J. B. & P. L. BOULICAULT.

PUMP.

APPLICATION FILED JUNE 12, 1908.

919,416. Patented Apr. 27, 1909.

FIG. 1.

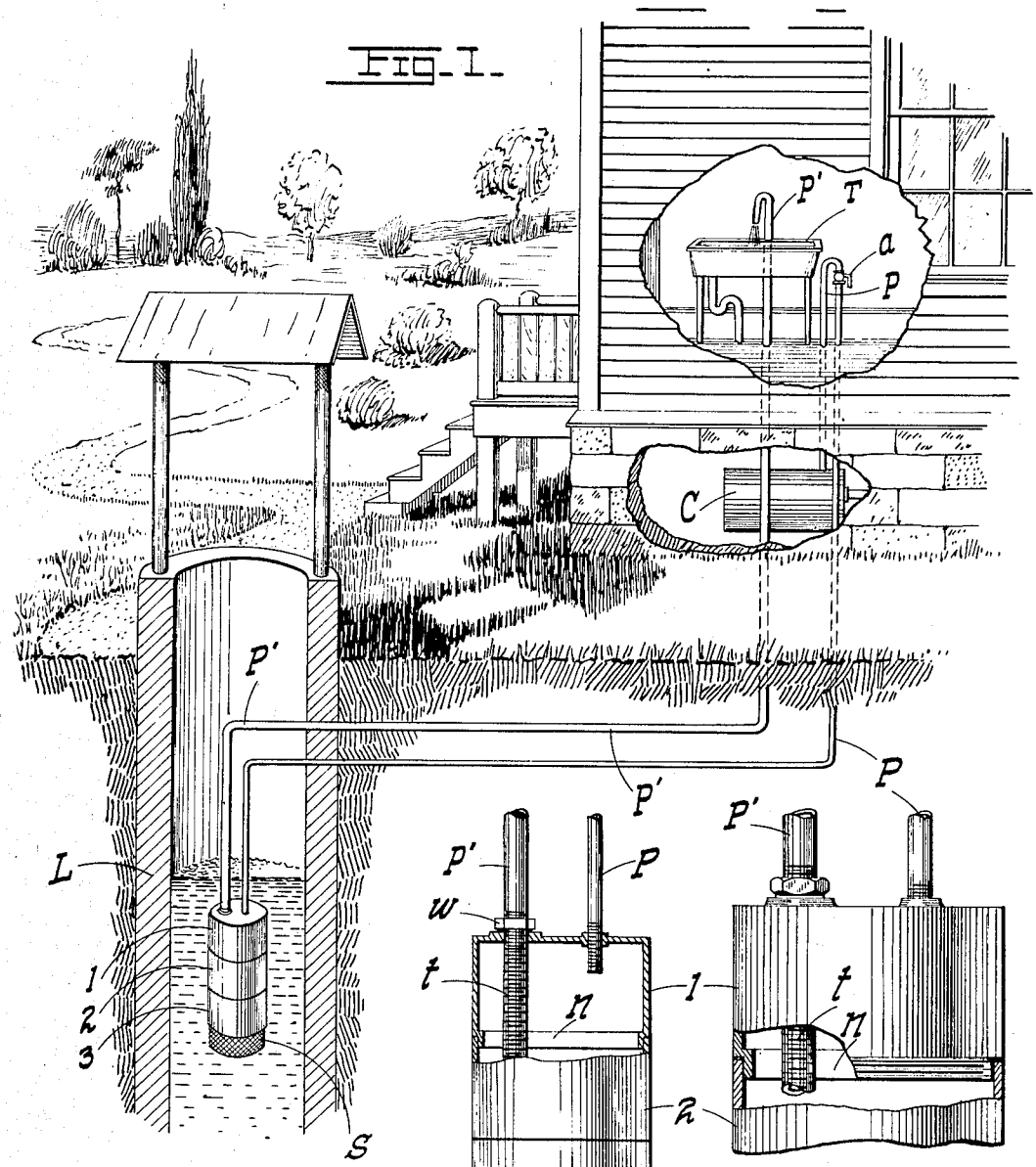


FIG. 2.

FIG. 3.

WITNESSES:

Thos. J. Dawn

W. C. Killeen

INVENTORS

Jean B. Boulicault

and Peter L. Boulicault

BY

Emil Stark

ATTORNEY.

UNITED STATES PATENT OFFICE.

JEAN B. BOULICAULT AND PETER L. BOULICAULT, OF ST. LOUIS, MISSOURI.

PUMP.

No. 919,416. Specification of Letters Patent. Patented April 27, 1909.

Application filed June 12, 1908. Serial No. 438,170.

To all whom it may concern:

Be it known that we, JEAN B. BOULICAULT and PETER L. BOULICAULT, citizens of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Pumps, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

Our invention has relation to improvements in pumps; and it consists in the novel details of construction more fully set forth in the specification and pointed out in the claim.

In the drawings, Figure 1 is a general perspective showing the application of our invention, parts being broken away; Fig. 2 is a combined section and elevation of the pump cylinder; and Fig. 3 is an enlarged elevation and section of two assembled sections of the pump cylinder.

The object of our invention is to construct a pump for the pumping of water from wells, cisterns, and the like, with a view of making the cylinder of the same extensible for increased depths of well; one which will be simple in construction and contain a minimum number of parts; and one possessing advantages better apparent from a detailed description of the invention which is as follows:—

Referring to the drawings, L represents a well casing or lining sunk to any available depth from which the water is to be pumped. Located at any convenient point near the well, is a compressed air cylinder or tank C from which leads a compressed air supply pipe P, the lower end of the pipe passing into the top of the upper section 1 of a pump-cylinder submerged in the water of the well. The pump-cylinder may be made of any number of sections 1, 2, 3, and so forth, depending on the desired capacity of the cylinder, each section having a terminal screw-threaded neck or ring *n* by which it may be screwed or coupled to the next section, and so on, the last section being provided with an intake check-valve *c*, below which is secured a strainer section S as shown. Passing through the top of the pump-cylinder and having its lower end submerged below the surface of the water therein is the discharge or delivery-pipe P′, the end in the cylinder being provided with any approved form of check-valve *d*, to prevent the water from returning into the pump cylinder. The pipe P′ continues upwardly, terminating in a discharge spout or goose-neck over a tank or basin T, where the water is to be utilized.

Should it be desired to reduce the capacity of the pump-cylinder a result readily accomplished by removing one of the sections thereof, for example the middle section 2, it would become necessary to correspondingly reduce the length of the pipe P′ within the cylinder thus contracted or shortened. For this purpose we provide the lower terminal of the pipe P′ with a screw-threaded portion *t* over the outer portion of which is passed a nut *w* forced up against the top of the cylinder. When the latter is shortened, the pipe P′ is correspondingly withdrawn to accommodate itself to the new dimension of such cylinder, whereupon the nut *w* is screwed down against the top of the cylinder. The nut *w* thus serves to support the pipe P′ at any height above the bottom of the pump-cylinder to which it may be desirable to set it. The pipe P is provided at a convenient point with a valve *a* of ordinary construction, by which the compressed air may at any time be turned into the pump-cylinder. The compressed air in the cylinder entering through the pipe P, forces the contents of the pump cylinder into the basin T. The pump cylinder fills from time to time through the gate or check-valve *c*.

Having described our invention, what we claim is:—

A pump comprising a source of compressed-air supply, a pump-cylinder composed of a series of sections having screwed connections, an intake valve for the bottom section, a strainer for the pump-cylinder located below the intake, a compressed-air supply pipe leading from the source of supply to the top of the pump cylinder, a discharge pipe entering freely through the top of the pump cylinder and terminating in a check-valve below the surface of the water, and having a screw-threaded terminal provided with a nut engaging the top wall of the cylinder, whereby the length of pipe within the cylinder may be adjusted, substantially as set forth.

In testimony whereof we affix our signatures, in presence of two witnesses.

JEAN B. BOULICAULT.
PETER L. BOULICAULT.

Witnesses:
W. C. KILLEEN,
F. C. B. LE GRO.