A. Rewerick,

Double-Acting Pump.

No. 53,185. Patented Mar. 13, 1866.

Fig. 1.

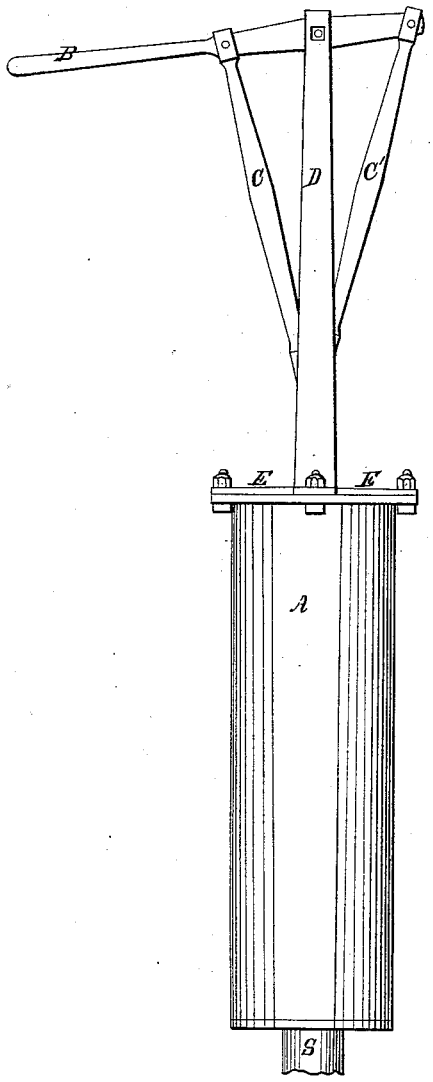
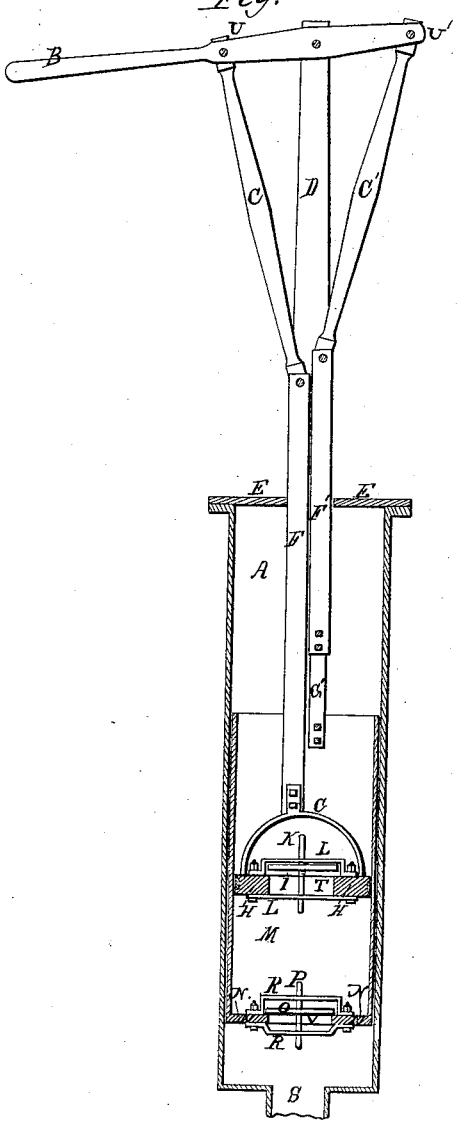


Fig. 2.



Witnesses.
C. M. Smith
Isaiah Weston

Inventor.
his mark
Assanax Rewick

UNITED STATES PATENT OFFICE.

ASSARIA REWERICK, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **53,185**, dated March 13, 1866.

To all whom it may concern:

Be it known that I, ASSARIA REWERICK, of the city and county of San Francisco, State of California, have invented a certain new and useful Improvement in Double-Acting Pumps, called "Rewerick's Double-Acting Pump;" and I do hereby declare that the following specification is a full, clear, and exact description of the same.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and the manner of operating the same, referring to the drawings, in which the same letters indicate like parts in each of the figures—

Figure 1 being a side elevation. Fig. 2 is a sectional elevation.

The nature of my invention consists in providing a double cylindrical barrel, the one fitting closely and operating inside the other, the inner barrel or cylinder having an induction-valve at its base with two branches joined together above it, one of which extends upward through a slot in a cross-bar placed across the main barrel, through which it works in connection with the piston or bucket valve by means of jointed arms.

In the accompanying drawings, Fig. 1, A represents a pump-barrel, (shown in elevation,) upon the top of which is bolted the standard D, which acts as a fulcrum for the handle B. To this handle are attached the conducting-rods C C′, placed on opposite sides of the support-standard D.

E E is a cross-bar, through which the piston-rods slide, and which serves to keep them in place. Fig. 2 shows clearly the parts.

To the jointed arms C′ and C″ are attached the piston-rods F and F′, which move the respective pistons H and M.

C is the conducting-rod which conveys the motion to the lower piston. C′ is the conducting-rod which gives motion to the upper piston.

The piston M consists of a cylinder fitting water-tight to the pump-barrel A, and is of sufficient length to allow another piston to work inside of it. At the bottom of the cylinder is an opening, V, above which is placed the puppet-valve O, opening upward. This valve is supported and steadied by the spindle P, moving in the supports R and R. Inside the cylinder M is a piston, H H, (also furnished with a valve, I, and spindle K,) opening upward and moving in the cross-supports L L.

The operation of my pump is as follows, to wit: When the lever or handle is depressed the upper piston is pressed down and the lower or barrel piston is at the same time elevated and its valves shut, which forces the water through the upper valve at the same time; and when the handle is raised the upper piston rises with its valve closed, and the water in its ascension is forced through the discharging surface or pipe. At the same time the lower piston descends, by which action its valve is opened.

Having thus described my double-acting pump, I will now state what I claim and desire to secure by Letters Patent:

The cylinders A and M and pistons H and N, with their valves, when arranged and operated substantially as described.

his
ASSARIA × REWERICK. [L. S.]
mark.

Witnesses:
C. W. M. SMITH,
ISAIAH WESTON.