JAMES A. SINCLAIR.

Improvement in Pumps.

No. 115,776. Patented June 6, 1871.

Fig. 1.

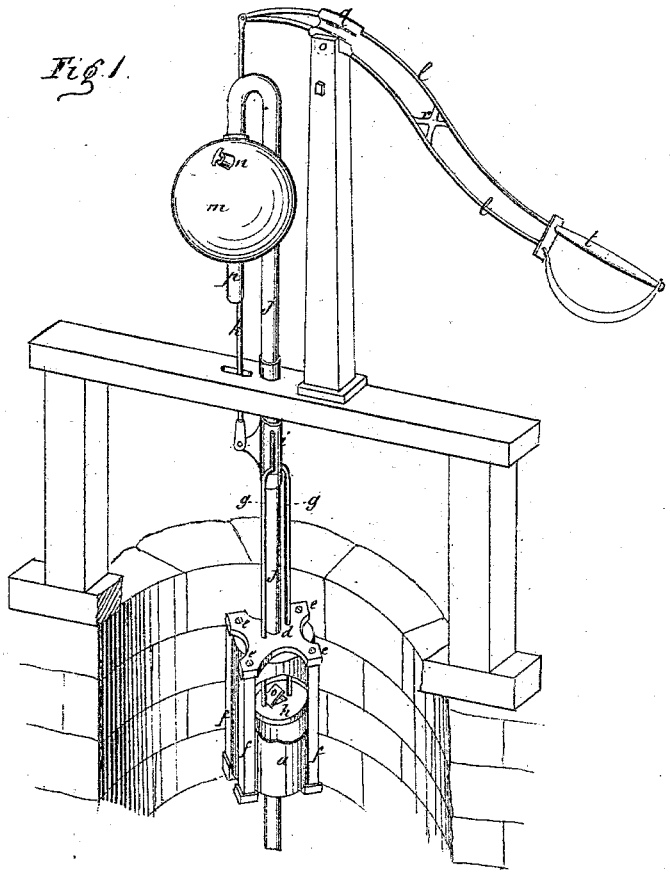
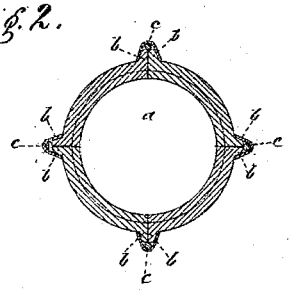


Fig. 2.



Witnesses:

L. P. Street

Thos. G. G. Durand

Inventor:

Jas. A. Sinclair.

Per Munn & Co

Attorneys.

UNITED STATES PATENT OFFICE.

JAMES A. SINCLAIR, OF WOODSFIELD, OHIO, ASSIGNOR TO HIMSELF AND WARREN HOLLISTER, OF SAME PLACE.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. 115,776, dated June 6, 1871.

To all whom it may concern:

Be it known that I, JAMES A. SINCLAIR, of Woodsfield, in the county of Monroe and State of Ohio, have invented a new and Improved Force-Pump; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 is a transverse section through the cylinder.

This invention relates to a pump in which a a chamber of peculiar construction is placed within the well above the surface of the water therein, for the purpose of receiving water therefrom, and in which a globular reservoir is employed, the same being placed outside the well, but connected with the chamber aforesaid by means of a pipe.

Referring to the drawing, *a* is the chamber aforesaid, the same being cylindrical in form and composed of glass or earthen-ware made in two or more pieces, so that it need not taper and does not suffer so great damage, if broken in part, as it would if whole. The parts of the cylinder have lugs *b* at their edges, and are connected by means of iron plates *c*, bent around the outside of said lugs, and also by means of heads *d*, the arms *e* of which are united by vertical stay-rods *f*. This chamber is supported upon a plank placed across the well at a suitable distance below its mouth, and from its lower end a pipe runs down into the water of the well, a valve being placed over the top of the pipe within the chamber. Through the upper head *d* pass the rods *g*, which connect the plunger *h*, that works up and down within the chamber *a* with a collar, *i*, that is placed outside of the pipe *j*, which leads from the top of the chamber up to any desired point above the well, said collar *i* being connected by a rod, *k*, with the pump-lever *l*. A globular reservoir, *m*, is attached to the upper end of the pipe *j*, which reservoir is furnished with a cock, *n*, by which to let air escape when filling the reservoir with water. Such filling is accomplished by working the plunger *h*, which is provided with an upwardly-opening valve, *o*, up and down in the chamber *a*, by which operation the water that enters the latter from the well, upon the first exhaustion of the air from the chamber, is forced from the latter up through the pipe *j* into the reservoir *m*. The escape-pipe of the reservoir is seen at *p*. An iron rod should be placed across the inside of the reservoir, to spread the current of water that is discharged thereinto. When a hose is attached to the pipe *p*, for the purpose of conducting its contents away, the cock *n* should be closed. The pump-lever *l* is skeleton, consisting of two pieces of wrought-iron, *l*, connected by castings *q* and braces *r*. The wooden handle *t* is secured to the lower end of the lever. This construction secures at once strength and lightness. The casting *q* has trunnions, which form the bearings or journals of the same in the top of the vertical post. Thus the casting is at once a brace and a pivoted bearing for the rods *l l* composing the pump-lever.

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

1. The chamber *a*, constructed in pieces that are provided with lugs *b*, and connected by plates *c*, heads *d*, and stay-rods *f*, as specified.

2. The combination of the chamber *a*, pipe *j*, and reservoir *m*, as described.

3. The combination of the chamber *a*, pipe *j*, reservoir *m*, plunger *h*, collar *i*, and rods *g k*, as explained.

JAMES A. SINCLAIR.

Witnesses:
W. HOLLISTER,
J. C. BECKETT.