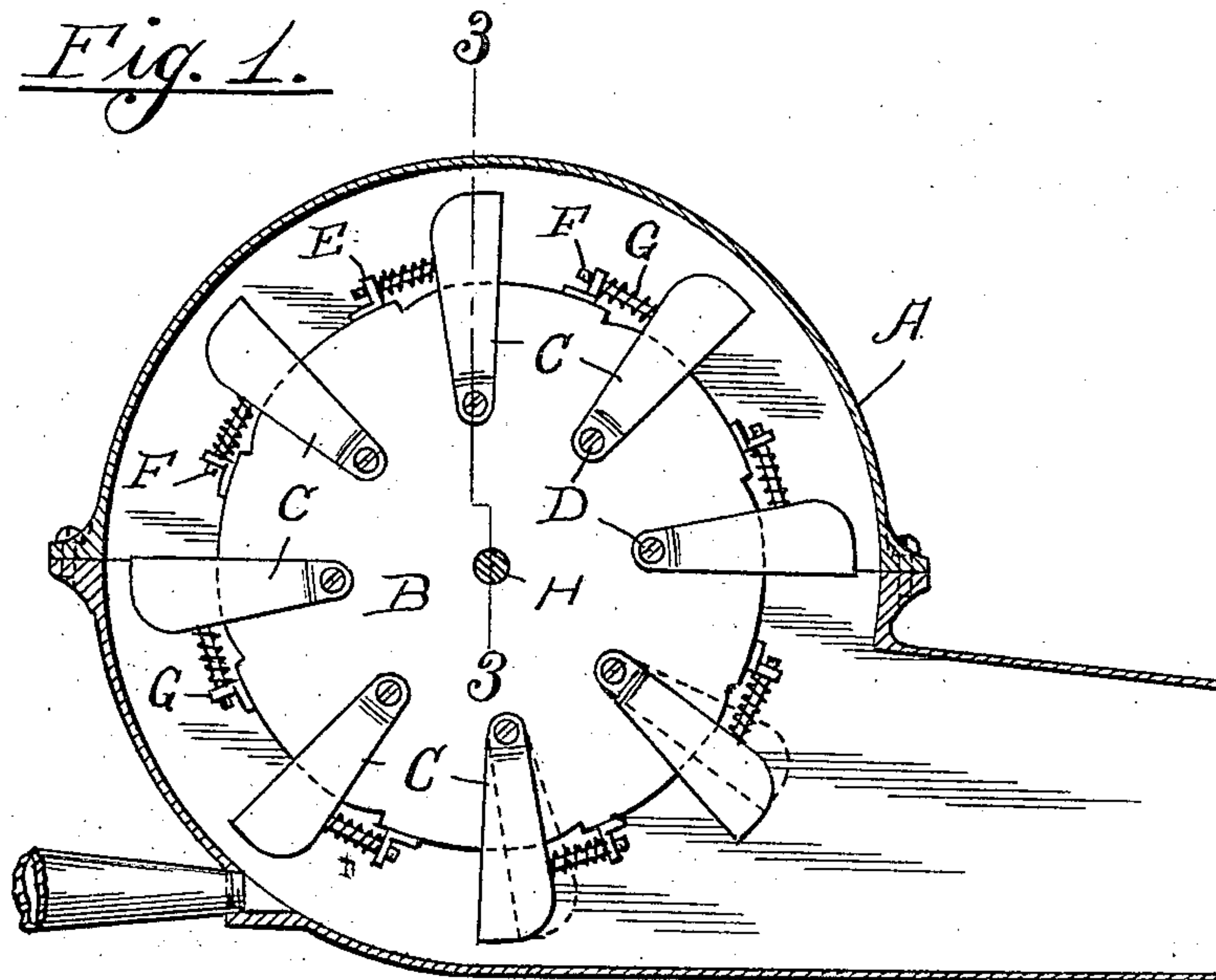


Fig. 2.

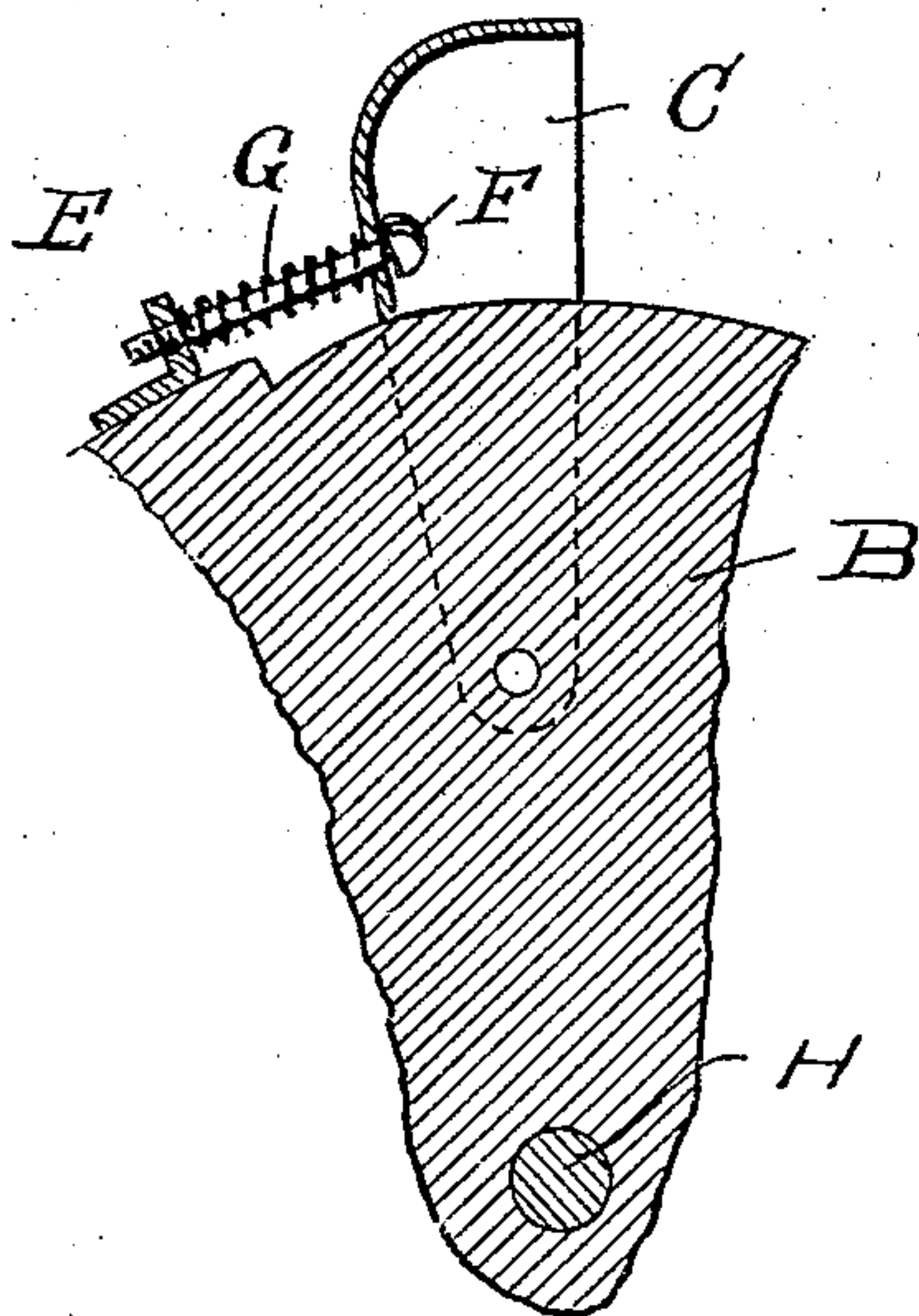
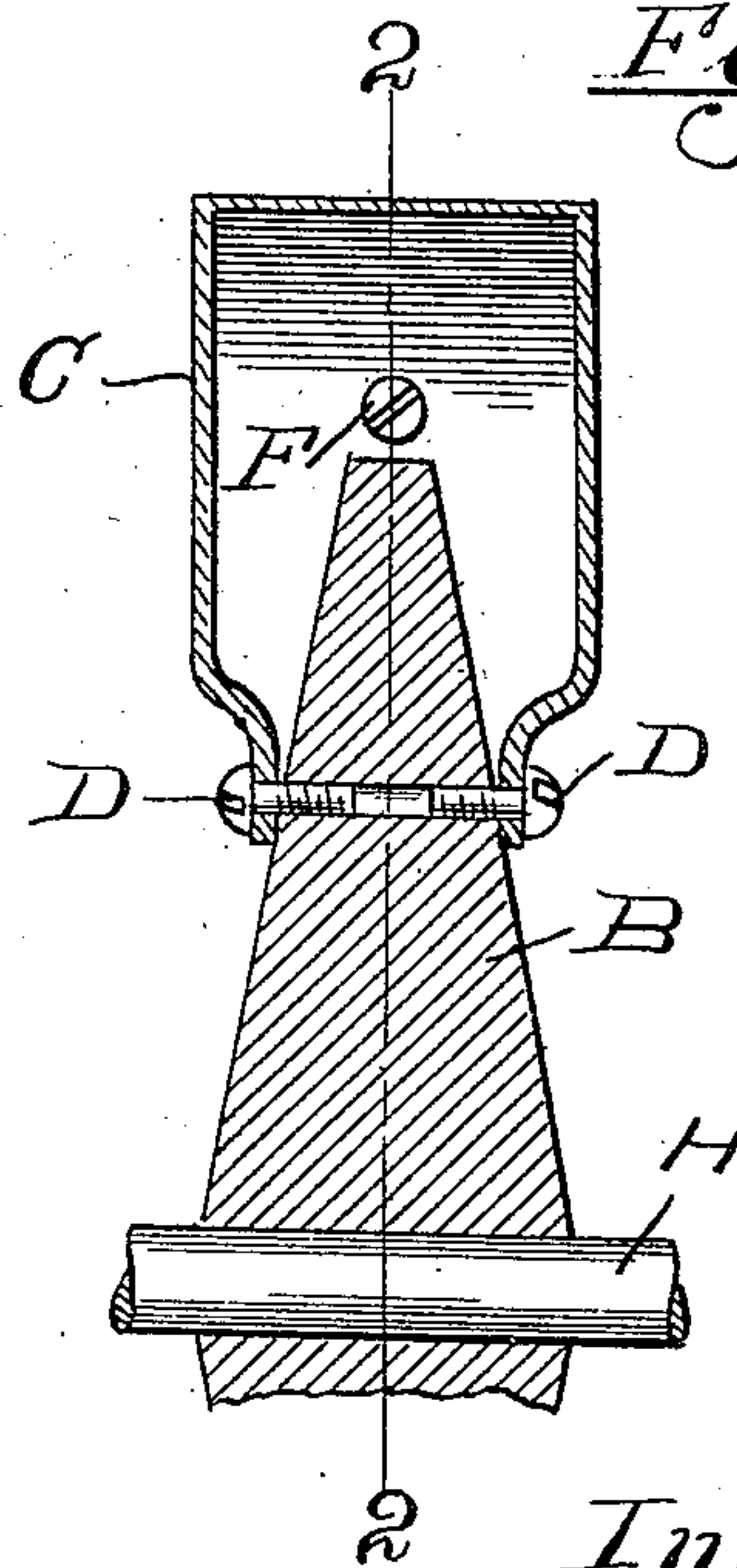


Fig. 3.



Witnesses:

C. F. Wilson
Charles C. Sherman

Inventor:

Bertrand B. Bush

UNITED STATES PATENT OFFICE.

BERTRAND B. BUSH, OF CHICAGO, ILLINOIS.

WATER-MOTOR WHEEL.

No. 817,546.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed February 23, 1905. Serial No. 247,029.

To all whom it may concern:

Be it known that I, BERTRAND B. BUSH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Water-Motor Wheel, of which the following is a specification.

My invention relates to improvements in water-driven motors in which a circular wheel with a V-shaped edge is provided with elongated cup-shaped buckets, being hinged or movable. Said buckets are hinged close to the wheel's axis and supplied on its under side with a recoil-spring; and the objects of my improvements are, first, to provide a wheel easy running, capable of attaining high speed, and producing great power on a small consumption of fluid; second, to afford facilities for the proper adjustment of the buckets independent of each other; third, to reduce friction caused by water being carried around with the buckets. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the wheel with the casing in section. Fig. 2 is a section of a portion of the wheel-body and of a bucket on line 2 2 of Fig. 3, and Fig. 3 is a section of the same parts on lines 3 3 of Fig. 1.

The motor comprises a casing A, wheel B, carrying hinged or movable buckets C, connected to lug E by tension-bolt F, passing through bottom of bucket C, through recoil-spring G, and threaded into lug E. The

buckets C comprise a series of hinged or movable buckets, being elongated, cup-shaped, pivoted upon the sides of the wheel at their inner ends, while the larger or outer extremity is supplied on its under side with bolts, which pass through the bottoms of said buckets and threaded into lug E, with springs upon the bolts between the buckets and the lugs. The combination of lug E, tension-bolt F, and recoil-spring G to form a support for the outer end of bucket affords facilities for the proper adjustment of the buckets and also to cushion the rebound of the jets therein or sudden shock imparted by the fluid coming in contact with buckets while wheel is motionless.

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

The combination, with the body of a wheel with a V-shaped edge, having mounted upon its periphery, a series of lugs, elongated, cup-shaped buckets, pivoted upon the sides of the wheel at their inner ends, bolts passing through the bottoms of the buckets, and threaded into said lugs, with springs upon the bolts, between the buckets and lugs, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BERTRAND B. BUSH.

Witnesses:

CHARLES O. SHERMAN,
WILLIAM E. TRAUTMANN.