

(No Model.)

LAFAYETTE D. RAILSBACK.
PUMP.

No. 257,383.

Patented May 2, 1882.

Fig. 1.

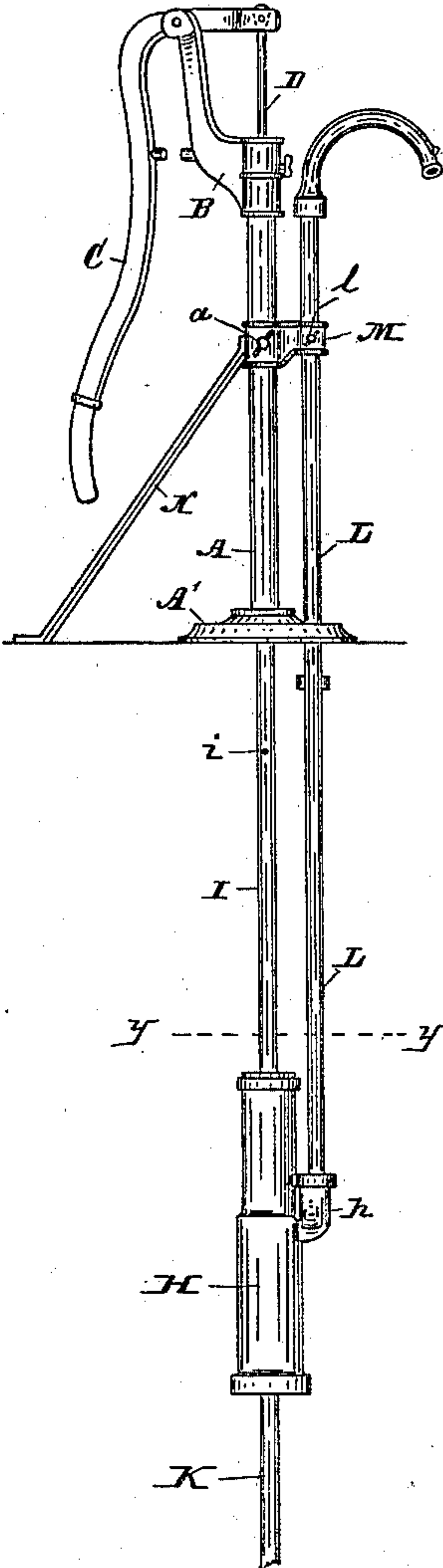


Fig. 2.

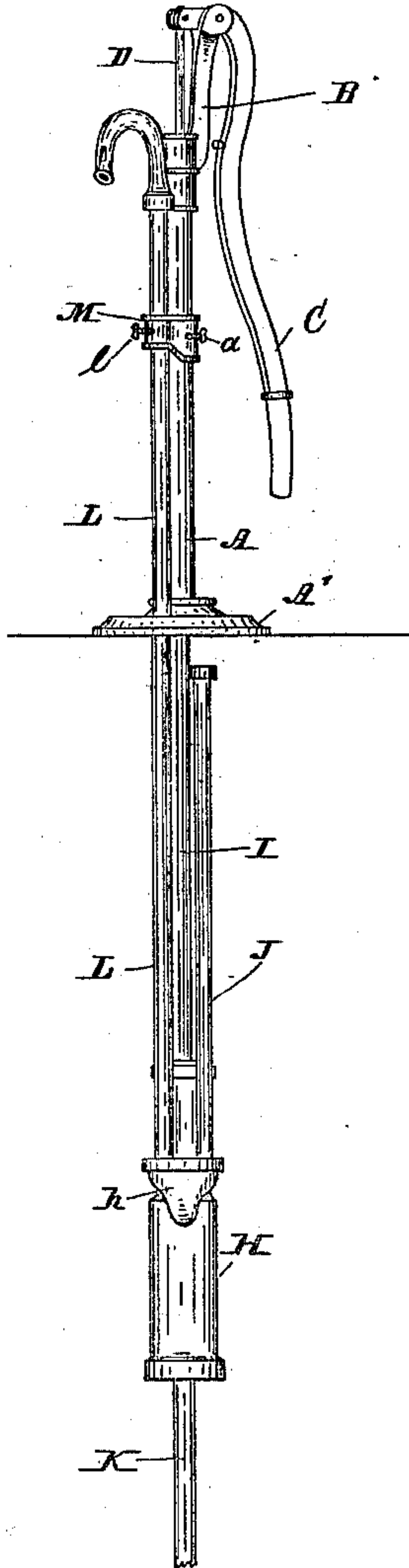


Fig. 3.

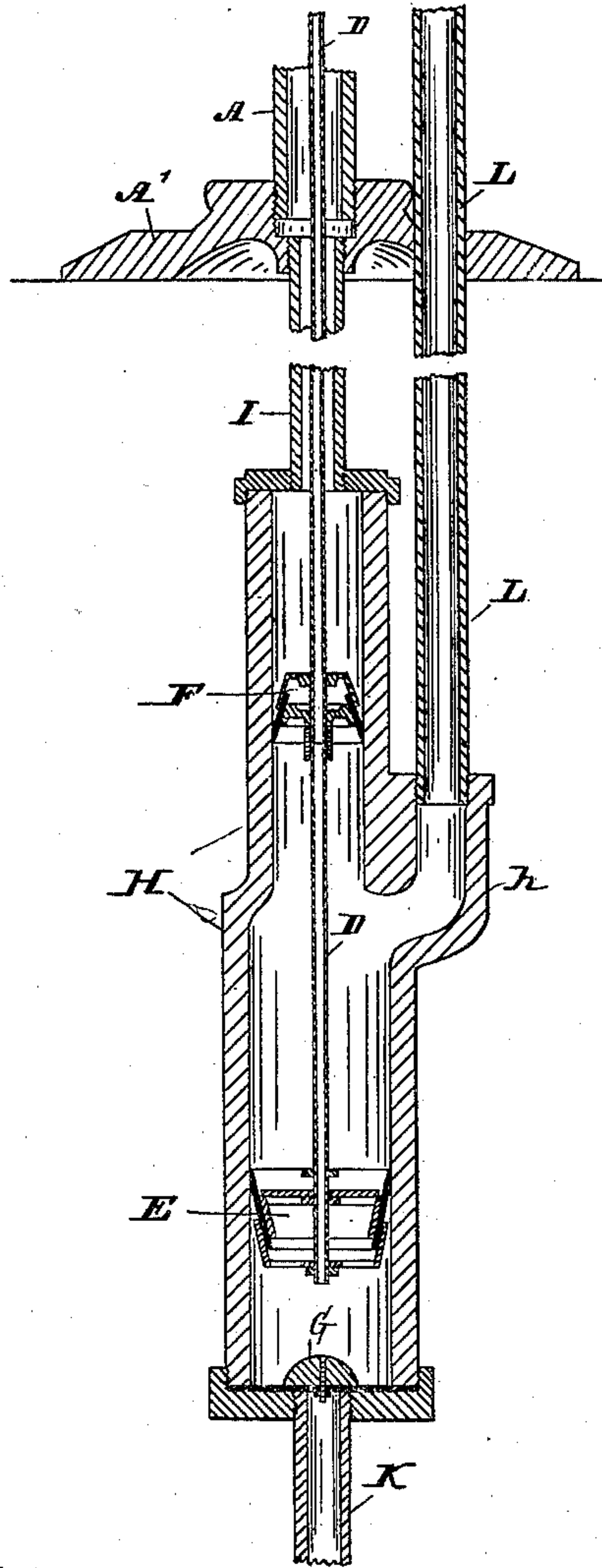
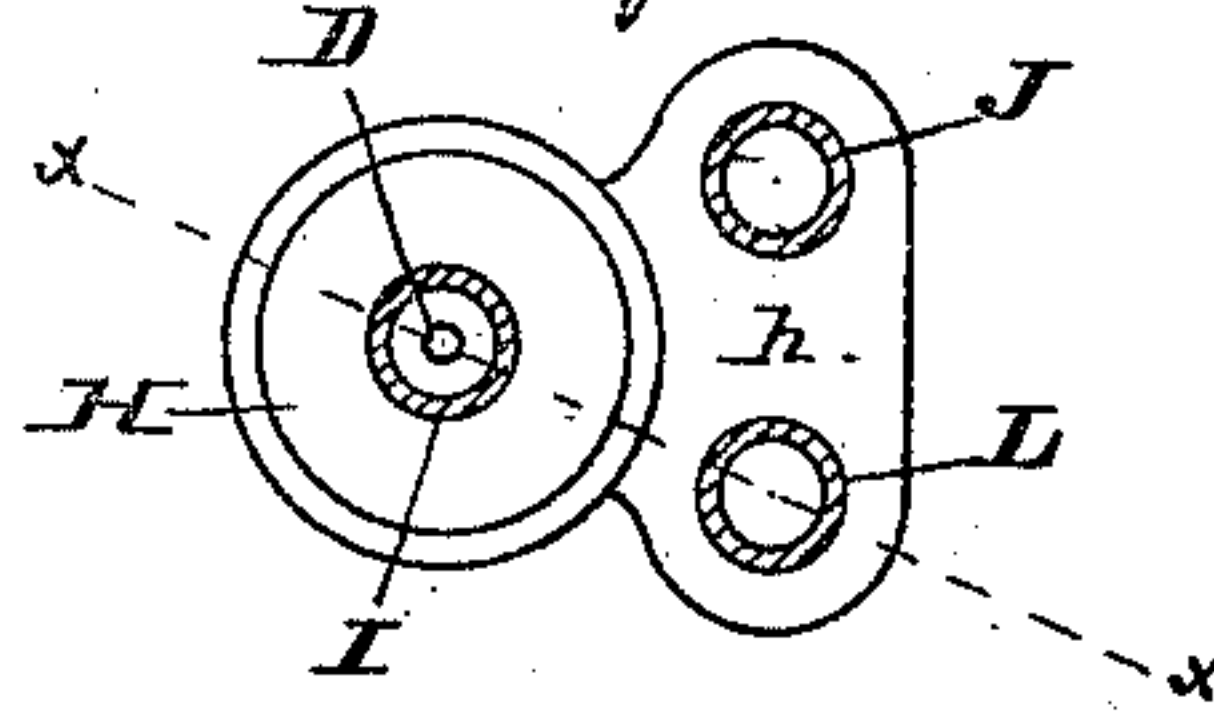


Fig. 4.



WITNESSES.

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PUMP.

SPECIFICATION forming part of Letters Patent No. 257,383, dated May 2, 1882.

Application filed September 15, 1881. (No model.)

To all whom it may concern:

Be it known that I, LAFAYETTE D. RAILSBACK, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Pumps, of which the following is a specification.

The object of my said invention is to improve the construction of force-pumps for general use; and it consists of certain details of construction and arrangement, as will hereinafter be more fully explained.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a side elevation of a pump embodying my improvements. Fig. 2 is a similar view when the pump is turned at nearly right angles to the position shown in Fig. 1. Fig. 3 is a vertical section of portions of the same on the dotted line $x x$, and Fig. 4 is a horizontal section looking downwardly from the dotted line $y y$.

In said drawings, the portions marked A represent the body of the pump; B, the bracket for the handle; C, said handle; D, the valve-rod; E F, the valves thereon; G, the check-valve; H, the cylinder; I, a "set-length," connecting the cylinder and the base of the pump-body; J, the air-chamber; K, the suction-pipe; L, the discharge-pipe; M, a clamp connecting the parts A and L, and N a brace attached thereto and to the platform surrounding the pump.

The body A is simply a piece of pipe screwed into the base A' at the lower end and entering the bracket B at the top.

The bracket B simply serves as a top to the pump and to support the pump-handle.

The pump-handle C, valve-rod D, and valves E F G are all of a not unusual construction, and serve only the usual purposes of such parts in similar pumps, and therefore need no particular mention.

The cylinder H, while it is not much different in appearance from those heretofore in use, is more conveniently and economically constructed. The air-chamber and discharge-pipe have both a place for attachment to the cylinder upon a single projection, h , upon one

side of said cylinder, instead of being located upon different sides, as is common. The top of the cylinder is cast partially closed or covered with a cap, so that the pipe or set-length I can be screwed centrally therein.

The set-length I is simply a piece of pipe, which is screwed fast to the base A', as shown, directly below the body A of the pump, and to the top of the cylinder H. In this position this pipe secures the cylinder and pump-body in an unvarying relation to each other, acts as a stay for the pump-rod D, preventing it from bending, and also as a means whereby the pump may be "primed" should the valves wear loose and the water be thereby permitted to "run down." It is provided near the top with an opening, i , which, should the upper valve, F, permit any water to pass beyond it, will serve as an overflow-hole, and when the water once reaches that point the lower valve, being tight, prevents it from going lower, and thus saves the time and labor which would otherwise be required to pump the water up to said point.

The air-chamber J, suction-pipe K, and discharge-pipe L are all of ordinary construction, and will be clearly understood by referring to the drawings.

The clamp M is a casting adapted to surround the pipe A, which forms the body of the pump, and also the discharge-pipe L, and secure them in unvarying relation. It also serves as a point whereto the brace N can be securely attached. It is secured to the parts A and L by the set-screws a and l .

The brace N is simply an ordinary brace, secured to the clamp M or to some other suitable point on the body A and to the platform on which the pump is mounted.

I desire it to be distinctly understood that I limit myself in my claims to a force-pump having a two-sized cylinder having its discharge-pipe outside of its body and set-length, and I call particular attention to the fact that this set-length is not for the same purpose as the water-conveying pipe which is similarly located in common pumps.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

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1. In a force-pump constructed as described, the combination of the cylinder H, having its top end closed, the set-length I, secured by an air-tight joint to said top and to the base of the pump-body, and provided with the opening *i*, thus serving the three purposes of a set-length, a stay for the pump-rod D, and an overflow-pipe for the cylinder, and the air-chamber J and discharge-pipe L, secured to a single projection, *h*, upon one side of said cylinder, all substantially as shown and described, and for the purposes set forth.

2. The combination of the body A, formed of pipe, secured to the base A' at the bottom, and having the bracket B upon its top, the discharge-pipe L, and the clamp M, connecting

said body and said discharge-pipe, all substantially as shown and specified.

3. The combination of the body A, bracket B, handle C, pump-rod D, valves E F G, cylinder H, set-length I, air-chamber J, suction-pipe K, and discharge-pipe L, all constructed, arranged, and operating substantially as shown and described, and for the purposes specified.

In witness whereof I have hereunto set my hand and seal at Indianapolis, Indiana, this 10th day of September, A. D. 1881.

LAFAYETTE D. RAILSBACK. [L. S.]

In presence of—

C. BRADFORD,

JAMES B. LIZIUS.