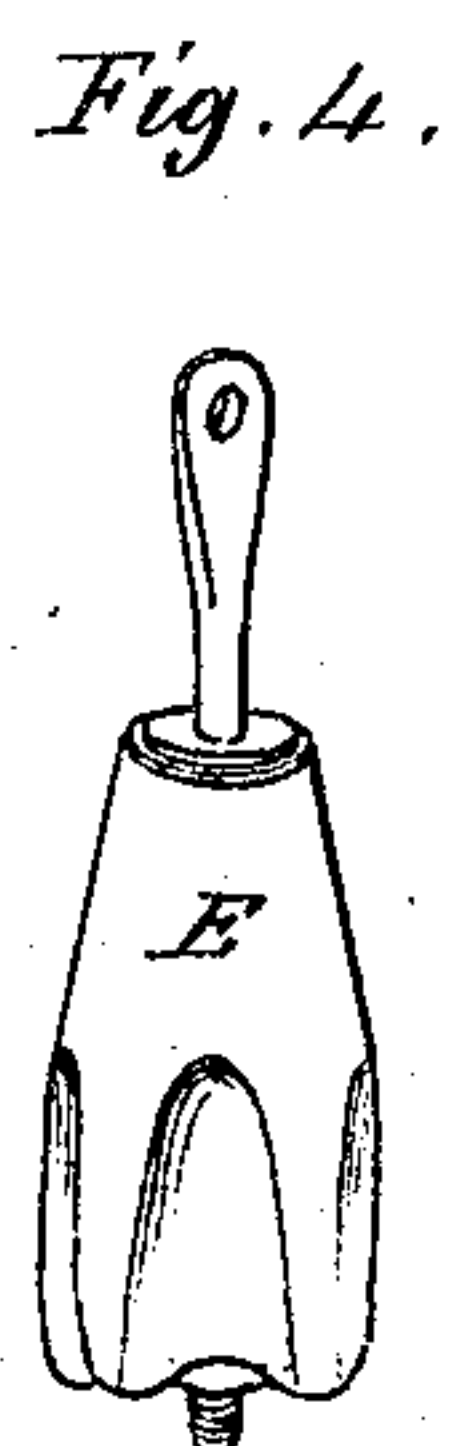
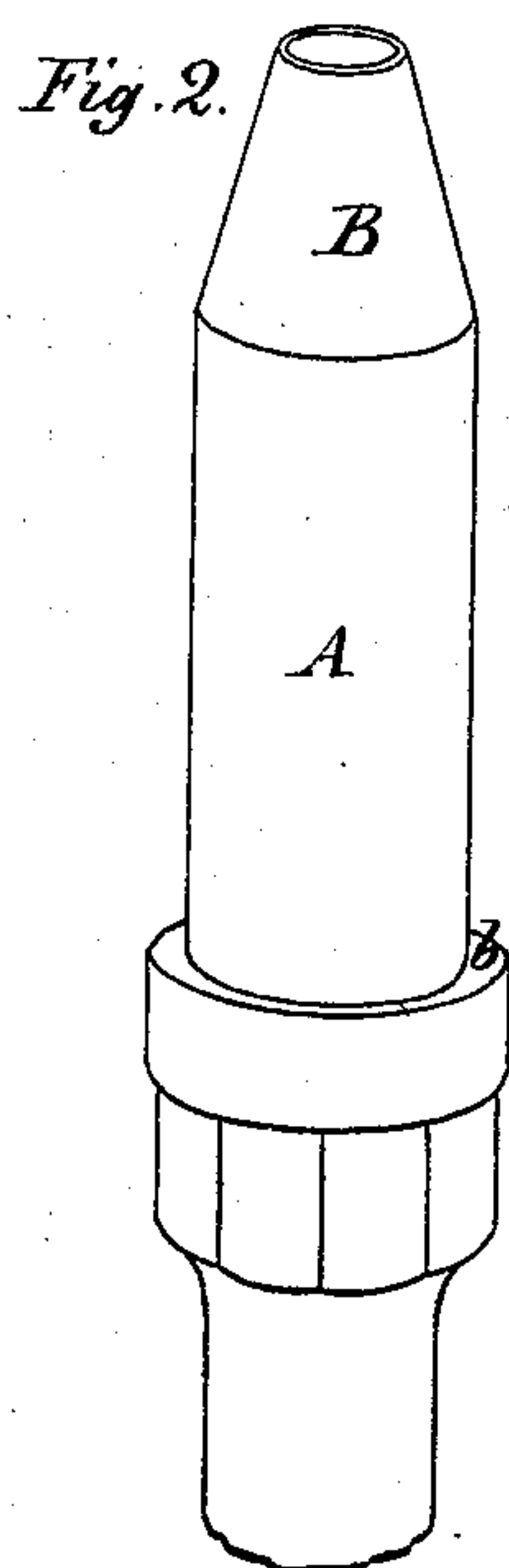
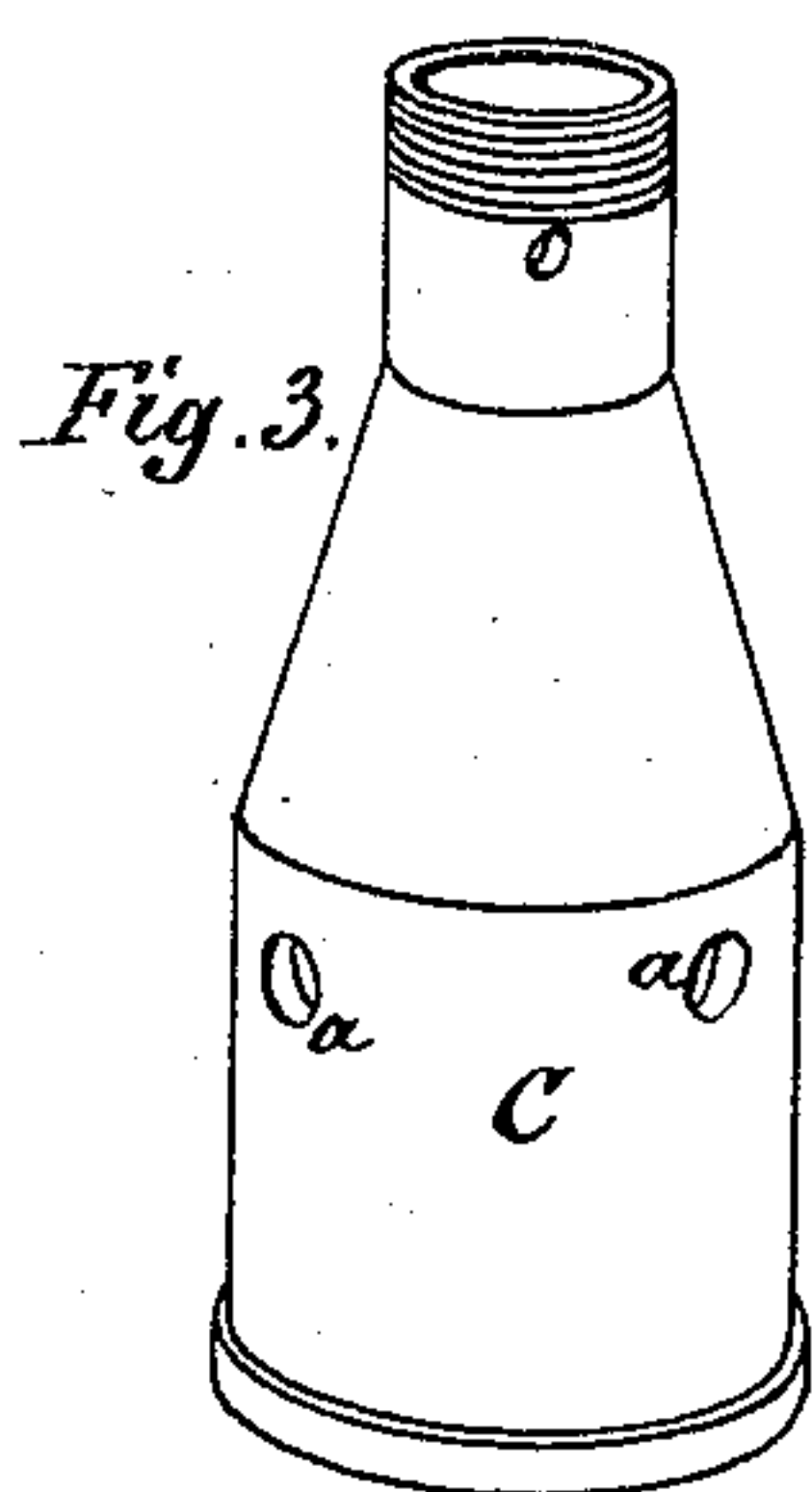
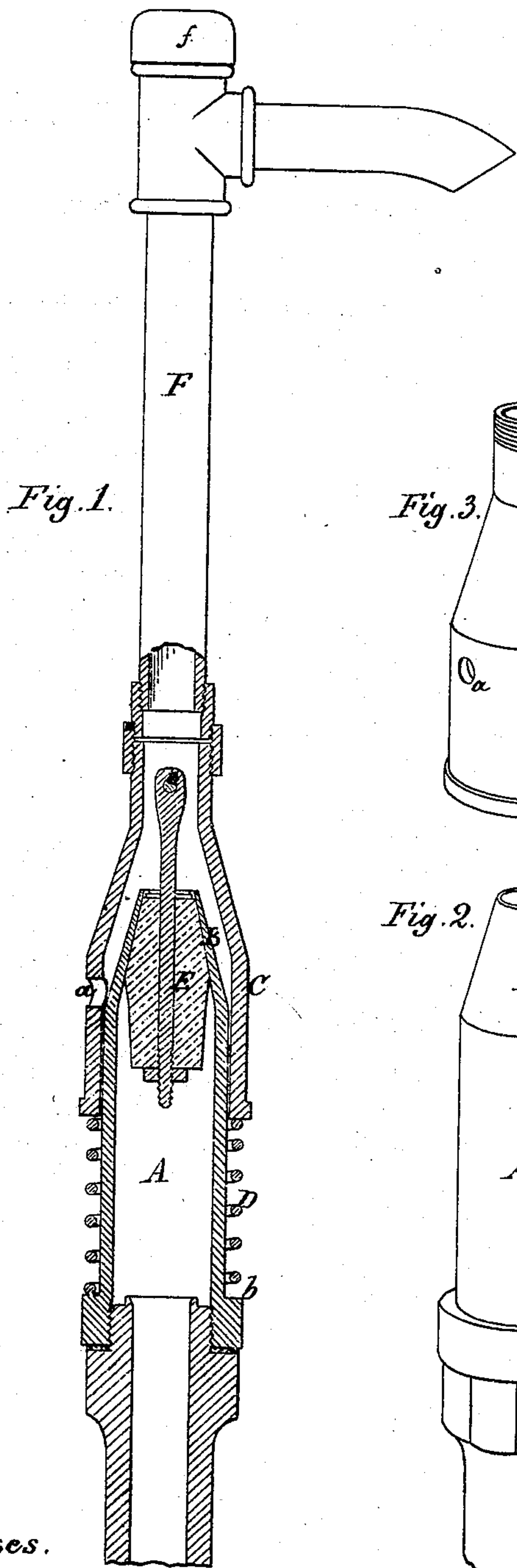


JOSEPH H. LEWIS.  
Stop and Waste Valve Apparatus.

No. 127,616.

Patented June 4, 1872.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

JOSEPH H. LEWIS, OF BINGHAMTON, NEW YORK.

## IMPROVEMENT IN STOP AND WASTE-VALVE APPARATUS.

Specification forming part of Letters Patent No. 127,616, dated June 4, 1872.

### SPECIFICATION.

I, JOSEPH H. LEWIS, of Binghamton, in the county of Broome and State of New York, have invented certain Improvements in Stop and Waste-Valve Apparatus, of which the following is a specification:

My invention relates to the combination of stop and waste valves and a tube connecting with the main pipe, which tube has a supplementary movable tube or sleeve, which, by its inward movement opens the stop valve and closes the waste, and by its outward movement closes the stop and opens the waste valve; the object of the invention being to prevent freezing, and by the waste of the fluid which would otherwise remain and become stale in the pipe connecting with the spout, supply fresh and cool water directly from the main pipe.

Figure 1 in the accompanying drawing is a vertical transverse section of an apparatus involving my invention. Figs. 2 and 3 are the stop and waste valve tubes separated. Fig. 4 is the stop-valve detached.

A is the stop-valve tube, which has an inverted valve-seat in the upper end, the outer part of which is made in the form of a truncated cone and constitutes the waste-valve B. This tube connects with the main pipe by an internal and external screw, in the ordinary manner. C is a movable supplementary tube fitting outside of the tube A, and also has a conical valve-seat in the end for the valve B.

This tube has holes, *a a*, for the discharge or "drip" of the waste-water. D is the spiral spring which encircles the tube A, the lower end bearing upon the shoulder *b*, and the upper end against the end of the supplementary tube C. E is the stop-valve, which closes upward, and is made in a conical form and provided with a stem extending to and connecting with the neck of the tube C by means of the pin *e*. F is the spout-pipe, surmounted with the knob *f*, and connected with the tube C by an external and internal screw. This pipe may be incased and an appliance attached to hold it down when a continued flow of water is required.

This improvement is particularly applicable to hydrants on the account of its non-freezing qualities. When used for ordinary purposes, the tube C is pressed in by means of the knob *f*, which contracts the spring D, opens the valve E, and closes upon the end of the tube A, or waste-valve B. The stop-valve is automatically closed and the waste-valve opened by the reaction of the spiral spring.

I claim as my invention—

The combination of the tube A and supplementary tube C, valves E and B, spring D, and spout-pipe F, all constructed as herein described, for the purpose set forth.

JOSEPH H. LEWIS.

Witnesses.

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