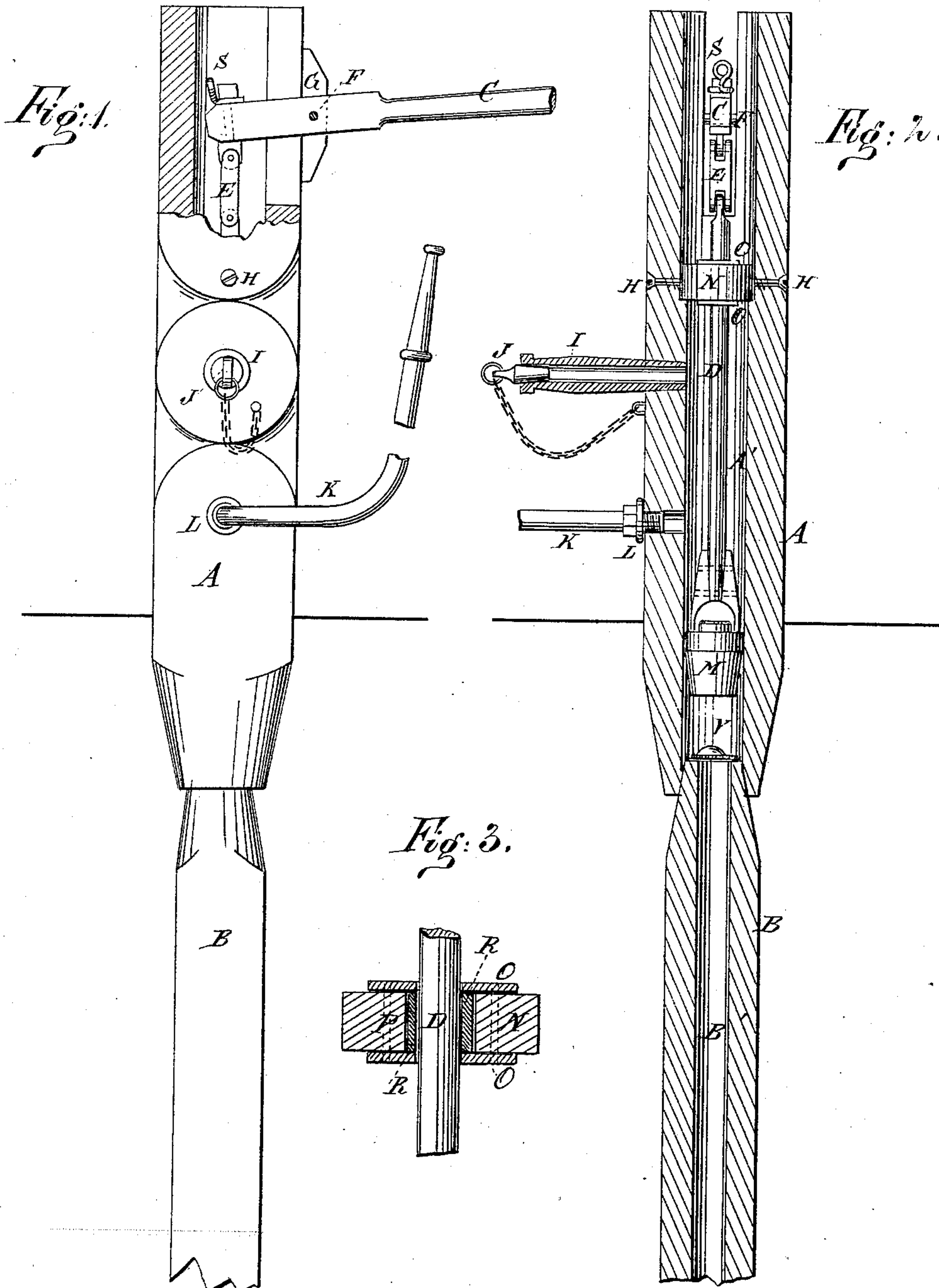


C. J. SWANSON.
Pump.

No. 223,188.

Patented Dec. 30, 1879.



WITNESSES:

Chas. N. Nier
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INVENTOR:

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UNITED STATES PATENT OFFICE.

CARL J. SWANSON, OF STOCKWELL, INDIANA.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **223,188**, dated December 30, 1879; application filed June 27, 1879.

To all whom it may concern:

Be it known that I, CARL J. SWANSON, of Stockwell, in the county of Tippecanoe and State of Indiana, have invented a new and useful Improvement in Pumps, of which the following is a specification.

The object of my invention is to provide a pump that can be used as a force pump or as an ordinary suction-pump.

The invention consists in a stopper composed of an inner ring of elastic material, an outer wooden ring, and two flat metallic rings, and in combining a handle, link, piston-rod, and hook, all as hereinafter described.

In the drawings, Figure 1 is a front elevation and section of the upper part. Fig. 2 is a vertical cross-section. Fig. 3 is a detail sectional view of the stopper.

Similar letters of reference indicate corresponding parts.

A is the body of the pump, and is bored out so as to form the barrel A'. B is a pipe leading down to the water. C is the handle of the pump, and is pivoted between the jaws G G, which are fixed to the side of the pump. To the end of the shorter lever-arm of C the piston-rod D is hung by means of the link E. The piston M and the check-valve V are as in the ordinary pump.

I is the spout, which can be closed by the stopper J. L is a plug, to which the hose K is attached.

N is a stopper, that is held in position by the screws H H, and through which the piston rod D passes. This stopper is composed of an inside ring, R, of rubber, leather, or some suitable like material, and an outside low wooden ring, N, of the same diameter as the pump-barrel. On the top and bottom are the flat metal rings O O. The pins P P hold these parts together. The hook S is for the application of an additional handle in case more power is required.

The pump is operated in the following manner: For general use the hose K is detached from the plug L, and this closed by means of a cap. The pump will then operate like an ordinary suction-pump; but if the pump is to force the water the spout I is closed by means of the stopper J, and the hose is attached to the plug. If the pump is operated, the water will rise in the barrel until it reaches the stopper N, which prevents it from rising any higher and flowing out of the top of the pump. As the piston M constantly forces more water into the barrel, a very great pressure is produced in the same, and under this great pressure the water passes out of the barrel through the hose. One man can thus produce sufficient pressure to throw a stream of water over a two-story house.

The packing R of the stopper N forms a close joint, but allows the piston-rod to pass up and down without producing too much friction. Any ordinary suction-pump can very easily be changed to a force-pump according to my invention, and thus a good and effective force-pump is obtained for very little money.

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

1. Surrounding the piston-rod D, the stopper N, composed of the inner ring, R, of rubber, leather, or like material, and outer wooden ring, N, and of the two flat metal rings O O, for the purpose of preventing the water from flowing out of the top of the pump.

2. The combination of the handle C, of link E, of piston-rod D, and of additional hook S, as and for the purpose set forth.

CARL J. SWANSON.

Witnesses:

JOHN A. CARD,
L. G. HAMILTON.