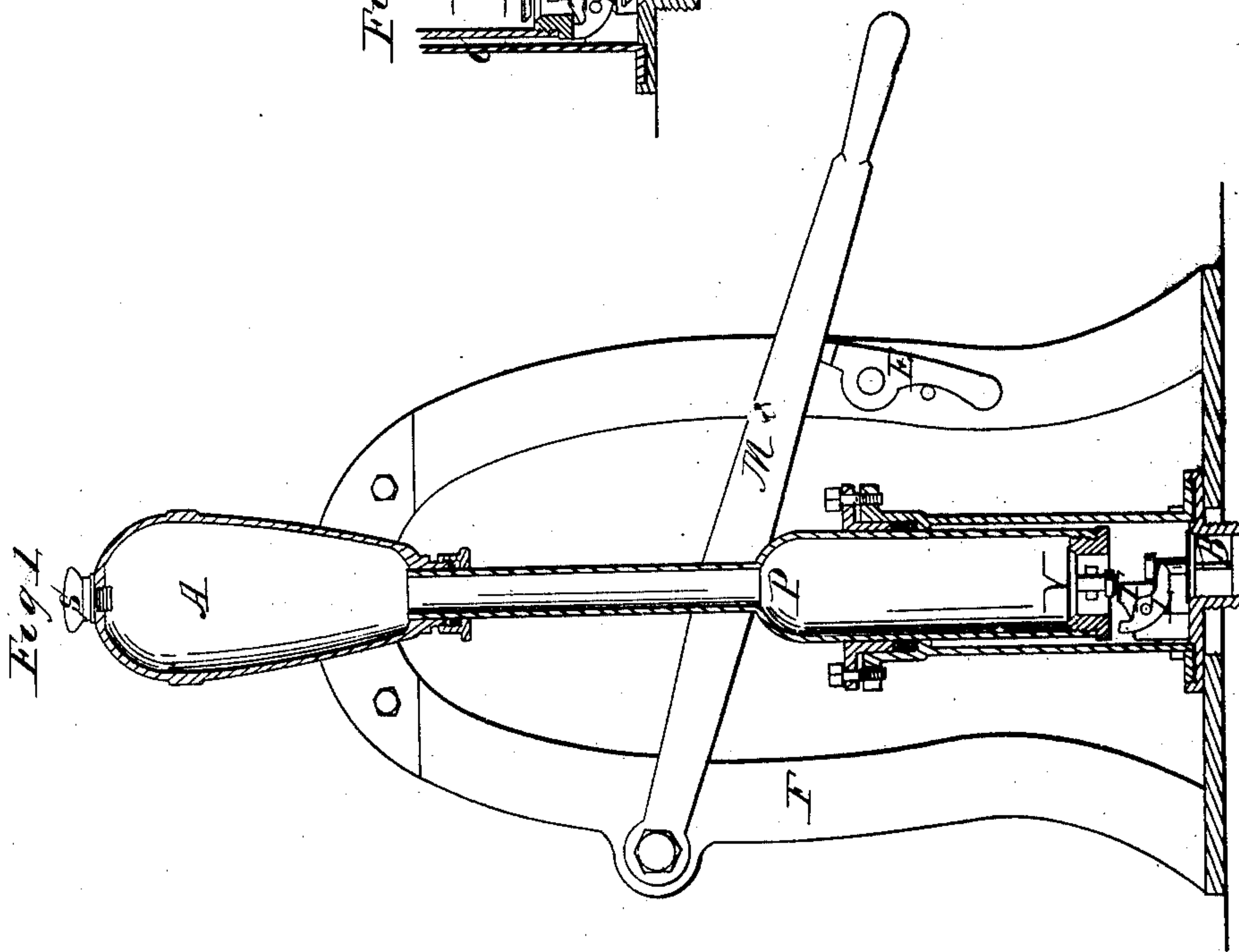
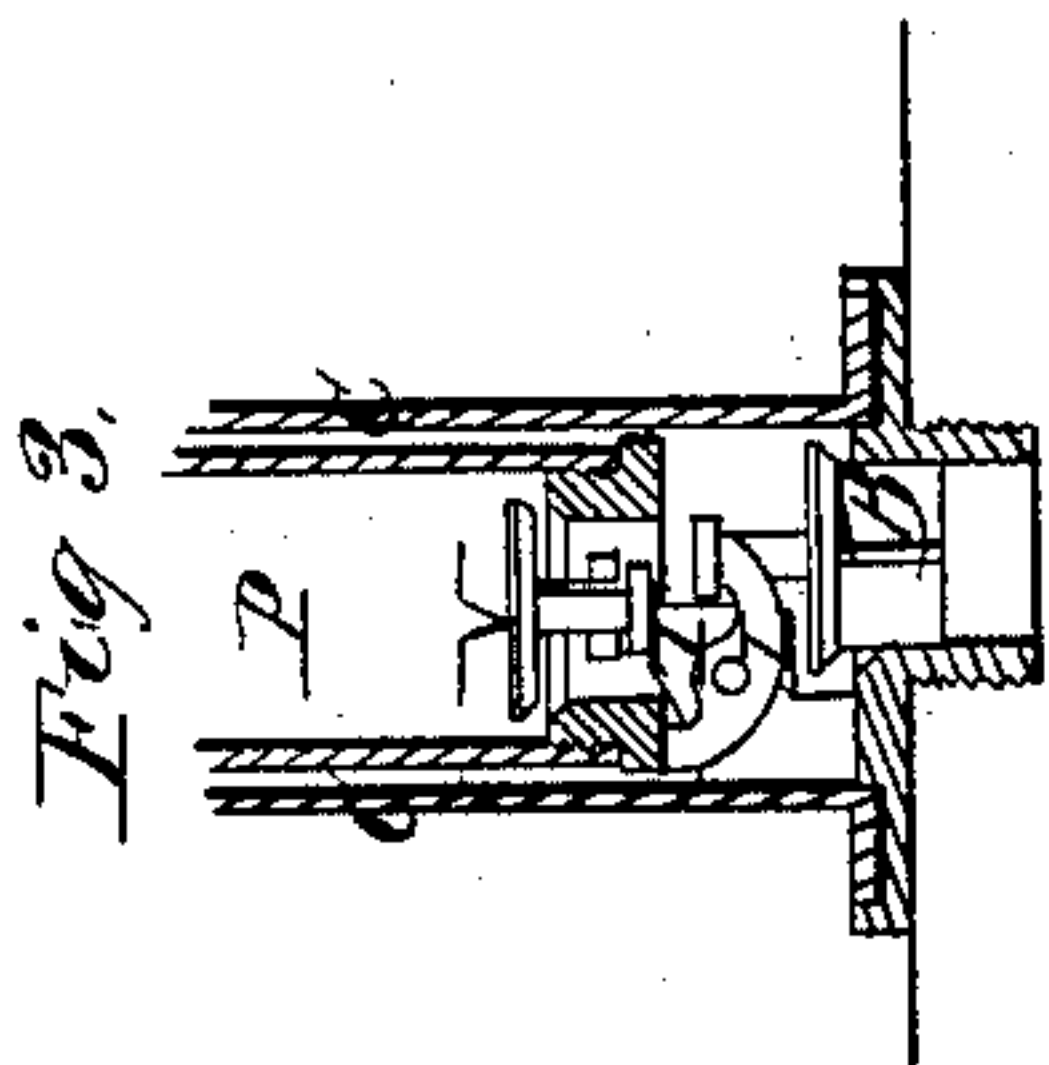
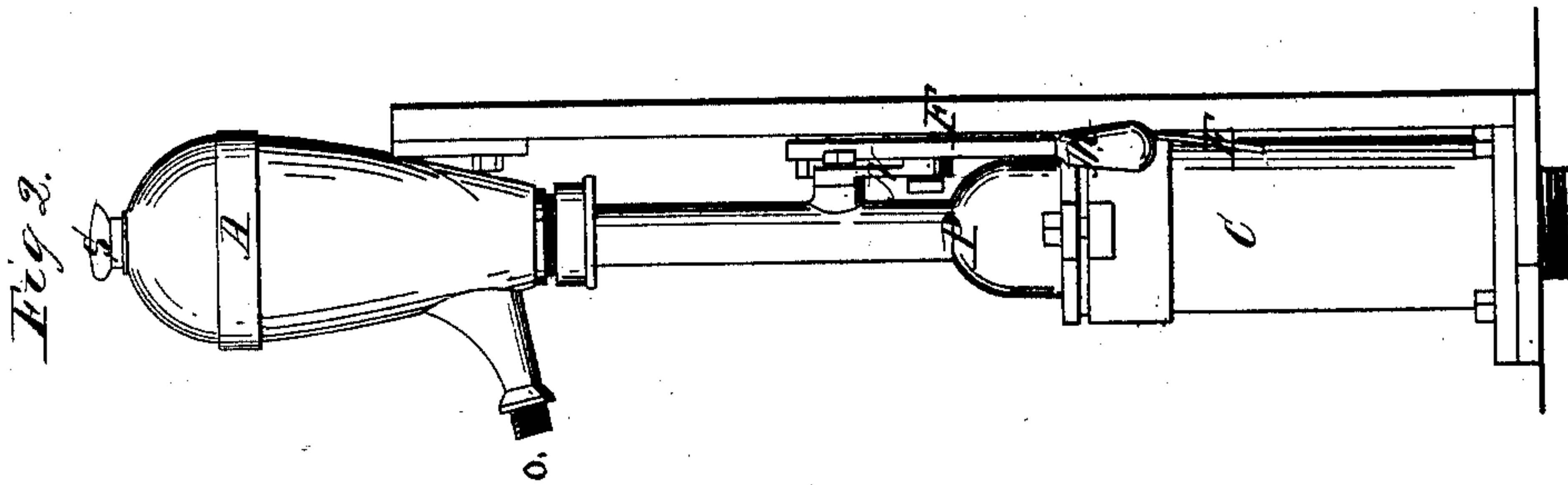


*A. Richard,*  
*Pump Lift,*

*N<sup>o</sup> 27070.*

*Patented Feb. 7, 1860.*



*Witnesses,*  
*John Pinkston*  
*C. A. Frick*

*Inventor,*  
*August Richard*

# UNITED STATES PATENT OFFICE.

AUGUST REICHARD, OF WASHINGTON, MISSOURI.

## PUMP.

Specification of Letters Patent No. 27,070, dated February 7, 1860.

*To all whom it may concern:*

Be it known that I, AUGUST REICHARD, of the town of Washington, in the county of Franklin and State of Missouri, have invented a new and useful Improvement in Pumps; and I do hereby declare that the following is a full, clear, and exact description of the construction of the same and the operation thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

To enable others skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

F is a frame to which the pump cylinder C and air chamber A are permanently attached.

P is a hollow piston and piston rod furnished with a valve *v*. The motion is communicated through the lever M, and connecting link N to the hollow piston P.

Figure 1 represents the piston in the lower position, lifting the piston will open the valve *b*, and raise the water in the cylinder, C. Lowering the piston will open the valve *v*, close the valve *b* and force the water through the hollow piston and piston rod into the air chamber A, from which it es-

capas through the orifice O. The top screw, S, is a means of letting in the air into the air-chamber A, to supply fresh air or to reduce the force pump to a suction pump.

Fig. 3 represents the valves opened to let the water flow back for antifreezing purposes, which is effected by an eccentric piece E which being turned around a quarter of a revolution permits the lever to be lowered enough to make the bottom of the piston press upon a lever, L, which by means of a fork opens the valve B, and the valve *v*, is opened by impinging upon T.

Fig. 2, is a side view of the pump.

Fig. 1, front view with section through middle of piston rod, cylinder and air-chamber.

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

A combination of the valve B, and lever L, valve V, and its rod and rest T, with the hollow plunger or piston P, arranged and operating substantially as described.

AUG. REICHARD.

Witnesses:

J. PINKSTON,  
C. A. FRICKE.