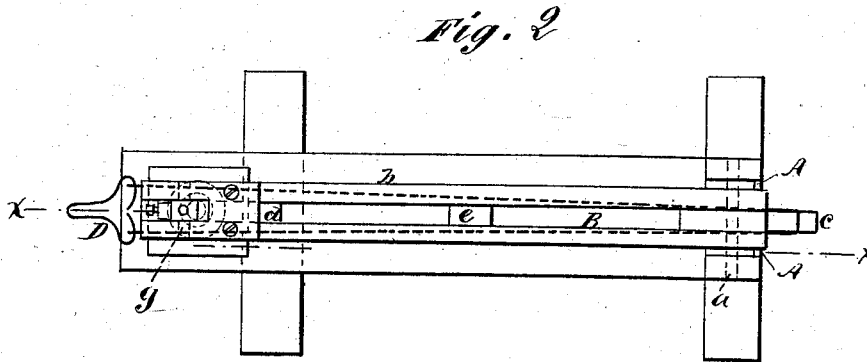
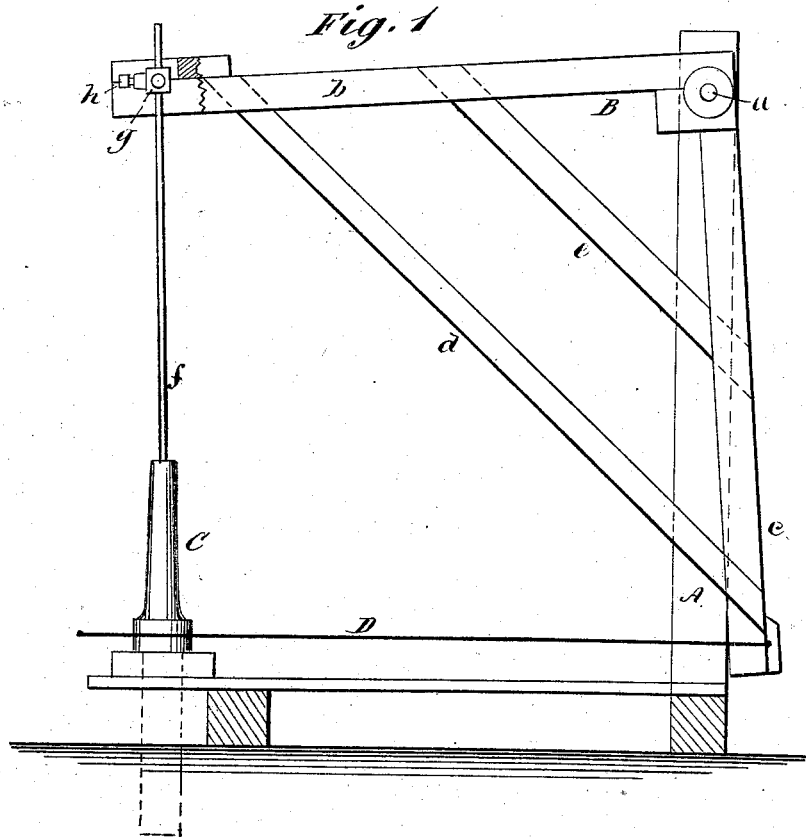


W. F. PLOCKROSS.  
PUMPING APPARATUS.

No. 189,955.

Patented April 24, 1877.



WITNESSES:

*C. Neveux*  
*J. H. Scarborough.*

INVENTOR:

*W. F. Plockross*  
BY *Munnell*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

WALDEMAR F. PLOCKROSS, OF FAGUNDUS, PENNSYLVANIA.

## IMPROVEMENT IN PUMPING APPARATUS.

Specification forming part of Letters Patent No. **189,955**, dated April 24, 1877; application filed April 2, 1877.

*To all whom it may concern:*

Be it known that I, WALDEMAR F. PLOCKROSS, of Fagundus, in the county of Warren and State of Pennsylvania, have invented a new and Improved Pumping Apparatus, of which the following is a specification:

Figure 1 is a side elevation in section, on line *xx* in Fig. 2. Fig. 2 is a plan view.

Similar letters of reference indicate corresponding parts.

My invention relates to apparatus used in pumping oil or water from deep wells; and it consists of a suitably-braced right-angled lever, which swings on a pivot between stationary posts, and is connected at the end of its horizontal arm with the pump-rod, and at the lower end of its vertical arm, by means of rods, with any convenient motive power.

Referring to the drawing, A A are posts, which are firmly fixed in the earth or in any suitable foundation. B is a right-angled lever, swinging on the pin *a*, that passes through the posts A A, and having the arms *b c*, which are connected by braces *d e*. The end of the horizontal arm *b* is connected with the pumping-rod *f*. The end of the vertical arm *c* is connected with any convenient motive power by a rod, D. This rod, in the present case, is double, so that it may pass the tube C of the well.

The horizontal arm *b* of the lever B consists

of two timbers, between which the upper ends of the braces *d e* are secured. The roller-pin *g* is journaled in the ends of the said timbers, and is bored to receive the pumping-rod *f*, which is clamped therein by the set-screw *h*. Any number of these levers may be connected with a single motor by means of a rod or cable, which may run either horizontally or upon an inclination, as circumstances may require. This form of lever possesses many advantages over the ordinary walking-beam, being more compact, and having greater strength and rigidity.

The counter-weights which are frequently used in connection with the ordinary walking-beam for securing a quick return motion are avoided, thereby saving power.

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

A right-angled lever for pumping apparatus, consisting of the horizontal arm *b*, vertical arm *c*, and braces *d e*, pivoted at *a*, and having the roller-pin *g*, for receiving the pumping-rod, substantially as shown and described.

W. F. PLOCKROSS.

Witnesses:

ROYAL E. SCOTT,  
W. H. SMITH.