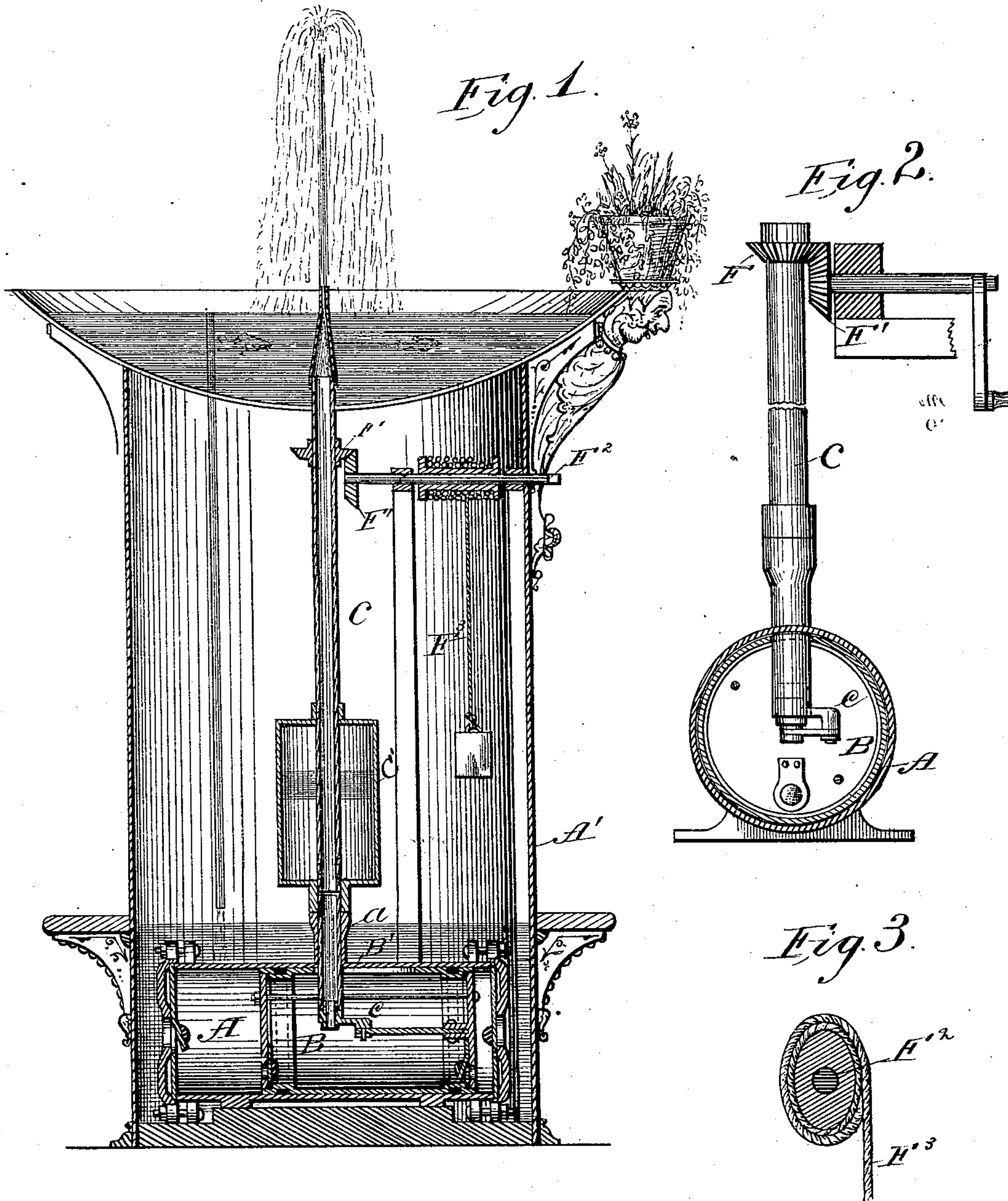


(No Model.)

A. TOELLNER.
Fountain Pump.

No. 236,650.

Patented Jan. 11, 1881.



WITNESSES

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ADOLPH TOELLNER, OF MILWAUKEE, WISCONSIN.

FOUNTAIN-PUMP.

SPECIFICATION forming part of Letters Patent No. 236,650, dated January 11, 1881.

Application filed April 19, 1880. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH TOELLNER, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain
5 new and useful Improvements in Fountain-Pumps; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to pumps; and it consists in the device hereinafter claimed.

Figure 1 is a vertical central section. Figs. 2 and 3 are details.

A is a horizontal cylinder having an inlet-valve at each end. B is a hollow plunger
15 similarly provided with inlet-valves. A slot, B', in the top of the plunger admits a pipe, C, and on the lower end of this pipe I key a crank, c, the arm of which is toggled to one of the heads of the plungers. The pipe C fits water-
20 tight in a tube, a, on the cylinder, and continues up to and through the basin. Just beneath the basin I key a horizontal bevel-wheel, F, to the pipe C, and this meshes with a vertical bevel-wheel, F', on an axle, F², from which
25 I suspend a weighted cord, F³; or the axle may connect with and be driven by a windmill or steam-engine.

Operation: Suppose the cylinder is submerged in a cistern and the cord F³ has been
30 wound about the axle. The weight in its descent will cause the cord to revolve the axle, which, in turn, will revolve the pipe and crank. To overcome the dead-centers of the crank I make the axle F² oval in cross-section, or provide it with an oval sleeve where it receives
35 the cord, and I so time it with the crank that when the latter has reached a dead-center the greatest width of the axle will have passed beyond the vertical, and will be carried over

with sufficient velocity to make the revolution
40 of the pipe continuous. One turn of the crank c will carry the plunger from one end to the other of the cylinder and back. I provide, when a steady stream is required, an air-chamber, O', into which the pipe C opens, the body
45 of air in the said chamber forming an elastic cushion, against which the water impinges at each stroke, to be forced out by the expansion of the air between the strokes. Thus, as the pipe is revolved, it will reciprocate the plunger
50 in the cylinder, expelling the water at each half-revolution of the pipe as water is forced into it, and by the employment of the air-chamber, or omitting it, a steady or intermittent stream may be ejected.

My pump may be operated by a crank, as shown in Fig. 2, and this may connect with wind, steam, water, or animal power.

I claim—

1. The hollow slotted plunger having a
60 valve at each end, and cylinder having corresponding valves, in combination with pipe C, a device for revolving it, crank, and connecting-rods, as set forth.

2. The combination of the axle, made oval
65 in cross-section or provided with an oval sleeve, with a weighted cord, pipe, crank attached to the lower end of pipe, connecting-rod, plunger having valve at each end, and the cylinder A, having corresponding valves,
70 as set forth.

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

ADOLPH TOELLNER.

Witnesses:

JAMES G. FLANDERS,
STANLEY S. STOUT.