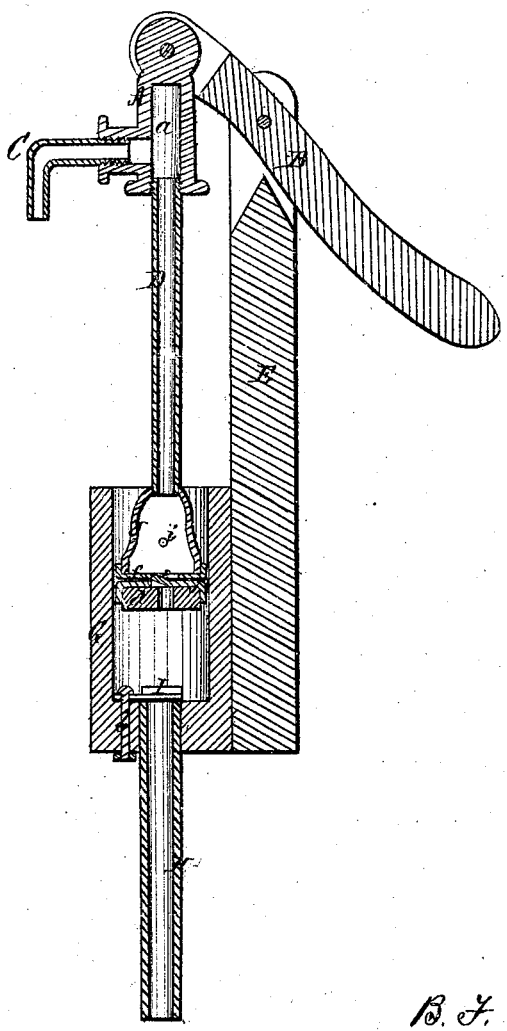
B. F. Mc Keehan,

Pump.

No. 112,730. Patented Mar. 14. 1871.




Witnesses.
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per
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# UNITED STATES PATENT OFFICE.

BENJAMIN FRANKLIN McKEEHAN, OF CLARKSBURG, WEST VIRGINIA.

## IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **112,730**, dated March 14, 1871.

*To all whom it may concern:*

Be it known that I, BENJAMIN FRANKLIN McKEEHAN, of Clarksburg, in the county of Harrison and in the State of West Virginia, have invented certain new and useful Improvements in Pumps; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "pump," as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a vertical section of my pump.

A represents a small piece of casting, constructed, as shown in the drawing, so as to be readily detached when worn out, and replaced at little cost. The upper end of this casting is pivoted to the handle B by a pin, as shown, and in the lower the piston-rod D is screwed. Above the hole for the piston-rod, within the casing A, is a chamber, *a*, from which another hole leads outward on the side, and in this hole is screwed the spout C. E represents a piece of scantling about six feet long, to which the pump is fastened, and this scantling is bolted to the curb securely, its upper end being forked or mortised, and the handle B pivoted in the same. The pump-rod D is a three-quarter inch galvanized-iron pipe, about five feet long, which acts both as a pump-rod and pipe to convey the water from the chamber G up into the detachable part A and spout C, and thence into the bucket. The chamber G is made of zinc, eight or ten inches long, and about three and three-quarters inches in diameter, or any size that may be desired. It may be secured in any suitable manner to the scantling or standard E. From the chamber G a galvanized inch pipe, H, runs down nearly to the bottom of the well. In the bottom of the chamber is a valve, I, fastened by means of a bolt, *b*, having the nut on the outside, so that it may be conveniently taken off when necessary. J represents the plunger, which is made in the shape of a bell, and has the pipe D screwed into its upper end. A round disk, *d*, of iron, with a hole in the center, over which the valve *e* works, is fastened to the plunger with two small bolts, and forms it bottom. Two circular pieces, *f f*, of leather, are placed between this disk and the plunger, in one of which the valve *e* is made. One of these leathers is turned upward all around the plunger, and the other is turned downward. This makes the plunger always fit the chamber. A small hole, *i*, is made in the plunger, which answers a twofold purpose of constantly priming the chamber, and also letting the water run down out of the pipe D, so as to prevent its freezing in cold weather.

The chamber being open at the top makes it convenient to get at the plunger by simply taking out the bolt or pin at the handle and lifting the plunger out. This done, it is very easy to get at the lower valve whenever it is desired.

The whole is designed to make a pump in which every part is readily got at. All the parts at all liable to wear are made small, easily detached, and replaced at very small cost. It does not freeze up, and does not spoil the water. It is exceedingly simple in its construction, so that any one can understand it and make his own repairs, which will only consist in putting on new leathers at long intervals, or a small bolt where the handle is attached.

I arrange the curb, also, conveniently. A hole two feet square is made in the platform; a curb about fifteen inches high is made around it, and the pump is bolted to one of the corner-posts, so that the chamber is two feet below the platform, and out of the way of freezing, and may be placed lower, if necessary, in a more rigorous climate. The principle is absolutely anti-freezing.

Over the curb is placed a cover, close for winter, and of open or lattice-work for summer. The bucket sits on this cover, just under the spout.

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

1. The combination of the bell-shaped plunger J, with its disk *d*, valve *e*, leathers *f f*,

and hole *i*, with the pipe D and casting A, all substantially as and for the purposes herein set forth.

2. The combination of the casting A, handle B, standard E, spout C, pipe D, plunger J, chamber G, pipe H, and valve I, when all are constructed and arranged substantially as shown and described, and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of Jauuary, 1871.

B. F. McKEEHAN.

Witnesses:
T. F. ROANE,
F. A. PRITCHARD.