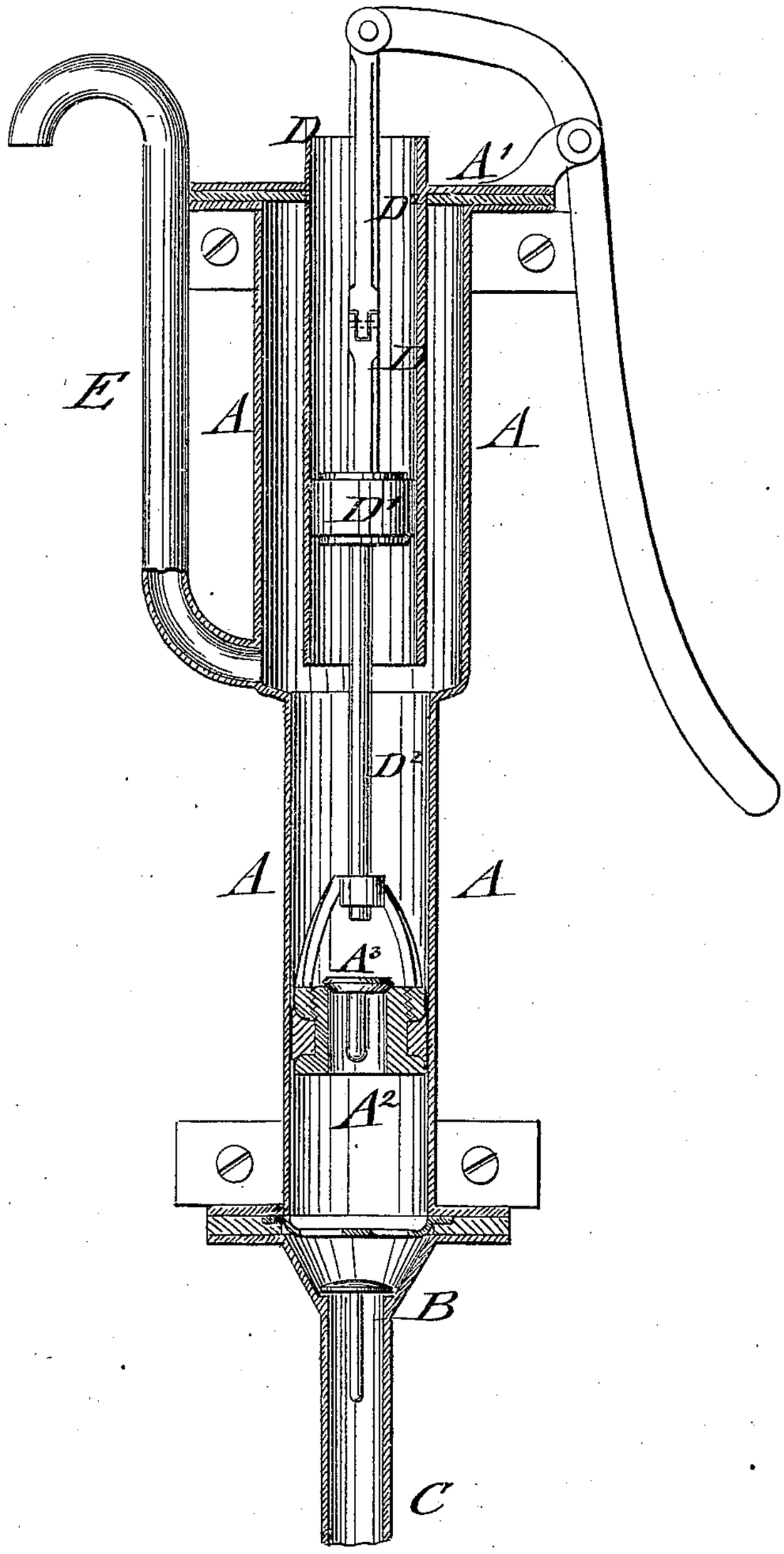
G. W. ROBAUGH.

Pumps.

No. 149,953. Patented April 21, 1874.



WITNESSES:

Chas. Nida.

Sedgwick

INVENTOR:

G. W. Robaugh

BY

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UNITED STATES PATENT OFFICE.

GEORGE W. ROBAUGH, OF LEE SUMMIT, MISSOURI.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **149,953**, dated April 21, 1874; application filed March 28, 1874.

To all whom it may concern:

Be it known that I, GEORGE W. ROBAUGH, of Lee Summit, in the county of Jackson and State of Missouri, have invented a new and Improved Pump, of which the following is a specification:

The accompanying drawing represents a vertical central section of my improved pump.

The object of my invention is to furnish a cheap, durable, and effective pump, which supplies a continuous stream of water, and works in an easy and regular manner. My invention consists of a central tube, which guides a piston in the usual manner, surrounded by an outer tube of larger diameter, forming a chamber around the inner tube, and discharging the water from a pipe extending upward from the base of the outer tube. The outer tube has an extension of smaller diameter, in which a second piston with a central valve is guided, it being attached to the extension of the upper piston-rod. The lower part of the extension-tube connects by a common conical valve in the usual manner with the well-tube.

In the drawing, A represents the outer or main cylinder or tube of my improved tube. The upper part of the same is of larger diameter than the lower part, which is connected by a conical valve, B, and perforated guard-plate, with the tube C extending to the bottom of the well or other receptacle. The upper part of tube A is closed tightly by a top disk, A′, with central perforation, to which the inner tube D is applied. Tube D is of smaller diameter than outer tube A, and extends downward nearly to the end of the upper wider part. An S-shaped discharge-pipe, E, extends from the lower end of the upper part of tube A to some distance above its upper end. A piston, D^1, of any approved construction is attached to piston-rod D^2, and plays up and down in the inner tube D, while a second piston, A^2, with central upward opening valve A^3 is firmly attached by its conical or bifurcated top piece to the end of the extension of piston-rod D^2 working in the lower part of tube A simultaneously with piston D^1 in the inner tube D.

The action of the pump is based on the action of a lifting and force pump combined, the water being raised by the upstroke of the lower piston through the bottom valve into the lower part of the main tube, passing on the downstroke through the valve of the lower piston into the upper part of the main tube, until the same is nearly filled. Each up-and-down stroke forces then, by the joint action of the pistons and the pressure caused thereby, the water through the discharge-pipe, so that a regular and continuous stream of water issues therefrom, being produced by very simple and effective means.

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

As an improvement in pumps, the outer main tube, having wider upper and narrower lower part, discharge-pipe, and inner tube extending nearly through the upper part, in combination with the upper piston and lower valve-piston, placed on the same piston-rod, for producing, by the simultaneous action, a continuous flow of water, substantially as and for the purpose set forth.

GEORGE W. ROBAUGH.

Witnesses:

GEORGE JONES,

ISAAC W. ADAMS.