(No Model.)

W. W. LAING & S. S. HUTCHINS.

PUMP.

No. 341,923. Patented May 18, 1886.

Fig. 1.

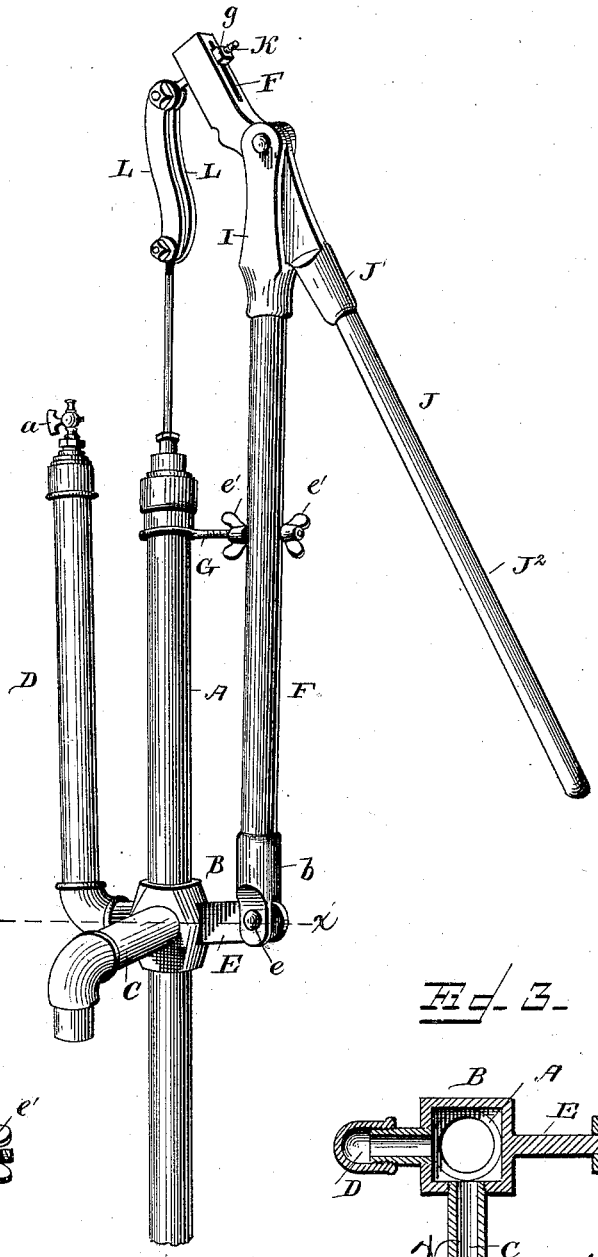


Fig. 2.

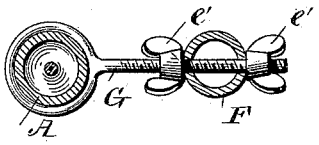
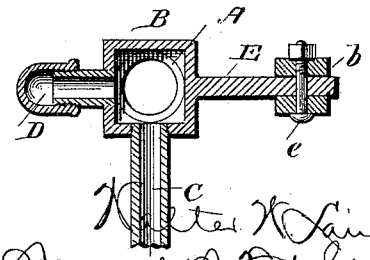


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

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PUMP.

SPECIFICATION forming part of Letters Patent No. 341,923, dated May 18, 1886.

Application filed October 20, 1885. Serial No. 180,459. (No model.)

To all whom it may concern:

Be it known that we, WALTER W. LAING and SAMUEL S. HUTCHINS, citizens of the United States, residing at Paola, in the county of Miami and State of Kansas, have invented certain new and useful Improvements in Pumps; and we do hereby declare the following to be a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to pumps, the object being to provide improved means for adjusting or varying the stroke of the piston as desired, or as circumstances may require.

With these ends in view the invention consists in the improved construction and combinations of parts hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a pump embodying our invention. Fig. 2 is a detail sectional view. Fig. 3 is a sectional view on the line *x x* of Fig. 3.

Corresponding parts in the figures are denoted by the same letters of reference.

Referring to the drawings, A represents the body of the pump, which is preferably constructed of gas-pipe, and is jointed at the point or connection of the spout, the sections being connected by a collar, B, which is interiorly threaded at its ends, and which receives the exteriorly-threaded ends of the sections, and communicating with the pump through the collar is a spout, C.

D represents an air-chamber, which is also of gas-pipe, by preference, and which connects with the collar B, said air-chamber having a stop-cock, *a*, to regulate the supply of air. Formed integral with the collar B is an extension, E, which projects laterally from the collar at right angles thereto.

F represents the fulcrum for the handle, which fulcrum is of gas-pipe, and has screwed or otherwise detachably secured to its lower end a sleeve, *b*, having the ears or lugs, which fit over the end of the extension E, and are pivotally connected therewith by a bolt, *e*.

G represents an eyebolt, the eye of which fits upon the body of the pump near the upper end thereof. The end of this bolt, which is threaded, passes through an opening in the fulcrum F, and on said bolt are thumb-nut *e' e'*, which bear against opposite sides of the fulcrum, and permit its upper end to be adjusted to or from the body of the pump.

Removably secured upon the upper end of the fulcrum F is a casting, I, which is divided, as shown, and fulcrumed in the divided end of said casting is a handle, J, composed of two sections, J' J², the section J' being of metal, and the section J² of wood. The metal section J' is provided with an elongated slot, *f*, arranged vertically with relation to the handle, and fitting in said slot is a bolt, K, upon the upper threaded end of which is a nut, *g*, which bears against the upper side of the handle. Pivoted to the lower end of the bolt, which end extends through and beyond the slot, are straps L, which are pivotally connected at their lower ends with the upper end of the piston-rod. The object of the slot and bolt to which the piston-rod is connected through the medium of the straps is to allow the bolt to be adjusted in said slot, so that the piston-rod will at all times be in a perpendicular position with relation to the body of the pump.

By making the fulcrum and piston adjustable in the manner before described we are enabled to increase or diminish the length of the stroke, and thereby control the supply of water without the necessity of renewing or changing the pump-heads.

Having thus described our invention, we claim—

1. The combination, with a pump, of a fulcrum pivotally connected with the pump at its lower end, and connected adjustably with the pump near the upper end thereof, a handle pivoted to the upper end of the fulcrum, a vertical slot in the inner end of the handle, a headed bolt fitted therein, a nut on the bolt, the piston-rod, and straps pivotally connecting the piston-rod and bolt, substantially as set forth.

2. The combination, with a pump having the extension projecting therefrom, of a fulcrum pivoted to said extension, a threaded eyebolt connected with the pump and passing through the fulcrum, thumb-nuts on the eyebolt and bearing against opposite sides of the fulcrum, the handle pivoted to the upper end of the fulcrum, said handle having a vertical slot at its inner end, a bolt in said slot, a nut on the bolt, and straps pivotally connecting

the bolt and piston-rod, substantially as set forth.

3. The combination, with a pump having the extension projecting therefrom, of a fulcrum pivoted to said extension, a threaded eyebolt connected with the pump, and passing through the fulcrum, and thumb-nuts on said bolt bearing against the opposite sides of the fulcrum, as set forth.

4. The combination, with a pump and a fulcrum for the handle pivotally connected therewith, of an eyebolt connected with the pump and passing through the fulcrum, and the thumb-nuts on the bolt bearing against the inner and outer sides of the fulcrum, as set forth.

5. A pump comprising in its construction two sections having threaded ends, a collar having interior threads to receive said ends, and having an integral extension, a fulcrum pivoted to said extension and adjustably connected with the pump near the upper end thereof, a handle pivoted to the upper end of the fulcrum, a vertical slot in the inner end of the handle, a bolt adjustably fitted therein, and straps pivotally connecting the bolt and the piston-rod, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

WALTER W. LAING.
SAMUEL S. HUTCHINS.

Witnesses:
A. J. WHALEY,
A. O. CODY.