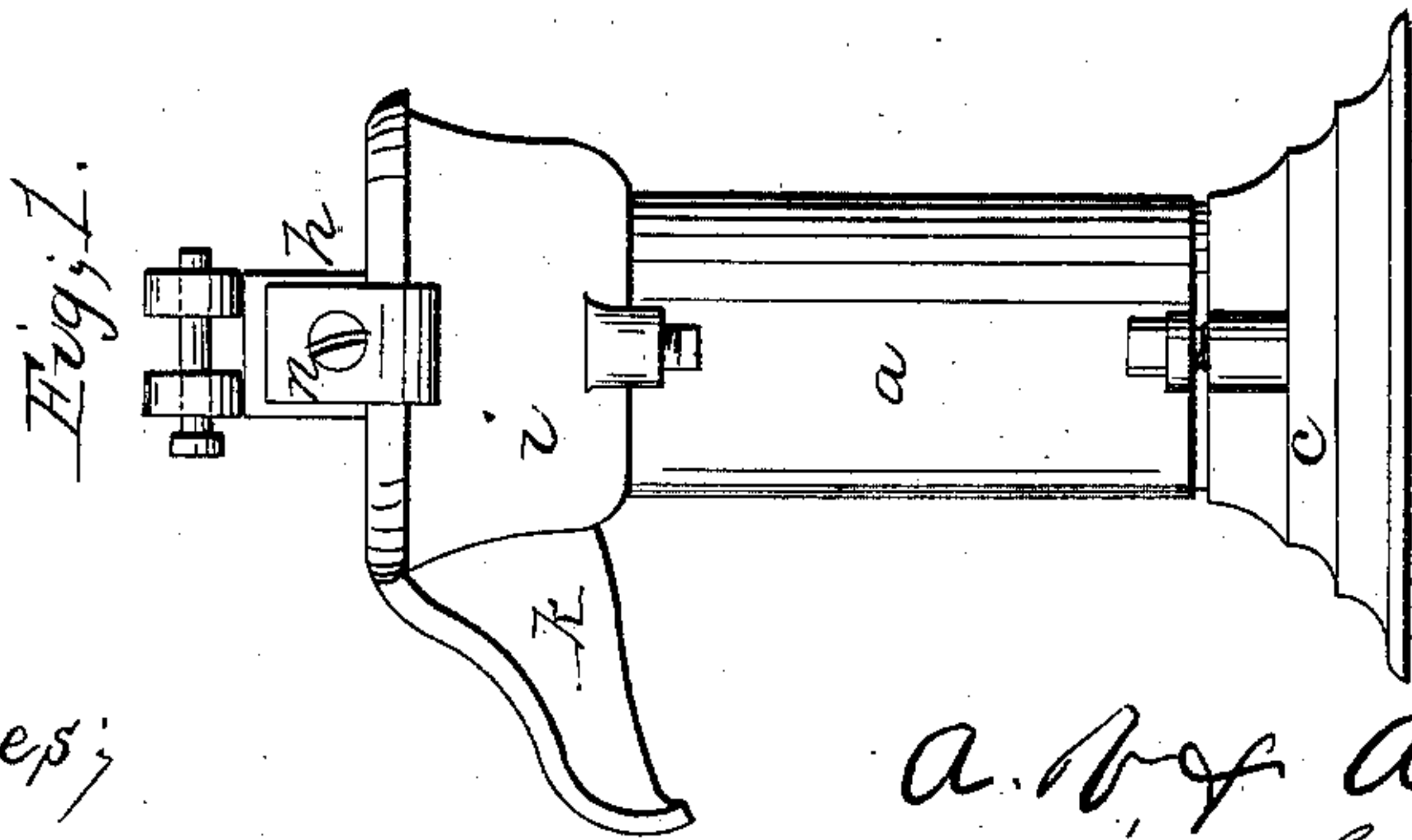
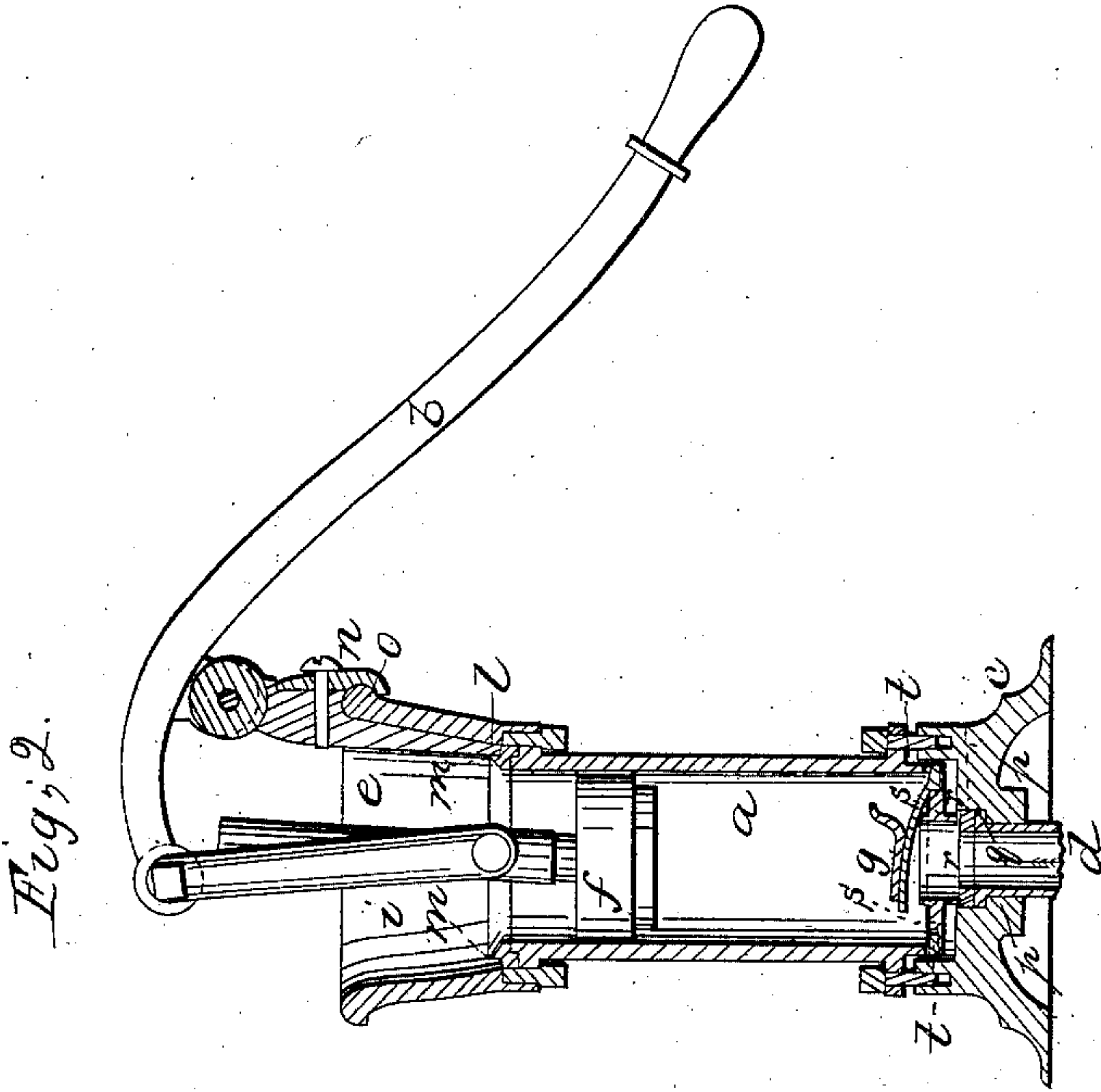


A. V. & A. F. Fletcher,

Pump Lever,

No. 44,792,

Patented Oct. 25, 1864.



Witnesses;
H. Gould
L. B. Hadden

Inventors;
A. V. & A. F. Fletcher
by their Atty
J. B. Crosby

UNITED STATES PATENT OFFICE.

A. V. FLETCHER AND A. F. FLETCHER, OF ATHOL, MASSACHUSETTS.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. 44,792, dated October 25, 1864.

To all whom it may concern:

Be it known that we, A. V. FLETCHER and A. F. FLETCHER, of Athol, county of Worcester, and State of Massachusetts, have invented an Improved Pump; and we do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of our invention sufficient to enable those skilled in the art to practice it.

This invention relates to the construction of metallic pumps; and the improvement consists in the manner of applying the fulcrum-post for the pump-brake to the pump-cylinder, and also to the method of coupling the pump to the well or cistern pipe.

Figure 1 of the drawings represent a side elevation of the pump, the handle or brake being removed. Fig. 2 a vertical central section taken through the pump-handle.

a denotes the cylinder of the pump; *b*, the handle thereof; *c*, the base-plate upon which the cylinder is supported, and through which it is connected with the well-pipe *d*. *e* is the piston-rod; *f*, the box or valve on the same, and *g* the lower or fixed valve.

The construction and operation of the piston-rod valves and pump-cylinder are the same as in many other pumps of this character.

The fulcrum-post *h* is made as a separate piece from the pump-cylinder, (or the spout-box *i* on top of the cylinder,) being so constructed as to be easily applied to or detached from the pump, and also so as to be capable of being set at any desirable position with respect to the spout *k*. The lower part of the post extends down within the spout-box *i*, resting against the inner surface thereof, while the bottom edge, *l*, extends into a groove, *m*, running around the bottom of the box *i* or the top of the cylinder. The upper part of the post projects over and so as to rest upon the top edge of the box *i*, and to this part a clamp-piece, *n*, is screwed, as seen in the drawings, said clamp-piece having a groove, *o*, which fits over the rim or bead on the top of the pump. The bottom edge, *l*, fitting into the groove *m*, confines the post at this part, while the clamp-piece *n* in connection therewith holds the post secure from lateral or vertical motion during the working of the pump-brake,

and this construction enables the parts to be conveniently packed for transportation.

The bottom edge, *l*, of the post may be confined in place by other methods than that described; but the construction shown is preferred. The pump-brake is applied to the post in the usual manner.

The top of the cistern pipe is shouldered, the flange thereon resting on a seat, *p*, in the base-plate *c*. A packing-ring, *q*, is placed on top thereof, and upon this ring a projecting ring, *r*, on the valve-plate *s* rests, this plate being provided with a packing-ring, *t*, against which the lower edge of the pump-cylinder is confined.

In connecting the pump-cylinder to the well-pipe the upper end of the pipe is passed through the bottom of the base-plate, and its edge then hammered or pressed out so as to make a lip thereupon to rest on the seat *p*. The packing ring *q* is then applied with the valve-plate *s* and packing-ring *t*, the lower valve generally projecting from this ring *t*. The cylinder is now placed upon the base-plate, being secured thereto by screws and nuts, or in any other convenient manner which admits of tightening the connection. As the cylinder is screwed down upon the base-plate, its lower edge presses down against the leather packing *t*, packing it against the plate *s* and the ring on the plate against the packing *q*, and this against the top of the well-pipe, thus packing the pump to the base-plate and the base-plate to the pipe by the operation of fastening the pump in position on the base-plate. This dispenses with the necessity of making a joint by soldering and enables the pump to be connected with a well or cistern pipe without the aid of a workman.

We claim—

1. The construction and application of the fulcrum-post, substantially as set forth.
2. The combination of the rings *t* *q*, plate *s*, cylinder *a*, base *c*, and pipe *d*, when constructed and arranged to operate together substantially as set forth.

A. V. FLETCHER.
A. F. FLETCHER.

Witnesses:

CHS. FIELD,
J. F. ANDERSON.