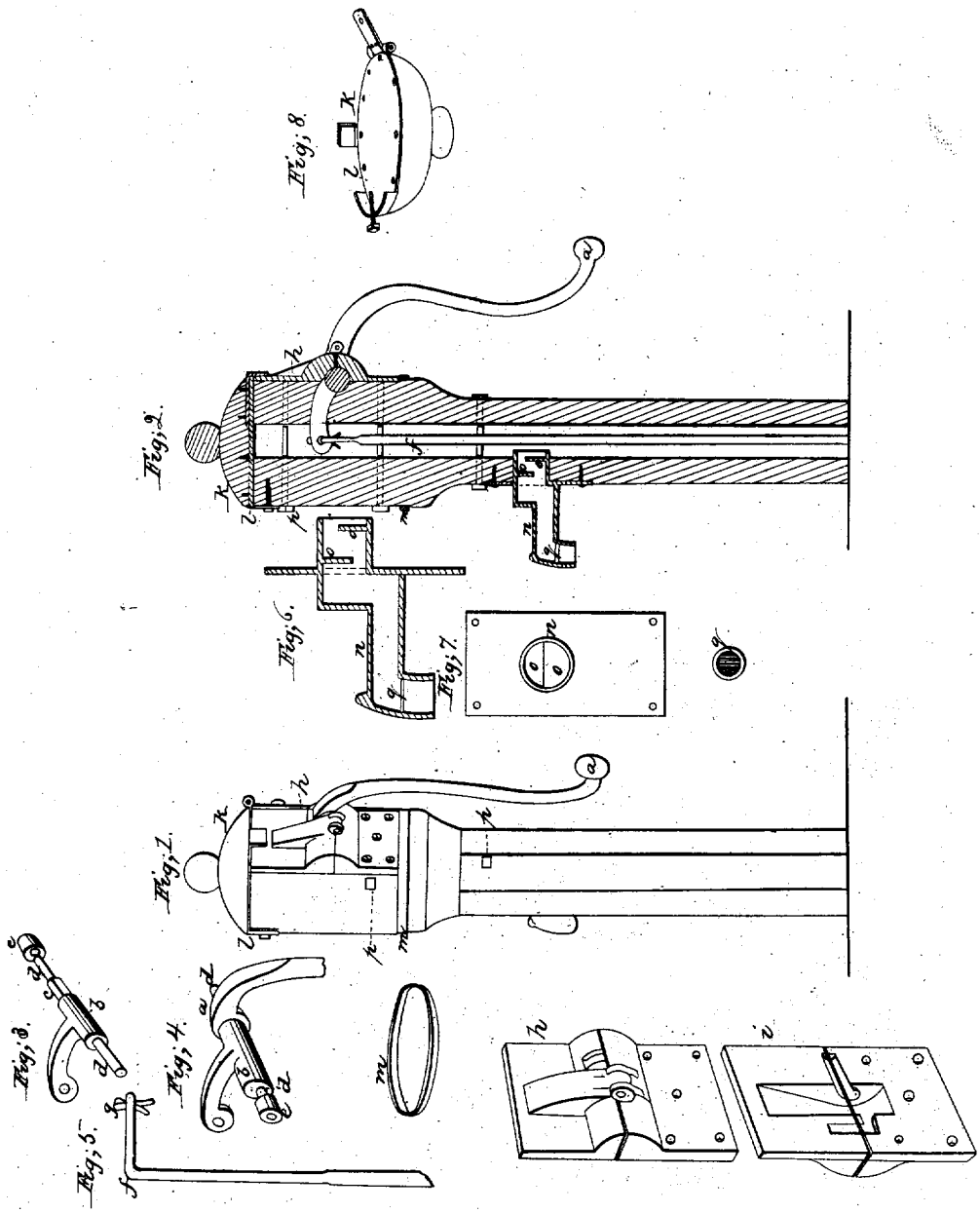
5975X

M. Mettee,

Pump Lever.

Patented May 20, 1830.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

X5915 May 20. 1824 111

Martin Mellor of Baltimore State of Maryland.

Letters Patent.

The Schedule referred to in these Letters Patent and making part of the same, containing a description in the words of the said Martin Mellor of his improvement in Pumps:

To all to whom these presents shall come,

Be it known that I Martin Mellor of the City and County of Baltimore and State of Maryland, have invented a new and useful improvement in Water Pumps (or land pumps) the object of which is to prevent the introduction of foreign substances through the top spout and handle mortis of the same, so as to impede the operation of the piston and of which the following is a full and exact description of the construction and operation of the same as invented and improved by me

1st. The fulcrum (most commonly called by pump makers the neck of the handle) is welded or united to the pin (or gudgeon) of the same forming one solid piece terminating at said pin, then about an inch from the right side of said neck, the pin is shouldered in square, then a square hole is punched in the upper end of the lever, or that part of the handle which hangs outside of the pump which is then heated and done on to the square shoulder of said pin so it cools it keeps very tight and close by shrinking then as commonly the 2 ends of the pin (viz) from the lever or handle on the right side and from the fulcrum or neck on the left) is rounded about an inch each, where they play in the fulcrum &c during the operation of the handle, two steel ferrils are then made and put on the 2 ends of the pin, loosely to serve in some measure as pistons collars to prevent the working pin from cutting out so soon.

2nd. The lock at the upper end of the piston instead of round is made square or at right angles, near after it is taken in the

Martin Mellor

No. X5975

eye. a spring key is dropped into it, so that the piston can be unlocked, without taking out the handle, it is also calculated to last longer the friction being more regular than in a round bent handle, which cuts out & wobble soon, &c——

3rd. The fulcrum box is made of cast iron (or wood if most convenient) the lower part of which from the fulcrum pin downwards is permanently fastened to the pump by 5 square headed bolts screwed into the wood, the other half, say from the pin, upwards, is fastened to the lower part by a joint hinge, the joint of which is thrown about one inch or more down from the centre (or that part where the two castings separate from each other) the object of which is to throw the upper casting some what off when opened in order to slip out the handle from the right side, or from where the pin at that end rests on the casting

There is also a flange or cap at the right & left of the centre of the casting which completely hides the two ends of the pin as also another on the upper and lower part of said casting. which fit tightly close around the pin, in the space between the neck and lever. (or handle) the handle playing between said flange on its left and the bearing for the pin in the casting on its right the upper casting has also a projection or swell about 2½ inches wide in the centre thereof, commencing at the pin, and gradually diminishing to nothing before it quite reaches the upper end. This is to prevent the fulcrum or neck from sticking against the same during the operation of the handle, the handle as may be operated hangs about two inches or more out of centre to the right side of the pump, nothing is seen of the neck and pin which is completely inclosed in the said fulcrum box or casting which also entirely encloses the mortice for the handle.

4th. The ball cap at the top of the pump has a hole running through and screwed to the inner part of the same to

present of splitting with the saw) said plate have part of it turned at one end to the pump, and at the other it is bent down 3 or 4 inches with a hole in the end and a square headed bolt screwed through the same, also into the pump, there is also a small plate screwed on to the under part of the aforesaid turned cap. with one end bent down about an inch, which hooks over the upper casting when the cap is slide down, which secures the same (casting) close up to the pump, and when any repairing are wanting, there is nothing to do but take out the aforementioned screw bolt which fastens down the aforementioned half plate (which secures the cap.) and all comes apart immediately

5th As the pumps are now made to taper upwards, a band is drove down and on which rests the fulcrum box said band secures the pumps splitting with the saw

6th The spout is made of cast iron with a plate or flange screwed or bolted to the pump it then has a knee about 3 or 4 inches down along side the pump, it then sallys out in a straight line as usual parallel with the part which runs into the pump. The nozzle of said spout is turned down about an inch and a half similar to a still cock, and has a grating cast in the same about an inch and a half up from the lower extremity of the same, a knob or rest is cast on the top of said nozzle for the bucket to hang upon the part which runs into the pump is an inch longer in diameter than the outside part, in order to admit of 2 half headings or semicircular pieces placed on opposite sides, the one 2 inches in from the other, so that the water passes into the pipe along one side and then turns along the other side, and then out

7th A square headed bolt is screwed into the pump just above the spout, and retains about an inch below the handle mortice, and 3 more a little above, screwed into

No. 1369.

3rd The other angles, the object of which is to prevent also the pump from smoking or spitting with the sun, as they frequently do; I forgot to mention that a circular grating is also put in the spout at the extremity of the inner end, which runs into the pump, perhaps I shall never have any occasion to make use of the last mentioned grating, nor yet of the aforementioned bendings yet I wish to have them under-stood in the Patent.

Witnesses
John Gill
James L. D. Gill

Martin Mettee

1860