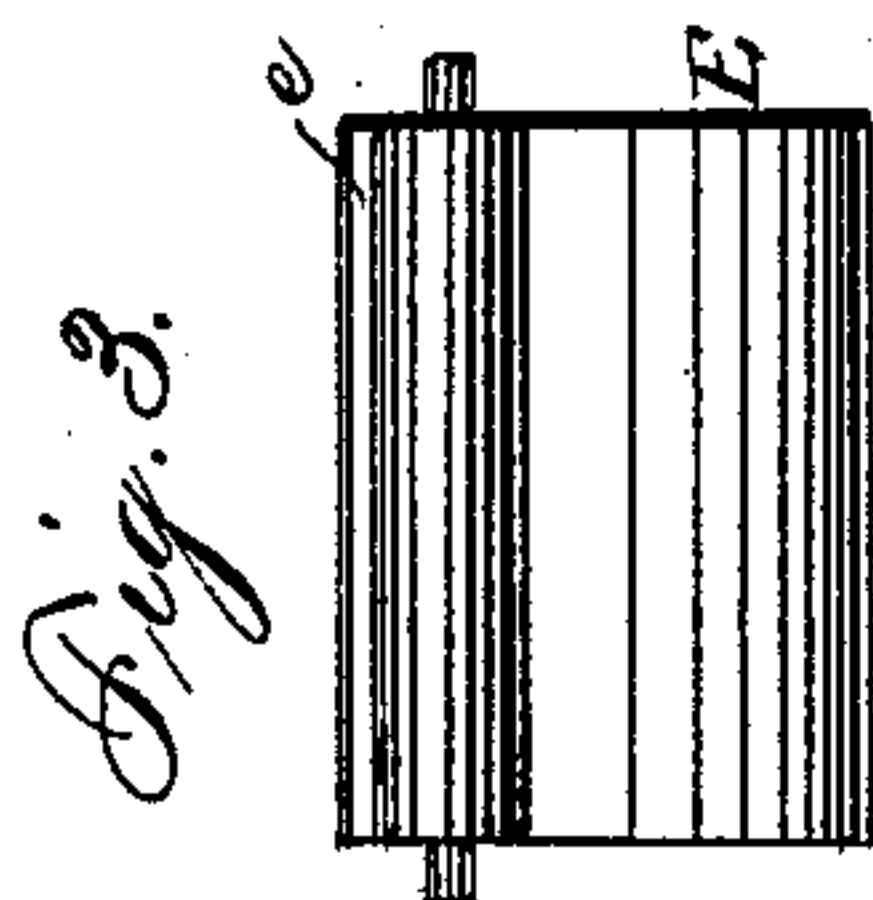
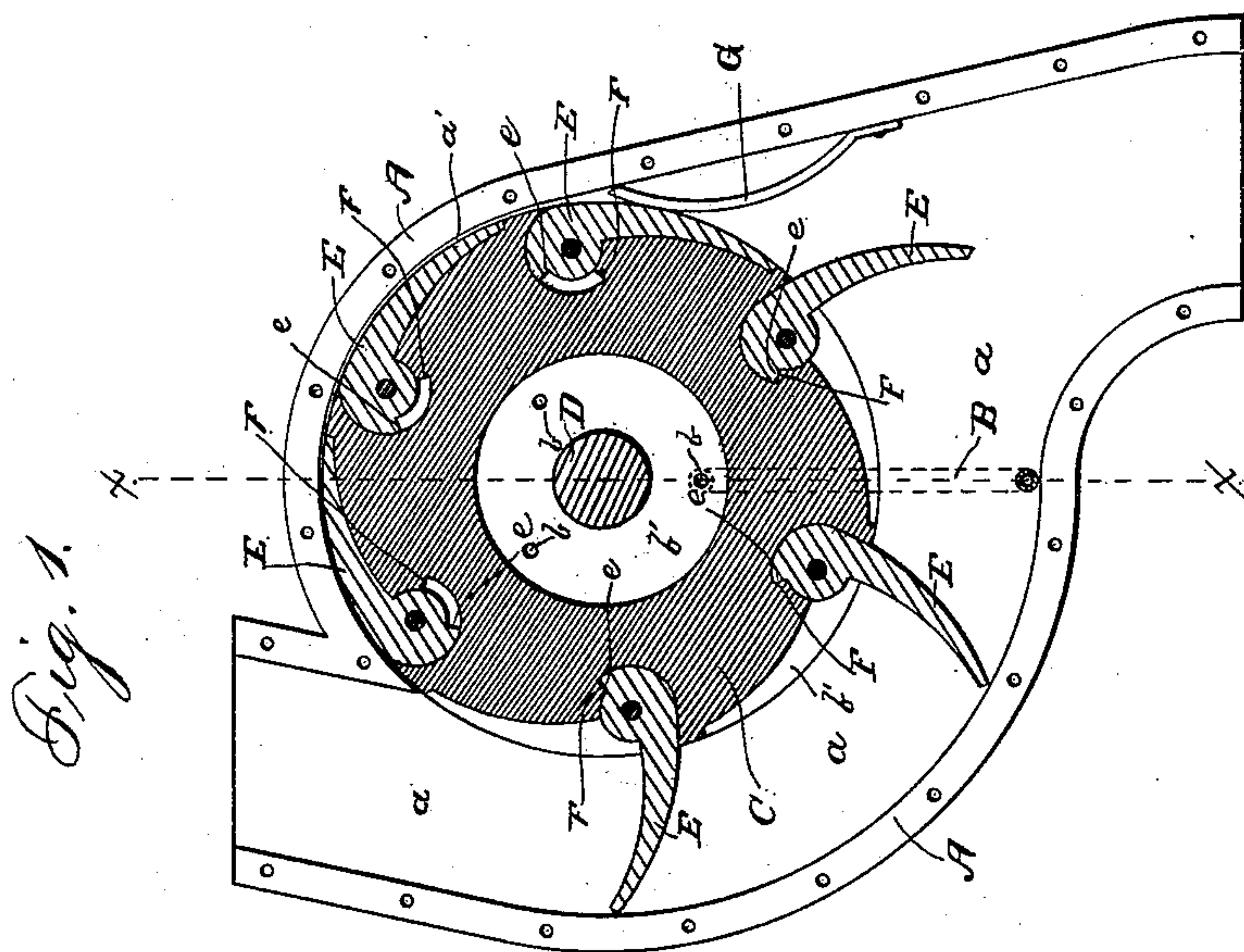
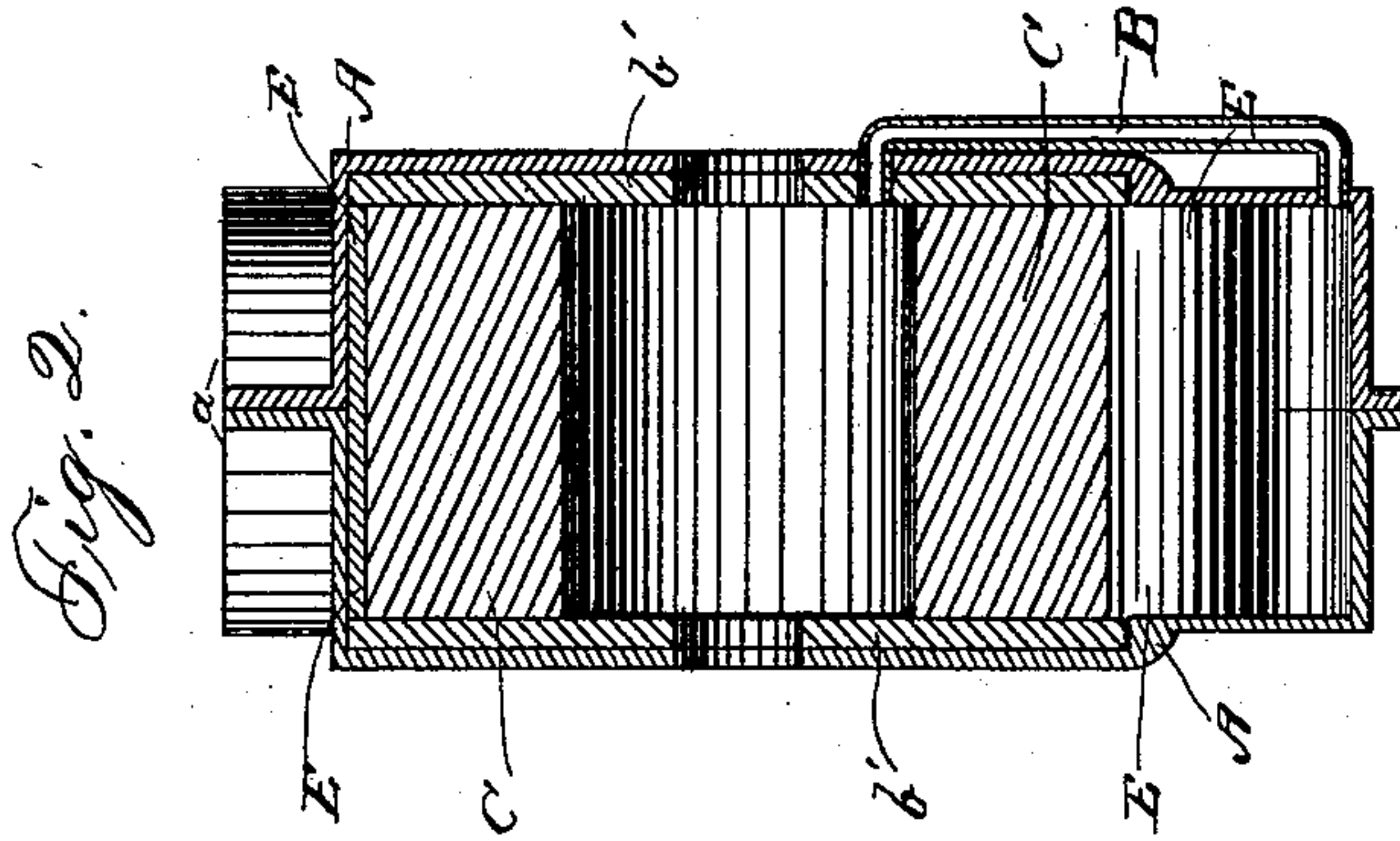


(No Model.)

A. ROBARTS.
HYDRAULIC MOTOR.

No. 600,173.

Patented Mar. 8, 1898.



WITNESSES:

Otis D. Swett.
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INVENTOR

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BY

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UNITED STATES PATENT OFFICE.

AARON ROBARTS, OF WARWICK, NEW YORK.

HYDRAULIC MOTOR.

SPECIFICATION forming part of Letters Patent No. 600,173, dated March 8, 1898.

Application filed June 4, 1897. Serial No. 639,416. (No model.)

To all whom it may concern:

Be it known that I, AARON ROBARTS, a citizen of the United States, residing at Warwick, in the county of Orange and State of New York, have invented certain new and useful Improvements in Hydraulic Motors; and I do 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 the letters of reference marked thereon, which form a part of this specification.

The special object of the invention is to make an improvement in hydraulic motors which have pivoted and folding buckets.

Figure 1 of the drawings is a median vertical section giving a side view of the parts; Fig. 2, a vertical cross-section on the dotted line *xx* of Fig. 1, and Fig. 3 a detail view of the bucket.

In the drawings, A represents the case, B the waste-water-discharge pipe, and C the wheel or disk, whose shaft D is journaled in the opposite plates *b' b'*. The latter have holes in a circle, so as to register with the discharge-pipe B, for the purpose of carrying off any water which may have found its way to the space around the shaft.

a is the pipe, into one end of which the water enters and from the other end of which it

is discharged. This pipe has an enlargement *a'*, in which the wheel revolves with its shaft, which may be connected by pulley, spur-wheel, or sprocket with any mechanism which is to be operated by the motor.

The disk C is provided at suitable intervals on its periphery with the pivoted buckets E and the stops F, the buckets having rear arms *e* to work against the stops. The buckets E are thus always held at right angles to the wheel C by the stops, while they are folded at the proper time to the wheel by a spring G. By this construction and arrangement of parts the maximum force of the water is utilized at all times, while the friction is reduced to a minimum.

What I claim as new is—

In a hydraulic motor, a discharge-pipe B combined with the wheel-shaft and two plates *b' b'* in the center of which said shaft has its bearings, one of said plates being provided with a circle of holes which register successively with an open end of said pipe as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

AARON ROBARTS.

Witnesses:

GEORGE H. QUACKENBUSH,
GEORGE W. MCELROY.