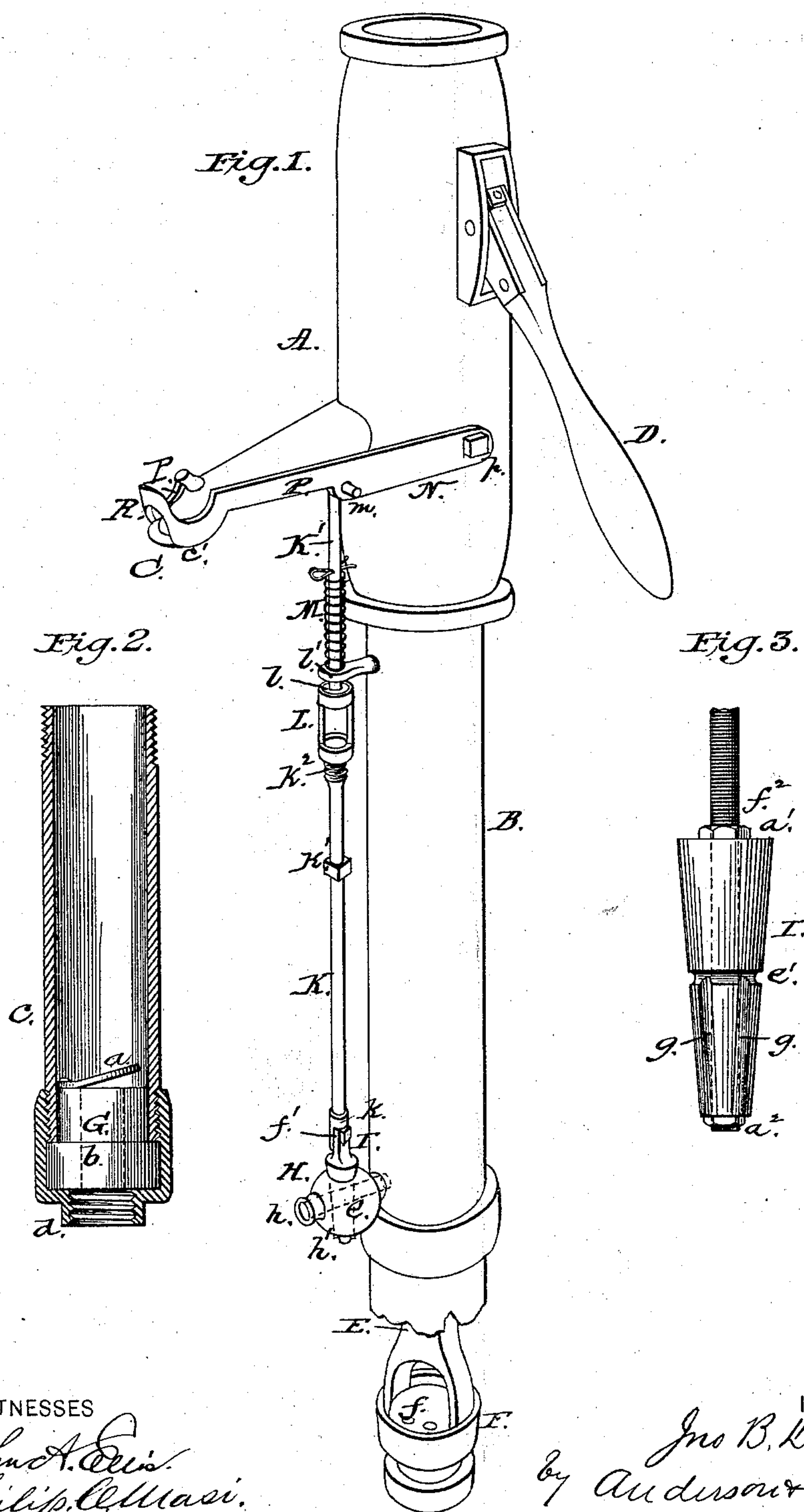


(No Model.)

J. B. DRAKE.
Pump.

No. 238,097.

Patented Feb. 22, 1881.



WITNESSES
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UNITED STATES PATENT OFFICE.

JOHN B. DRAKE, OF GOSHEN, INDIANA.

PUMP.

SPECIFICATION forming part of Letters Patent No. 238,097, dated February 22, 1881.

Application filed December 30, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. DRAKE, a citizen of the United States, resident at Goshen, in the State of Indiana, have invented certain new and useful Improvements in 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 to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification, in which—

Figure 1 represents a perspective of my pump, and Figs. 2 and 3 are detail views of the same.

This invention relates to pumps, more particularly to attachments to prevent freezing.

The invention consists in the construction hereinafter described.

In the annexed drawings, A is a pump having tube B, outlet C, handle D, connecting-rod E, plunger F, with valve *f* and stationary valve G, consisting of valve proper, *a*, wooden seat *b*, cylinder *c*, and nut *d*.

H is an outlet-tube leading from the tube B, somewhat above the water-line, having the passage *h* and transverse valve-seat *h'*.

I is a valve, fitted to the seat *h'*. This seat may be conical, and the valve of the same shape, having a passage, *e*, registering with passage *h*, when the valve is in position, or a circumferential groove, *e'*, on a line with passage *h*, with grooves *g* running down therefrom, or the valve may have both constructions. Instead of a valve thus formed there may be one with a transverse passage and pivoted in the outlet H. This valve may be made of metal, with an eye, *f'*, or of wood, with a tube, *f''*, running through.

K is a rod, having its lower end, *k*, connected to eye *f'*, or running through tube *f''*, and held adjustably by nuts *a'* *a''*. This rod has an angular portion, *k'*, for a wrench, and is screw-threaded at *k''*, and connected by a turn-buckle, L, to another rod, K', said rod K' having an enlarged end, *l*, on which the turn-buckle swivels, and is held in a guide-eye, *l'*, fastened to the pump.

M is a spring surrounding rod K', above eye *l*, having its lower end bearing on said eye

and its upper end against a projection on rod K' or a pin, the latter to be withdrawn in using the pump continuously. At its upper end, *m*, rod K' is made fast to a lever, N, which is pivoted to the pump-stock. This lever is composed of two arms, P P, pivoted at *p p*, extending forward and converging over the end of the outlet C in an upturned lip, R, just above the mouth *c'* of the outlet. This lever may extend backward and have a weight upon its rear end to assist spring M. It also may be made of one arm only, extending around above mouth *c'*; but the construction shown is preferable.

When the pump is not in use the spring M lifts up the rods K' K and valve I so that the valve is opened.

In use the bucket is hung upon lip R, and its weight, overcoming the upward pressure of spring M, forces valve I down and closes the same. This prevents the escape of water from tube H, and the water can be pumped, as usual. As soon as the bucket is removed the valve is opened and the water above valve G runs out, and the tube above the water-line being empty all danger of freezing is prevented.

In summer, water being kept out of the tube the first pumpings will be cool.

To prevent waste the tube H can be conducted to the source of supply.

What I claim is—

1. An outlet to prevent freezing having a valve-seat, a valve, and means for automatically closing the same when the bucket is applied, all combined substantially as described.

2. An outlet, a valve seated therein, a lever for receiving the bucket, and a connecting-rod for operating the valve, all combined substantially as described.

3. An outlet, a valve seated therein, a lever for receiving the bucket, a connecting-rod for closing the valve, and a spring for opening the valve, all combined substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN B. DRAKE.

Witnesses:

ADAM YEAKEL,

WILFRED P. DUGDALE.