

H. R. BAKER.  
Pump.

No. 223,631.

Patented Jan. 20, 1880.

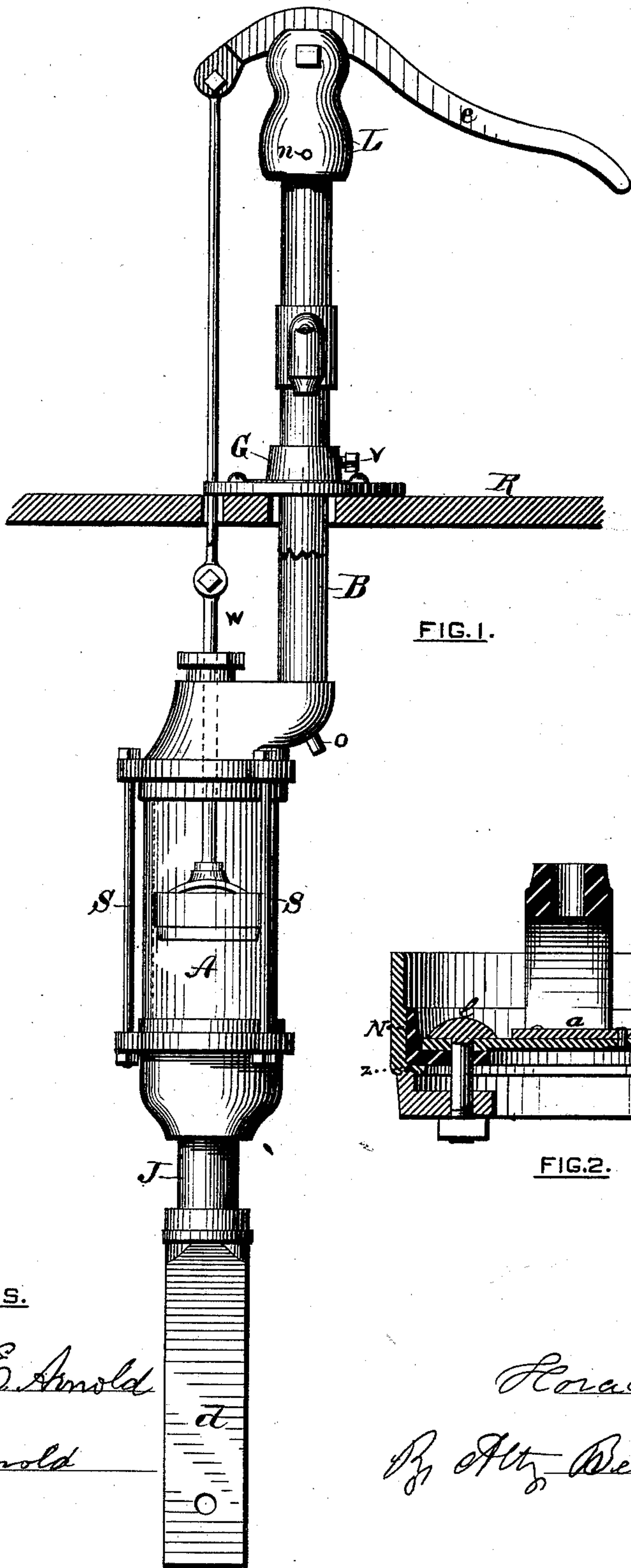


FIG. 1.

FIG. 2.

WITNESSES.

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# UNITED STATES PATENT OFFICE.

HORACE R. BAKER, OF FISKEVILLE, RHODE ISLAND.

## PUMP.

SPECIFICATION forming part of Letters Patent No. 223,631, dated January 20, 1880.

Application filed August 11, 1879.

*To all whom it may concern :*

Be it known that I, HORACE R. BAKER, of Fiskeville, in the county of Providence and State of Rhode Island, have invented certain  
5 Improvements in Pumps, of which the following is a full and correct description, reference being had to the accompanying drawings, forming a part of this specification.

The nature of this invention consists in an  
10 improvement in the plunger, whereby the packing is held more securely in place by putting a row of points on the follower that holds the packing to the main part of the plunger, the points pressing into an annular recess in  
15 the bottom of the plunger; also, in the mode of securing the parts of the plunger and valve together.

Figure 1 shows an elevation of the pump and pipes. Fig. 2 is a vertical cross-section  
20 of the plunger or bucket on an enlarged scale.

A is the cylinder of the pump, placed about six feet below the platform R. B is a pipe leading up from the pump through the platform, to convey the water and form a support  
25 for the working-lever *e*.

The body of the pump is made, preferably, of a glass cylinder held between two heads which are secured together by the rods S S.

The pipe *d* is of wood, and extends to the  
30 bottom of the well. It is connected to the pump by a short piece of enameled pipe, J. A small vent is made in the pump-cap at *o*, to relieve the pipe above of water when it is not in use.

G is a collar fitting loosely on the pipe B, and provided with one or more set-screws, *v*, to fasten it on the pipe. A flange on the lower edge of the collar has holes in it to receive bolts, by which it is fastened down to the plat-  
40 form.

A cap, L, is screwed onto the upper end of the pipe B, with a notch in it to hold the lever *e*. A small hole, *n*, in this cap, into which a screw-plug is fitted, allows it to be used as an air-chamber, when the pump is used as a force-  
45 pump, by having the plug screwed in; and when the pump is used as a lifting-pump, by leaving the plug out, the water is allowed to rise in the pipe above the outlet, and thus equalize the flow and prevent splashing. 50

My improvements in the plunger consist in making an annular recess in the bottom of the box N, and making points *z z* on the top of the follower *m*, which press into the leather *p* in the recess and hold it securely. The follower  
55 *m* is secured to the box N by a T-bolt, *l*, on one side, which also holds the valve *a* down on its seat, and also by a countersunk screw-bolt, *h*, on the other side.

The piston-rod *w*, which is attached to the  
60 bail on the box N, passes through a stuffing-box in the top of the pump-cap, which is made with an offset to receive the pipe B. This is for the purpose of bringing the axis of the cylinder A in a direct line with the point of con-  
65 nection on lever *e*.

Having thus described my improvements, what I claim as my invention is—

The combination of the box N, having a recess in its bottom, with the follower *m*, furnished with the points *z z*, valve *a*, and leather  
70 packing *p*, all being held together by the T-bolt *l* and the screw-bolt *h*, substantially as set forth.

HORACE R. BAKER.

Witnesses:

DANIEL HOWLAND,  
ALMOND W. FISKE.