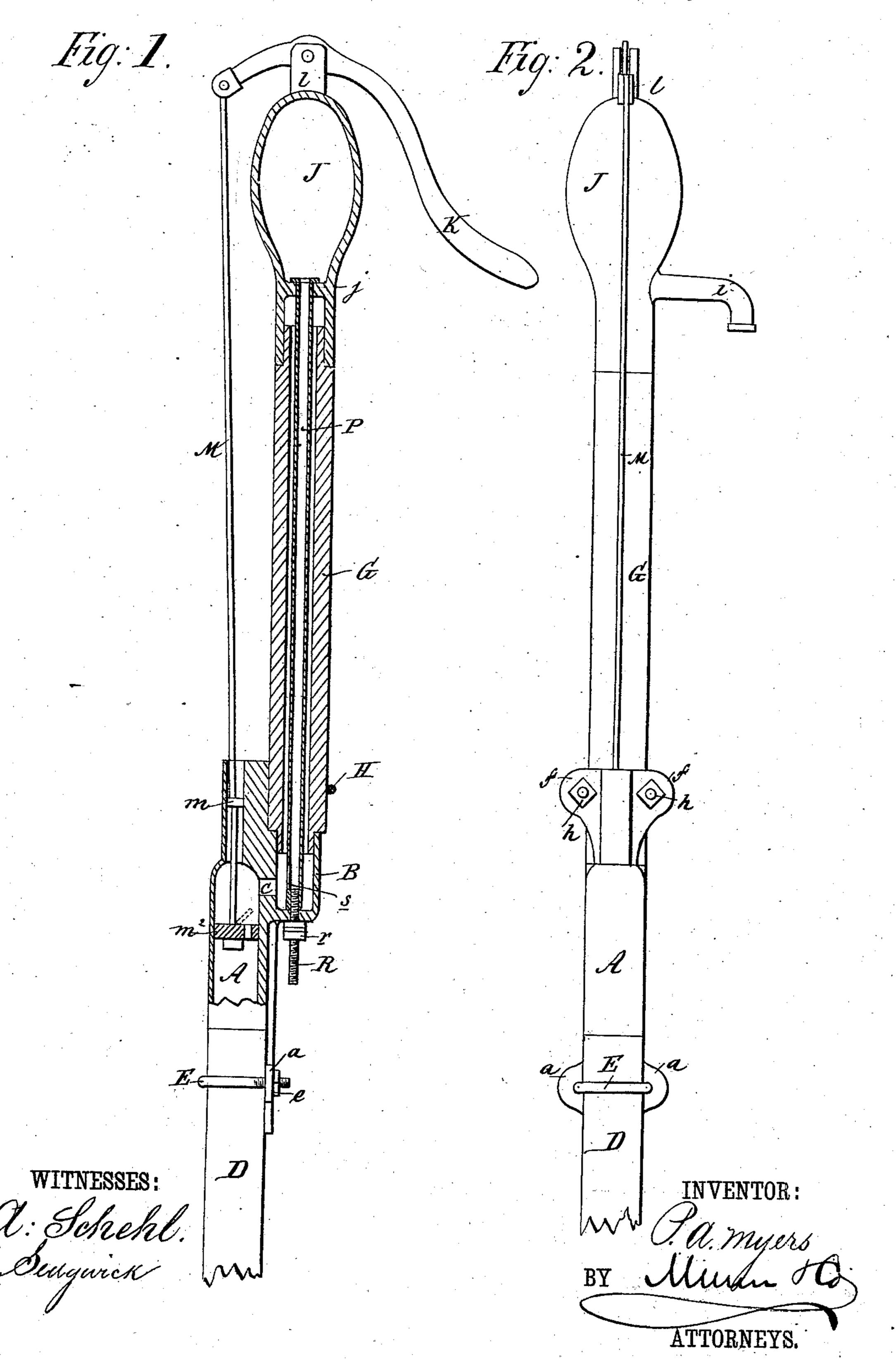
P. A. MYERS. Force-Pump.

No. 228,103.

Patented May 25, 1880.



## United States Patent Office.

PHILIP A. MYERS, OF ASHLAND, OHIO.

## FORCE-PUMP.

SPECIFICATION forming part of Letters Patent No. 228,103, dated May 25, 1880.

Application filed March 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, Philip A. Myers, of Ashland, in the county of Ashland and State of Ohio, have invented a new and useful Improvement in Force-Pumps, of which the following is a specification.

My invention consists in a novel construction, arrangement, and combination of the various parts of a pump, whereby simplicity, conomy, and efficiency are obtained, as hereinafter particularly described.

In the accompanying drawings, Figure 1 represents a central vertical longitudinal section of a pump embodying my improvements. 15 Fig. 2 is an exterior view at right angles to Fig. 1.

Similar letters of reference indicate corre-

sponding parts.

A represents the pump-cylinder, which is formed with a lateral extension, B, communicating therewith by a port or passage, c. These parts are made of metal and in one piece.

D represents the suction-pipe, which is made of wood, and is inserted in the lower end of the cylinder A, and is secured thereto by means of a staple, E, surrounding the pipe D, and passing through lugs a a on a plate formed with the cylinder, and fastened by nuts e.

G represents the discharge-pipe, which is made of wood, and is inserted in the upper end of the extension B, and is secured in place by means of a staple, H, surrounding it and passing through lugs ff, formed on the upper part of the cylinder, and fastened by nuts h.

J represents the air-chamber, provided with a spout, i. The air-chamber is made of metal,

and rests on the upper end of the dischargepipe G, which is inserted therein.

K is the pump-lever, which has its fulcrum 40 on a standard, l, formed on the top of the airchamber J. M is the pump-rod, carrying two pistons, m  $m^2$ , which work in the cylinder A.

P is a metal pipe, having its upper end flanged, and resting in a seat, j, in the bottom 45 of the air-chamber J, just over the upper end of the discharge-pipe G. The lower end of the pipe P has attached to it a screw-bolt, R, which passes through the bottom of the extension B, and is fastened by a nut, r. In the 50 pipe P is a port or passage, s, opposite to and communicating with the port or passage c.

The various parts being secured together, as shown and described, the wooden discharge-pipe G serves also as the pump-stock, and the 55 metal pipe P serves also as a rod or bolt for holding the cylinder and extension, the discharge-pipe, and the air-chamber firmly and securely together.

When the pump is in use the water passes 60 from the suction-pipe D into the cylinder A, and from thence through the ports c and s up the pipe P to the air-chamber J.

Having thus described my invention, I claim as new and desire to secure by Letters 65 Patent—

The combination of the cylinder A, extension B, pipe P, and ports c and s with the pipe G and air-chamber J, as shown and described, for the purpose specified.

PHILIP A. MYERS.

Witnesses:

CHAS. J. KENNY, P. I. GROSSCUP.