P. Shank,

Draining Pump,

No. 24,337. Patented June 7, 1859.

Fig. 1

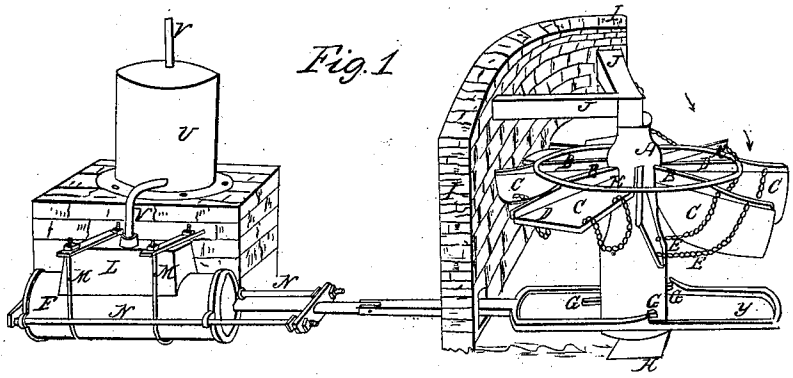


Fig. 2

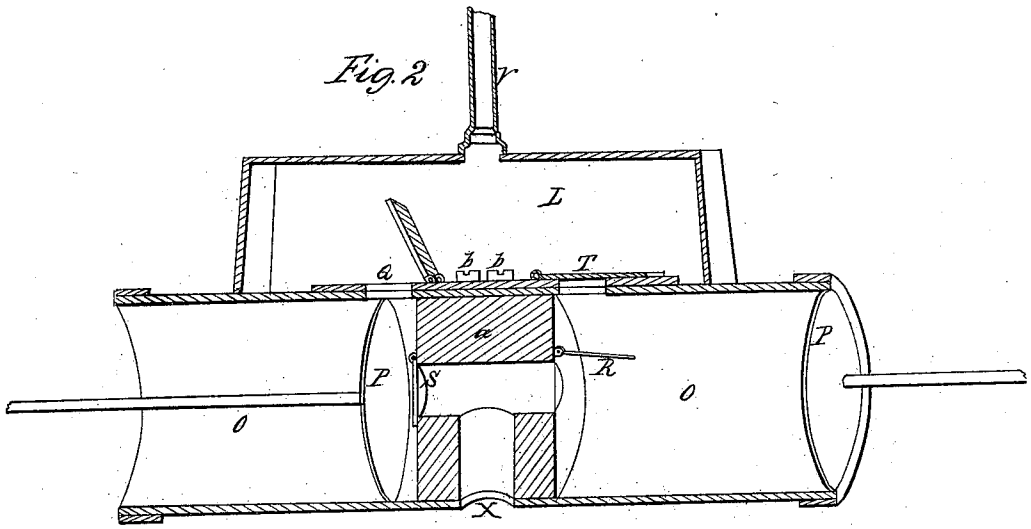
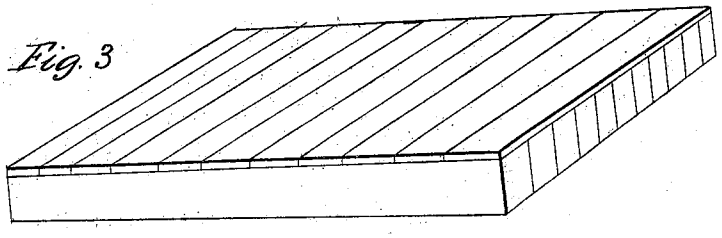


Fig. 3



UNITED STATES PATENT OFFICE.

PETER SHANK, OF JEFFERSON TOWNSHIP, MONTGOMERY COUNTY, OHIO.

MACHINE FOR RAISING WATER.

Specification of Letters Patent No. 24,337, dated June 7, 1859.

To all whom it may concern:

Be it known that I, PETER SHANK, of Jefferson township, in the county of Montgomery, in the State of Ohio, have invented a new and Improved Mode of Raising Water Out of Large and Navigable Streams for Mill-Powers, City Water-Works, Tan-Yards, Distilleries, Hydraulics, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

I call my invention the "Automaton river power."

It consists of a horizontal float wheel "A", (Plate 1st) with eight arms "B" to each of which is attached the broad plank C., by means of hinges D, and supported by the chains E. Also, the horizontal double pump F, and the mode of working it by means of the three pins G.

The foundation of my Automaton river power is formed by cleaning out and leveling a space in the bottom of the river or stream and laying hewn logs within the space even with the bed of the stream and spiking down strong planks within the space even with the bed of the stream and spiking down strong planks laid transversly on the logs as shown in plate 3rd. Upon this foundation the steel plate H, (Plate 1st) is fastened in order to receive the lower end of the upright shaft of the float wheel A. The letters I (Plate 1st) represent a stone wall built from the foundation up above the high water mark; a part of this wall is built in the form of a curve in order to allow the current to act upon one half of the float wheel, while the other half is in still water; above and below this curve the wall is straight up and down stream as far as it is necessary to build it.

J J represent two logs that are walled into the stone wall "I" in order to receive and support the upper end of the upright shaft of the float wheel "A."

K, is an iron band fastened on the upper side of the eight arms (B,) to stiffen and support them.

L is a receiver fastened on to the pump by the rods M, M.

N, N are the side rods that guide the pistons.

The interior of the pump is shown by Plate 2; it consists of the cylinder O, divided into two departments by the block of wood "*a*" which is held in its place by the screws *b*, *b*; two pistons P, P, and valves 2, R, S, T.

The manner in which my invention works is as follows viz: The current comes down in the direction shown by the arrows Plate 1st striking the planks C, C, and forcing them around until they reach the still water when they float at ease and the chains E (which are straight when the current is acting on the planks C) hang loose as they are shown in the plate 1st. The revolving of this wheel causes the pins G, to strike the frame Y that is attached to the piston, forcing it forward discharging the water that was in one apartment of the cylinder through the valve 2 (Plate 2nd) at the same time the other piston is withdrawn and the other apartment of the cylinder is filled through the aperture *x* (in the bottom of the pump) and the valve R. At this time another one of the pins G strikes the opposite side of the frame Y and forces the pistons back discharging from one apartment and filling the other. The water is forced from the pump into the receiver L, and from the receiver L, into the air vessel "U" and from the air vessel through the tube V to wherever it is required.

What I claim as my invention and desire to receive by Letters Patent is—

The combination of the horizontal float wheel the crank motion as produced by the three pins which gives six motions of the pump to one revolution of the wheel and the horizontal double pump substantially as described for raising water.

PETER SHANK.

Witnesses:
JOHN SCOTT,
DANIEL P. NEAD.