

R. WARD.

Pumps.

No. 124,024.

Patented Feb. 27, 1872.

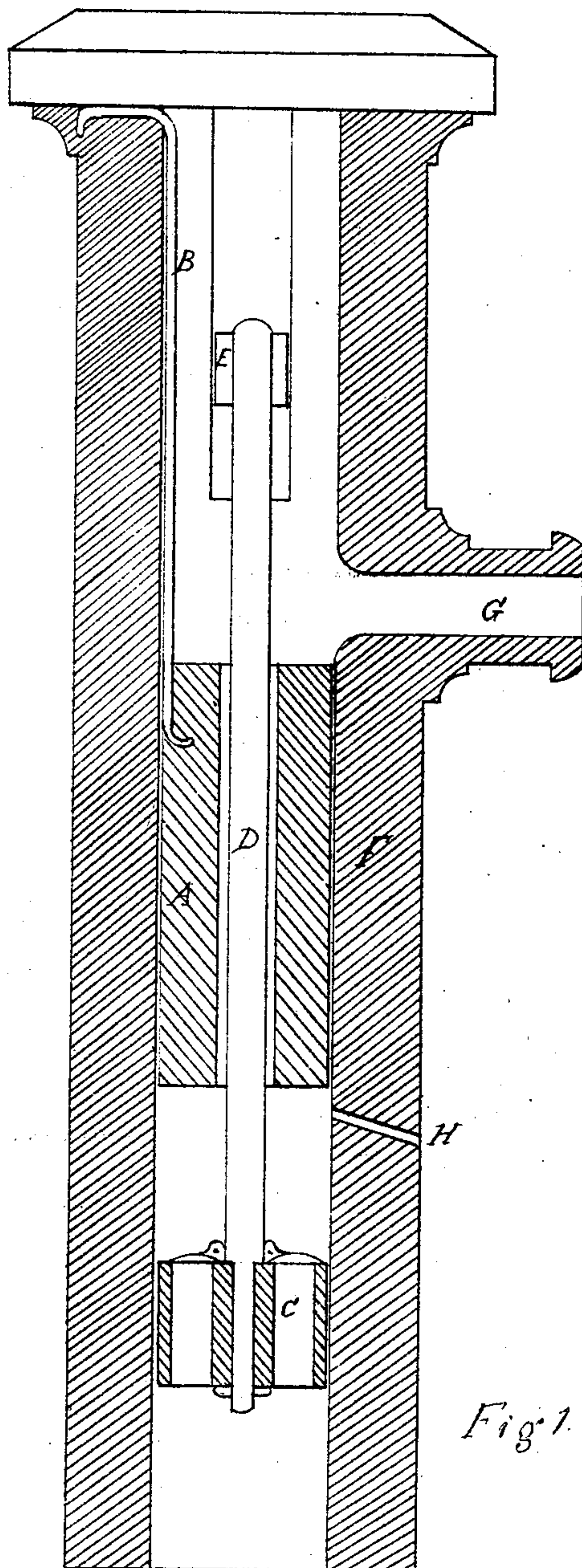


Fig 1.

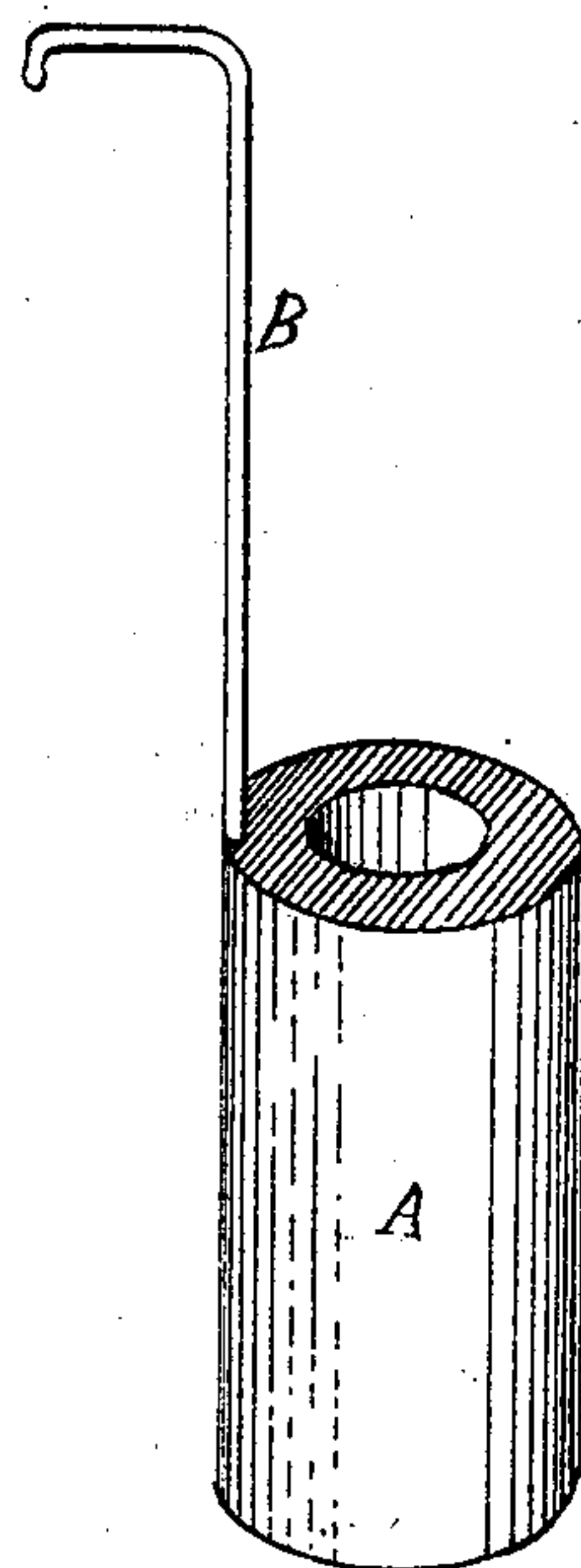


Fig 2

Witnesses { Wm H Wood
E A Hunt

Inventor
Rivers Ward

UNITED STATES PATENT OFFICE.

RIVERA WARD, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. 124,024, dated February 27, 1872.

Specification describing an Improvement in Pumps, invented by RIVERA WARD, of Newark, in the county of Essex and State of New Jersey.

My invention relates to an improvement in all that class of well and cistern pumps in which the bore is of such size as to admit of the withdrawal of the plunger from the top, and which are designed to be vented between the plunger and the spout or discharge; and consists of a bushing held in position between the vent and discharge. Said bushing having such a bore as shall admit of the free action of the plunger-rod, and of the passage of the water; the object of my invention being to reduce the capacity of the bore between the vent and discharge, thereby enabling the water to be brought to discharge with less number of strokes of the plunger than without said bushing. A rod is secured to the bushing, and extending up is secured to the top of the pump by means of a hook, screw, or other convenient mode, thereby holding the bushing in its proper position. The bushing being fitted loosely to bore of pump can readily be withdrawn with the plunger whenever it becomes necessary to repair the latter.

Figure 1 is a vertical section of a pump embodying my invention. Fig. 2 is a perspective view of my invention withdrawn from the pump.

A is the bushing. B is the rod secured to the bushing A at one end, and to the top of the pump at the other. C is the plunger. D the plunger-rod connected to the handle E. F is the body of the pump, in which the plunger C works. G is the spout or discharge. H is the vent, the object of which is that the water may run down to that level within a short time after the pump has been used, to prevent the water from freezing in winter and becoming warm and stale in summer.

The objection to venting has been heretofore the greatly increased labor necessary to cause a flow of water, which objection my invention obviates, as with it, when properly constructed and applied, the first full stroke of the plunger fills the water-way of the bushing A, and at the second stroke water flows from the spout or discharge G.

I claim as my invention—

1. The bushing A, substantially as and for the purpose hereinbefore set forth.
2. The rod B, in connection with the bushing A, substantially as and for the purpose hereinbefore set forth.

RIVERA WARD.

Witnesses:

R. DAVIS WOODWORTH,
WM. H. DODD.