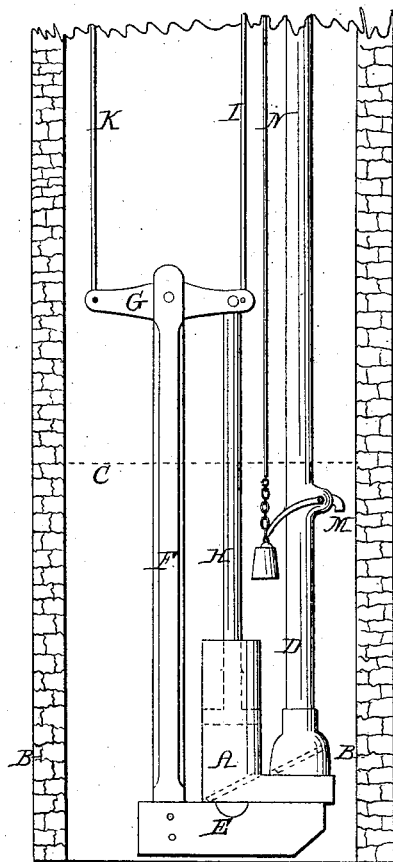
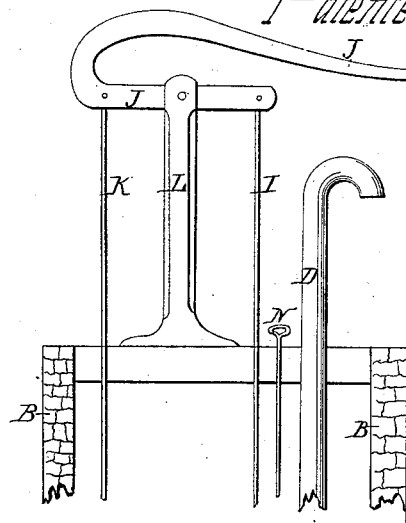


T. W. H. Moseley,

Force Pump.

N^o 1351.

Patented Sep. 30, 1839.



UNITED STATES PATENT OFFICE.

THOMAS W. H. MOSELEY, OF PARIS, KENTUCKY.

MODE OF CONSTRUCTING THE WORKING PARTS OF FORCE-PUMPS FOR WELLS, &c.

Specification of Letters Patent No. 1,351, dated September 30, 1839.

To all whom it may concern:

Be it known that I, THOMAS W. H. MOSELEY, of Paris, in the county of Bourbon and State of Kentucky, have invented
5 an Improvement in the Manner of Constructing Force Pumps, by which they are rendered applicable to the raising of water from common wells and other reservoirs more conveniently and efficiently than in the
10 ordinary manner of making them; and I do hereby declare that the following is a full and exact description thereof.

My pump, and its appurtenances, may be varied in size according to the depth from
15 which water is to be raised, the power to be applied to work it, and other circumstances; the measurements which I shall give for the purpose of description, are to be considered as applicable to wells of ordinary depths,
20 say from twenty to thirty feet.

I make a cylinder, or chamber, of metal, eight inches long, and three inches in diameter, in the interior; this cylinder I place
upon a suitable foundation within the well,
25 and adapt to it a solid piston in the usual manner of making the pistons of force-pumps. In the lower end of this cylinder, there is a valve opening upward, for the admission of water from the well; there is also
30 a rising main, connected to the lower part of the cylinder, through which main the water is to be forced; and this also has a valve at the lower end, opening upward, and not differing in its general construction,
35 or operation, from other force-pumps; my improvement consisting in the manner in which I have combined and connected the levers and rods by which the piston is to be worked.

40 In the accompanying drawing, A, represents the cylinder, or chamber, of the pump, placed within a well B, B, and immersed, wholly, below the surface of the water, C, C, being supposed to be the water line.

45 D, D, is the rising main, which may be an inch and a half, more or less, in diameter in the bore.

E, is a block, or foundation, upon which the cylinder rests, and from this foundation
50 rises a standard F, F, which I have made of six by three inch scantling, and about five, or six, feet long.

G, is a lever of equal arms, working on a fulcrum near the upper end of the standard F, F. To one end of this lever is attached
55 the piston rod H, and also a rod I, leading up to the brake, or handle J. The distance between the fulcrum of the lever G, and the piston rod, I make four inches, and to its opposite end is attached the rod K, which
60 also extends up to the brake, or handle J. The brake has its fulcrum in a standard L, or in any convenient fixture suitable to sustain it.

The rods I, and K, operate upon the lever
65 G, by tension, and may, therefore, be made of stout wire, the piston rod H, which is short, alone requiring to be sufficiently strong to sustain the pressure upon it end-
wise, which is necessary for working the
70 piston, and forcing the water up the rising main.

A principal object had in view in this arrangement of the force-pump, is to secure it effectually against the influence of frost,
75 which I effect by placing it entirely below the surface of the water in the well; and to prevent the freezing thereof in the rising main, I insert a cock therein, as at M, below the surface of the water in the well; this
80 cock, in its ordinary position will not discharge the water which stands above it, so as to cause it to return back again into the well, but by raising a rod, or chain, N, N, it will be so turned as to discharge said
85 water; such cocks are well known to those conversant with hydraulic apparatus, and need not, therefore, be described.

What I claim as my invention, and desire to secure by Letters Patent, in the above
90 described apparatus, is—

The manner in which I have arranged and combined the rods I, and K, operating by tension, with the lever G, the brake J, and the piston rod, so as to actuate a force-
95 pump situated entirely below the surface of the water in a well, or other reservoir; the parts being so arranged in other respects, in the manner set forth, as effectually to prevent the freezing of the water.

THOS. W. H. MOSELEY.

Witnesses:

THOS. P. JONES,
GEORGE WEST.