(No Model.)

H. A. FRENCH.

PUMP.

No. 491,801. Patented Feb. 14, 1893.

Fig. 2.

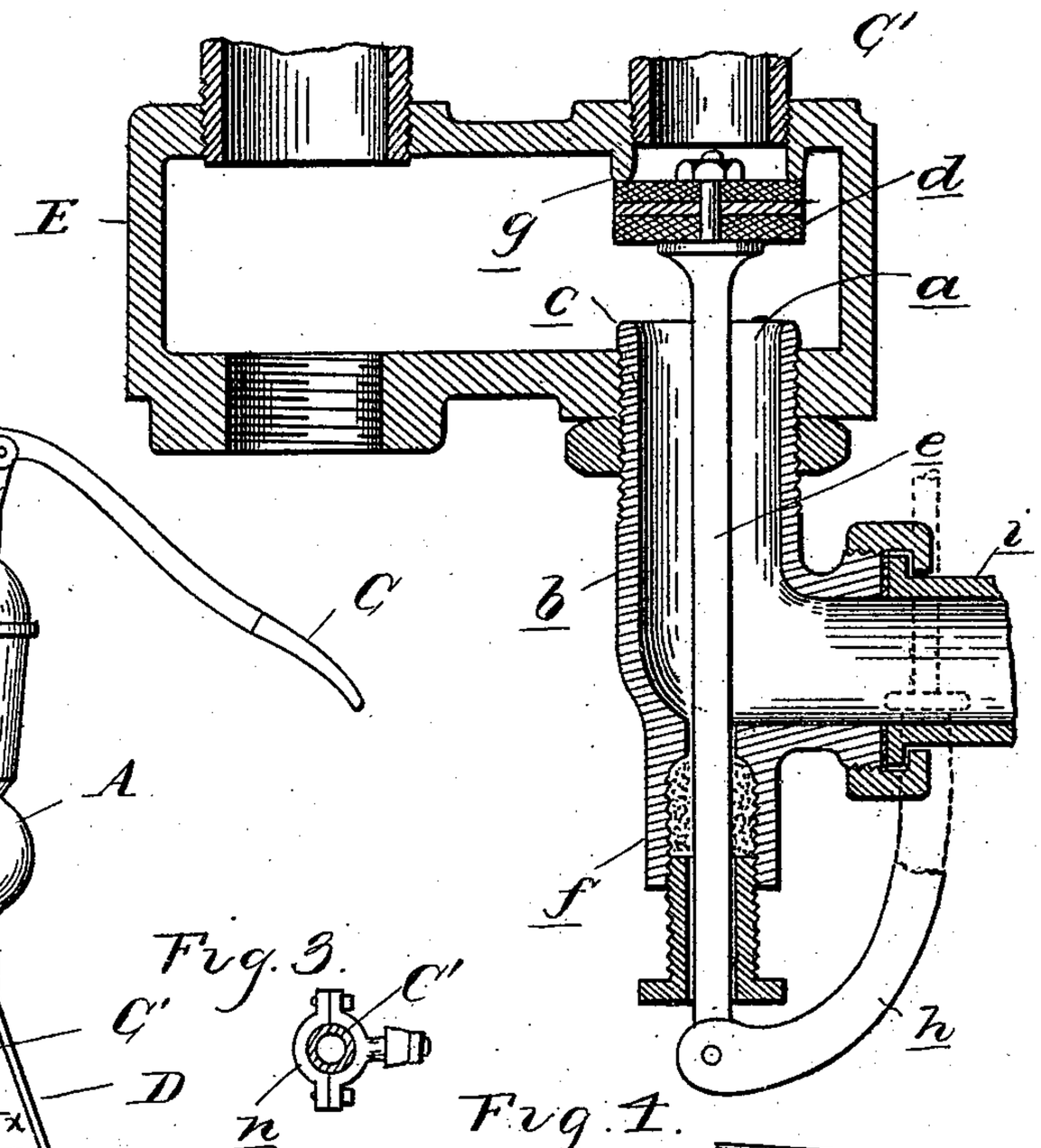


Fig. 1

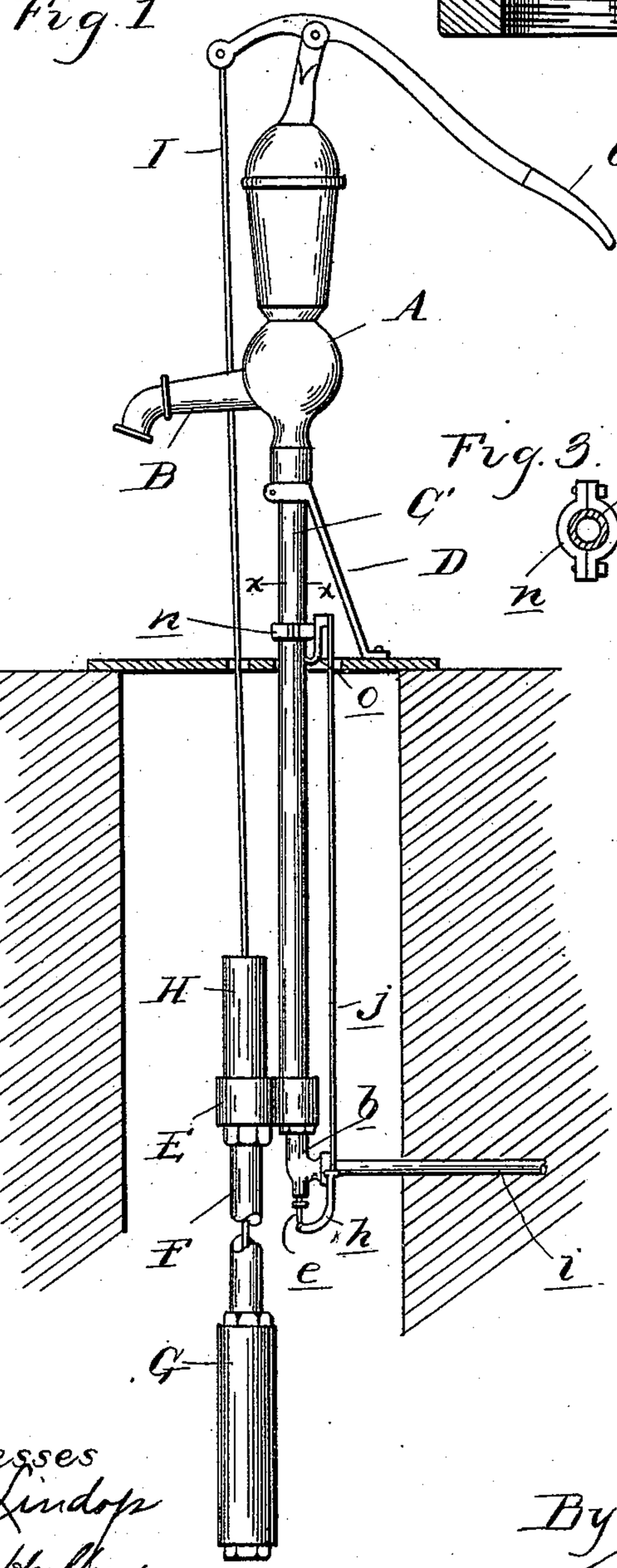
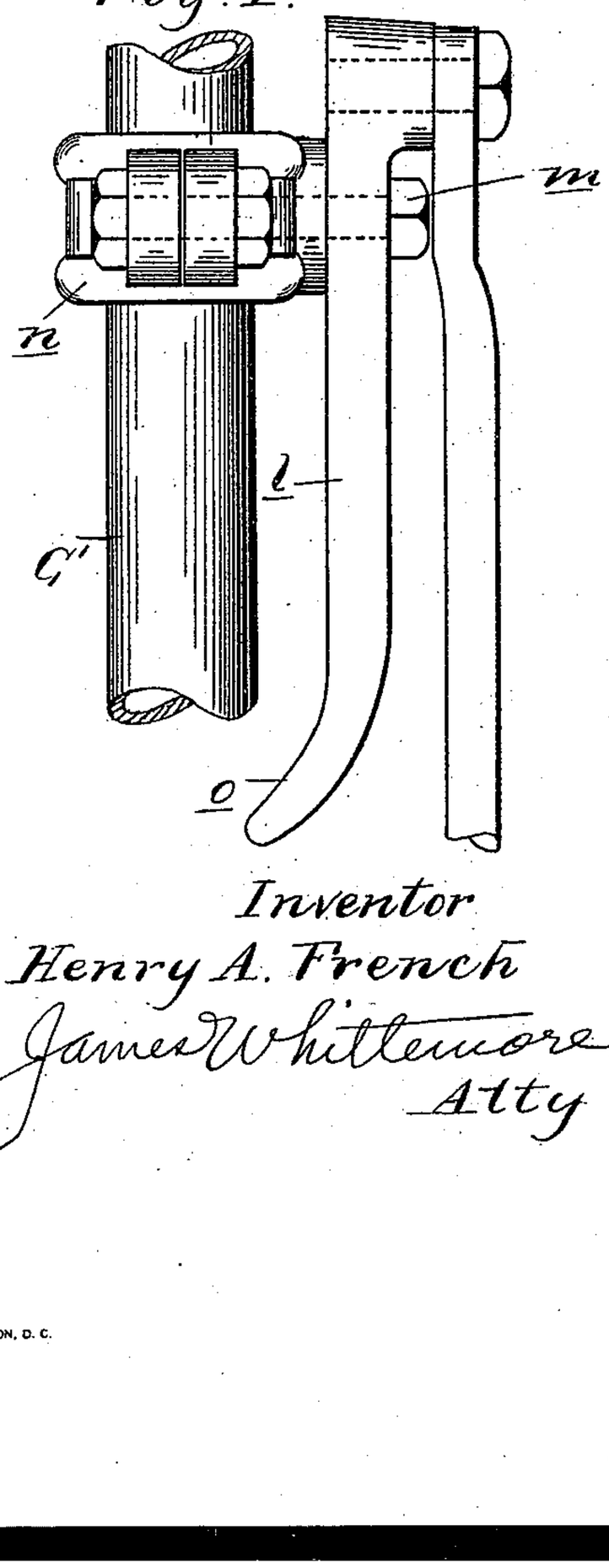


Fig. 3.

Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY A. FRENCH, OF LANSING, MICHIGAN.

PUMP.

SPECIFICATION forming part of Letters Patent No. 491,801, dated February 14, 1893.

Application filed March 21, 1892. Serial No. 425,733. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. FRENCH, a citizen of the United States, residing at Lansing, in the county of Ingham and State of Michigan, have invented certain new and useful Improvements in Pumps, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful, improvements in pumps, and relates especially to the construction of a three-way cock designed to be used in connection with a pump standard where water is to be distributed underground or delivered to the platform as desired.

The invention consists in the peculiar construction, arrangement and combination of the various parts whereby the lateral discharge may be made in any desired direction from the pump, and the lever for operating the valve may likewise be turned at any desired angle to the standard, and further whereby the lateral outlet and valve may be placed in position at any time after the pump has been set.

In the drawings, Figure 1 an elevation of my improved pump, showing it in operation in a well. Fig. 2 is a vertical central section of Fig. 1, through the three-way cock, showing also the operating lever therefor in elevation. Fig. 3 is a cross section on line *x x* in Fig. 1. Fig. 4 is an enlarged elevation of the eccentric head.

A is a pump top having a discharge spout B and an operating lever C. The top is supported upon a pipe C′, by means of a brace D, or a base resting on the platform, or in any other suitable manner. The pipe C′ extends beneath the platform below the ground into the well and at its lower end engages into a casting E. This casting is suitably apertured to receive the suction pipe F, at the lower end of which is secured the usual pump cylinder G.

H is a cylinder secured to the top of the trefoil E in line with the suction pipe F and adapted to receive a forcing plunger so as to make the pump double-acting.

I is the pump rod connected to the operating lever C and extending down through the cylinder H and suction pipe F, having secured thereon suitable plungers for raising the water.

A pump constructed in accordance with the description above given will draw water from the well and discharge the same through the discharge spout B upon the platform. In such use an aperture *a* which is formed in the casting opposite the discharge pipe C′ of the pump will necessarily be filled with a plug in case it is desired to use the pump to carry water to a distance at any angle of the pump. I can accomplish this by removing the plug from the aperture *a* and applying the following device:

b is an elbow screw threaded at its upper end to engage in the aperture *a* in the casting shape. This elbow enters the casting shape a sufficient distance and has formed upon its inner end a seat *c* for the valve *d*, which is secured to a valve stem *e*, passing through the elbow and through a stuffing box *f* at the lower end thereof.

Opposite the aperture *a* and surrounding the aperture which leads to the discharge pipe C″ of the casting, I form a second valve seat *g*. The elbow at its other end is provided with suitable means for connecting to a discharge pipe *i*. The stem *e* at its lower end is pivotally connected with a curved arm *h*, which at its upper end connects in any suitable manner with the operating rod *j*, extending to the platform where it is secured to the crank lever *l* pivoted at *m* to a casting *n* clamped to the pipe C′ above the platform.

The crank lever *l* is provided with a handle *o*. By raising or lowering this handle the rod *j*, and with it the valve *d* is vertically reciprocated. When it is in its proper position, as shown in Fig. 2, the valve will close the platform discharge pipe C′ and the lateral discharge pipe *i* will be open. When moved to its lower position the valve will close the lateral discharge *i* and open the platform discharge pipe C′.

What I claim as my invention is:

In a pump the combination with the standard of a curved laterally adjustable casting connected thereto having a lateral discharge

formed with oppositely arranged apertures, a discharge pipe leading from one aperture, a discharge pipe leading in an opposite direction from the other aperture, a stuffing box formed on said latter pipe, a valve rod extending into the casting and carrying on its upper end a valve located between the apertures in the casting, a curved operating rod pivotally connected with said valve stem and extending up outside of the pipes, a movable collar surrounding the standard, and a lever pivoted to the collar and connected to the upper end of the operating rod, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY A. FRENCH.

Witnesses:
M. B. O'DOGHERTY,
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