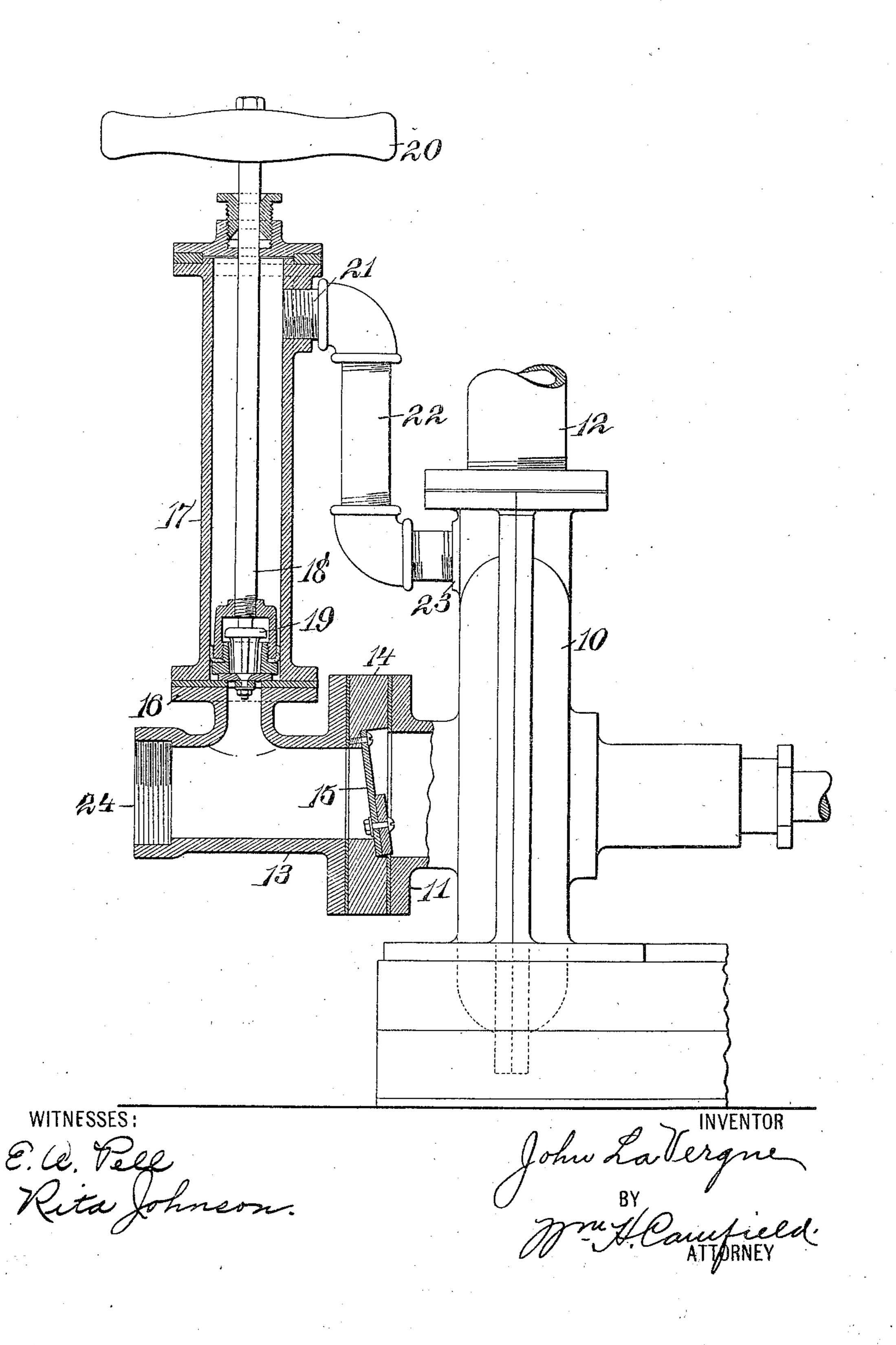
J. LA VERGNE. PRIMER FOR PUMPS. APPLICATION FILED AUG. 1, 1906.



INTED STATES PATENT OFFICE.

PRIMER FOR PUMPS.

No. 868,192.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed August 1, 1906. Serial No. 328,689.

To all whom it may concern:

Be it known that I, John La Vergne, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented cer-5 tain new and useful Improvements in Primers for Pumps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had 10 to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to a primer for pumps, and preferably centrifugal pumps, and is designed to fill the 15 pump, preliminary to starting it, to insure the suction necessary.

As heretofore made, the primers have been very large and bulky and have taken up a great deal of room, and they have also had a multiplicity of valves that 20 require considerable attention.

This invention economizes space, furnishes a more simple device, and is more easily operated.

I illustrate, in the accompanying drawing, a centrifugal pump 10 having the inlet portion 11 and the out-25 let 12. Secured to the inlet portion is a cylindrical member 13, the free end 12 of which is attached to a suitable pipe furnishing the supply of water or liquid. On the end 14, of the cylindrical portion 13, is a check valve 15, and transversely arranged on the cylindrical 30 casing 13, resting on the part 16, is a pump 17 supplied with the pump rod 18 and the valve 19, this pump being a lift pump and adapted to be manually operated by the handle 20. At the top of this vertical lift pump

is an outlet 21, and this is connected by the pipe 22 with an opening 23 in the side of the pump near the top. 35 ...

When it is desired to operate the pump and to establish a suction, the pump 10 must be filled with water, and to accomplish this the lift pump is operated which draws water through the opening 24, through the lift pump 17 and the pipe 22 into the pump 10 until it is 40 filled, the water being held in the pump by the check valve 15. When the pump 10 is operated the valve 15. opens, and the pressure of water in the pump insures the closing of the valve 19. This primer is small and takes up but little room, is economically manufac- 45 tured, and its simplicity makes its operation insured.

Having thus described my invention, what I claim is:--

1. In a device of the kind described, the combination of a pump having an inlet pipe leading thereto, and baving 50 a check valve therein, with a lift pump arranged transversely on the inlet pipe beyond the check valve, means for manually operating the lift pump, and an outlet pipe leading from the lift pump to the upper part of the pump for charging the same whereby the priming is done by a pipe 55 other than the inlet pipe.

2. A primer for pumps comprising a pump having an inlet pipe and an outlet pipe, a check valve in the injet pipe, a lift pump having its inlet on the inlet pipe of the main pump beyond the check valve, means for manually 60 operating the lift pump, and a second pipe connecting the lift pump with the first pump near the top thereof to prime the first pump, whereby the check valve is kept closed until the main pump is operated.

In testimony, that I claim the foregoing, I have hereunto 65 set my hand this 30th day of July 1906.

JOHN LA VERGNE.

Witnesses:

E. A. PELL, WM. II. CAMFIELD.