(No Model.)

F. E. BUDDINGTON.

TOY WATER MOTOR.

No. 362,421. Patented May 3, 1887.

Fig. 1.

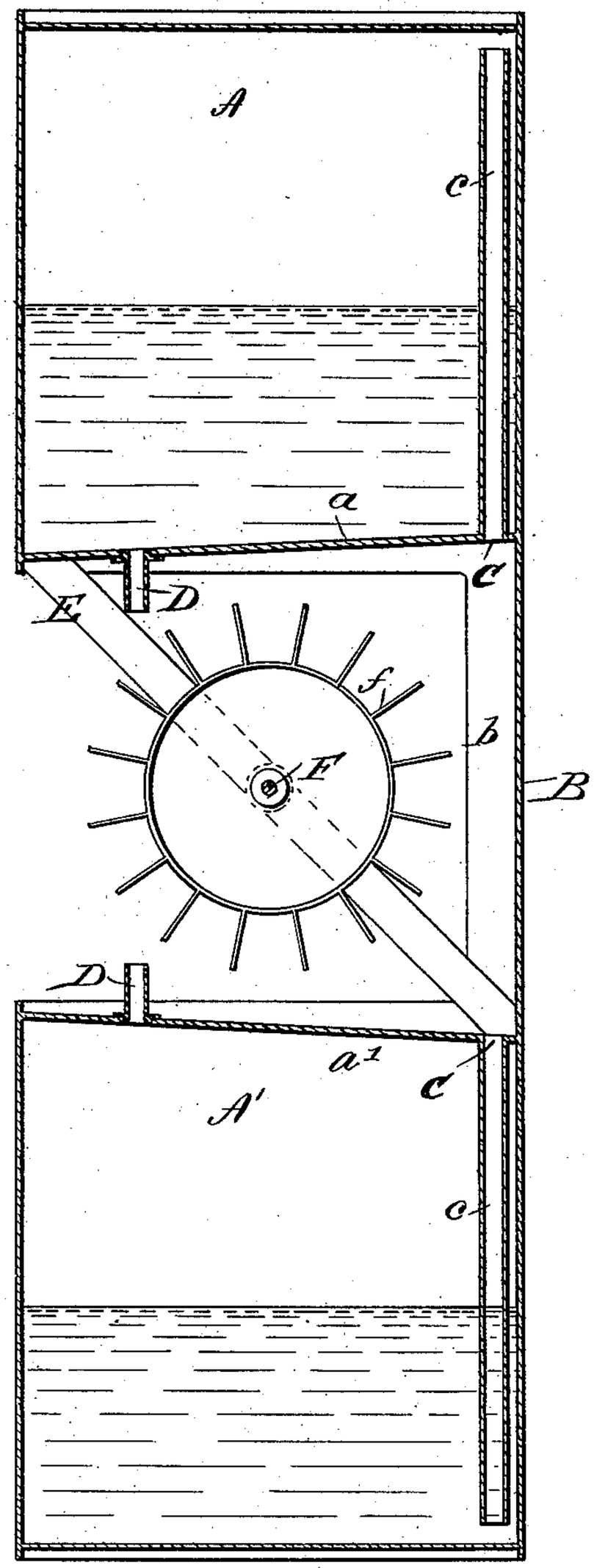
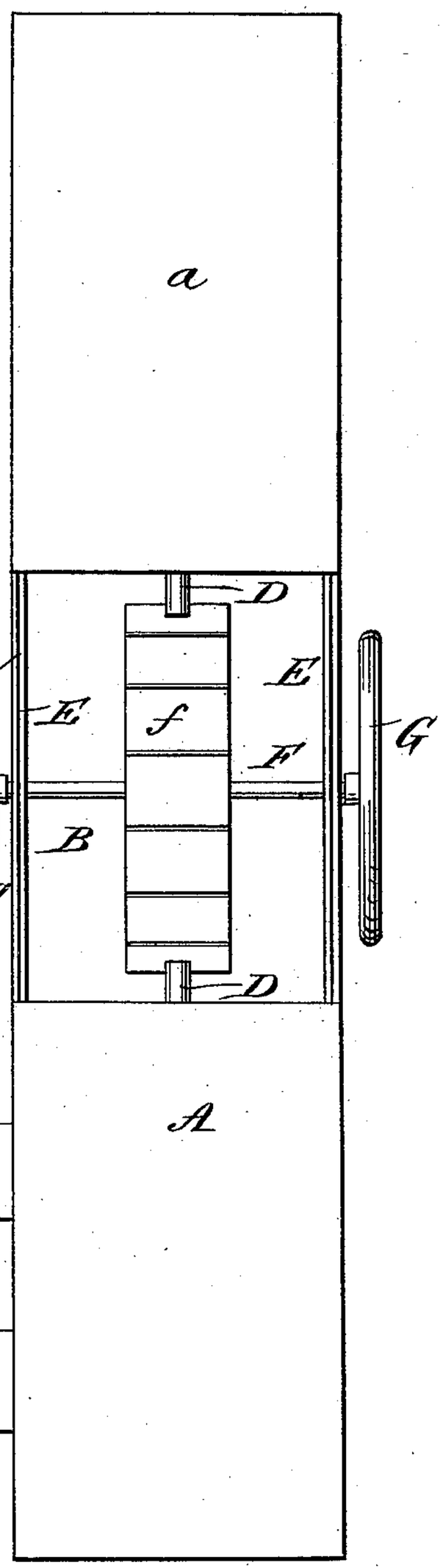


Fig. 2.



WITNESSES:

Donn Twitchell

C. Sedgwick

INVENTOR:

F. E. Buddington

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANK E. BUDDINGTON, OF CHICAGO, ILLINOIS.

TOY WATER-MOTOR.

SPECIFICATION forming part of Letters Patent No. 362,421, dated May 3, 1887.

Application filed January 22, 1887. Serial No. 225,104. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. BUDDINGTON, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Water-Motors, of which the following is a full, clear, and exact description.

My invention relates to an improvement in water-motors specially adapted for a toy, and has for its object to produce a compact, simple, and cheap device for operating toy machinery.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a vertical longitudinal section through my motor, and Fig. 2 a front elevation thereof.

In carrying my invention into effect I provide two reservoirs, A and A′, adapted to hold water, and connect the said reservoirs at one end by a plate, B, provided with flanged sides *b*. The opposing end plates, *a a′*, of the reservoirs are made to slant from their outer edges inward in the direction of the connecting-plate B, and each of said ends is provided with an aperture, C, near the inner edge of the reservoirs, into which tubes *c* are fitted, to extend within the reservoirs to a point near the opposite or outer end thereof. These tubes *c* serve to introduce air in the reservoirs and also serve as a means of filling the same. Outlet-tubes D are provided the inner inclined end plates, *a a′*, of the reservoir, centrally the same, a distance from their outer edges, the outlet-tube of the one reservoir being in alignment with the outlet-tube of the other.

Bars E are attached at one end to the upper edges of one reservoir at each side and at the other end to the lower side edges of the opposite reservoir, extending thereby at an inclination across the space intervening the same. About centrally the said bars E a shaft, F, is journaled, having attached thereto a paddle-wheel, *f*. The said wheel is so located between the aforesaid side bars E as that a stream of water issuing from either outlet-tube D will fall squarely upon the paddles. Upon one end of the shaft F, outside the side bars, E, a balance-wheel, G, is secured, while upon the opposite side, also outside the side bar in which the shaft is journaled, a crank, *g*, is formed on said shaft, which is connected, by means of a rod, H, with a saw, H′, or other device, adapted to be operated by the rotation of the water-wheel.

In operation one reservoir is filled with water, introduced through the aperture C into the pipe *c*, and when said reservoir is filled the device is placed in a vertical position, the filled reservoir upon top. The water will issue through the outlet-tube D upon the paddles of the wheel, turning the same, and, wasting upon the inclined end plate of the lower reservoir, will enter the same through the aperture in said plate. When the upper reservoir becomes emptied, the device may be reversed and the other reservoir, now full, be utilized.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a motor, the combination, with the united reservoirs A A′, having their opposing ends *a a′* constructed to guide the water rearwardly, and provided with an aperture, C, and tube *c*, adapted to admit air, and outlet-tubes D in the same vertical plane, of a paddle-wheel held to rotate between said outlet-tubes, substantially as shown and described, and for the purposes herein set forth.

2. In a motor, the combination, with the united reservoirs A A′, provided with inwardly-inclined opposing ends *a a′*, having flanged sides, and an aperture, C, and tube *c* in said inclined ends, adapted to admit air, and outlets D in the same vertical plane, of a paddle-wheel, *f*, held to rotate between said outlet-tubes, having a balance-wheel, G, attached at one end of its shaft H, and a crank, *g*, at the other, substantially as shown and described, and for the purposes herein set forth.

FRANK E. BUDDINGTON.

Witnesses:
MARIA D. BUDDINGTON,
SILAS F. MORGAN.