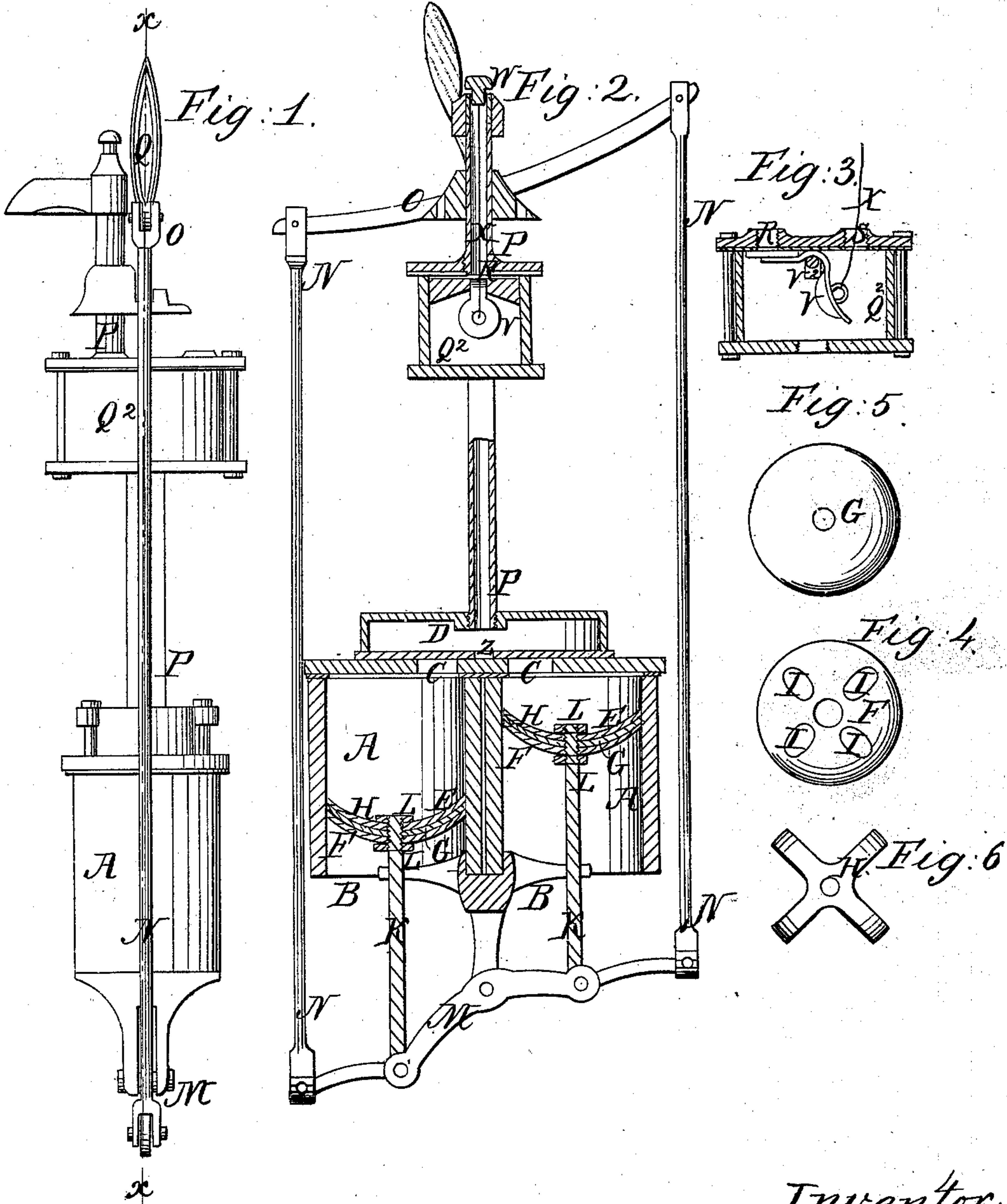


H. Tyler,

Double-Acting Pump.

N^o 68,810.

Patented, Sep 10, 1867.



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United States Patent Office.

HIRAM TYLER, OF GAINES, NEW YORK, ASSIGNOR TO HIMSELF AND

Charles T. Richards ~~VERNUM STERNS.~~ and *John Marsh.*

Letters Patent No. 68,810, dated September 10, 1867.

IMPROVEMENT IN PUMPS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HIRAM TYLER, of Gaines, in the county of Orleans, and State of New York, have invented new and useful Improvements in "Pumps;" and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The present invention consists in the combination, with the pumping-tube of the pump, of a chamber or reservoir, having more than one outlet, with a valve or valves so arranged as to open or close either one or more of the said outlets, and thus, through any suitable pipes or tubes connected therewith, enable the water to be conducted off to any desired locality, or discharged from an ordinary pump-nozzle or spout, as may be desired, and in the peculiar construction of the plunger, as will be hereinafter more fully described. In the accompanying plate of drawings my improvements in pumps are illustrated—

Figure 1 being a view and elevation of one side of a pump constructed according thereto.

Figure 2, a central vertical section taken in the plane of the line *xx*, fig. 1.

Figure 3, a section through the chamber or receptacle attached to the discharge or pumping-tube of the pump; and

Figures 4, 5, and 6, views in detail of the separate parts of the plungers to the pumping-cylinders.

Similar letters of reference indicate like parts.

A A, in the drawings, represent the pumping-cylinders or barrels, placed side by side, and open at their lower ends B B, but with their upper ends closed, communicating, through an opening, C, for each cylinder, with a chamber or box, D, on the upper side. E, the plungers to the cylinders A, each of which plungers is made in three parts or sections, F, G, and H, placed one upon another, with the centre or intermediate part G made of leather or other similar material, but with the outer head made of a cup-shaped plate or disk, having a series of openings, I, between which, upon the upper side of the disk, the leather is confined, by means of the upper or inner section, which is made of an arm or prong-shape, the several parts being connected together in the order above mentioned, by means of nut L upon the rod K to the plungers, and each part being shown separate or detached in figs. 4, 5, and 6 of the drawings. The rods K to the plungers are hung or pivoted to a cross rocker-beam, M, arranged to swing upon a fulcrum or centre-pin of the under side of the cylinders A, and at equal distances from the said centre-pin. This beam M, at its outer end, is connected, through rods N, with a common rocking-beam, O, at or near the upper end of the discharge-tube P to the pump, which beam is provided with a lever-handle, Q, or other suitable means for operating it. The discharge-tube P connects at its lower end with the chamber above the pumping-cylinders. Q², a chamber or receptacle attached to discharge-tube P at or near the upper end, which chamber is provided with two openings, R and S, the one communicating with the discharge-nozzle or spout T, while with the other a pipe or tube may be connected, for conveying the water off to any point desired. In this receptacle Q a double valve-plate, V, is hung, so as to swing upon a support, V², this plate being bent into such a shape that when in a position to close one of the openings from the chamber the other part will be open. W, a knob, connected by wire X with valve-plate V, for operating and swinging the same.

The water, in passing from the pump-cylinders to the chamber, lifts the leather packing-disk over the port, which packing-disk, between the ports, has an opening, Z, made in it, for the water then to pass through.

What I claim as new, and desire to secure by Letters Patent, is—

1. The construction and arrangement of the receptacle Q², having separate openings R S, supported upon the chamber D by the tube P, the double bent valve-plate V, swinging upon the support V², and connected by the wire X, passing through the tube P, with the operating knob W, as herein set forth, for the purpose specified.

2. The plunger E, constructed as described, consisting of the central elastic packing G, clamped between the prong-shaped plate H and the perforated disk F, as herein set forth, for the purpose specified.

The above specification of my invention signed by me this 1st day of March, 1867.

HIRAM TYLER.

Witnesses:

WM. F. McNAMARA,

ALBERT W. BROWN.