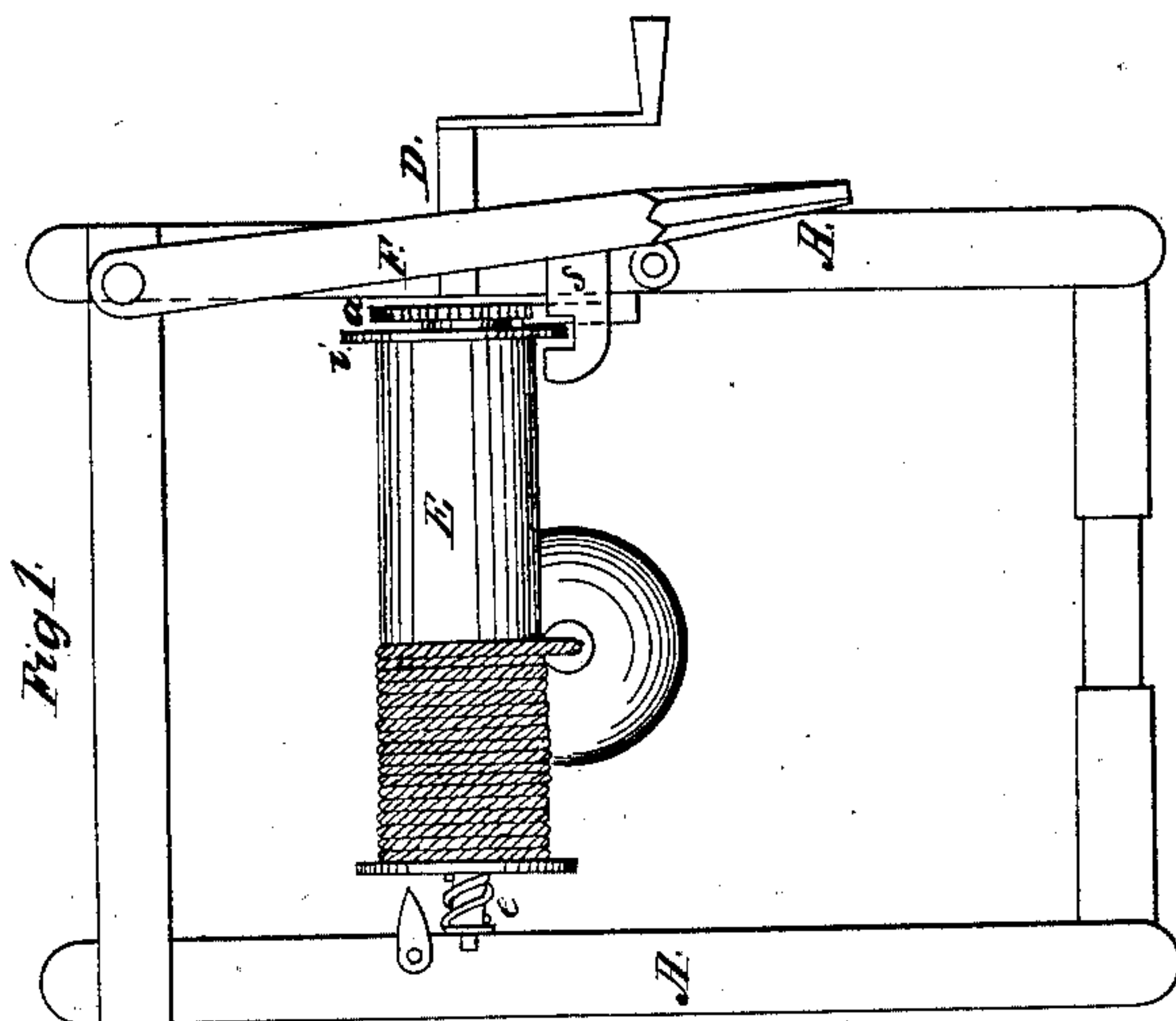
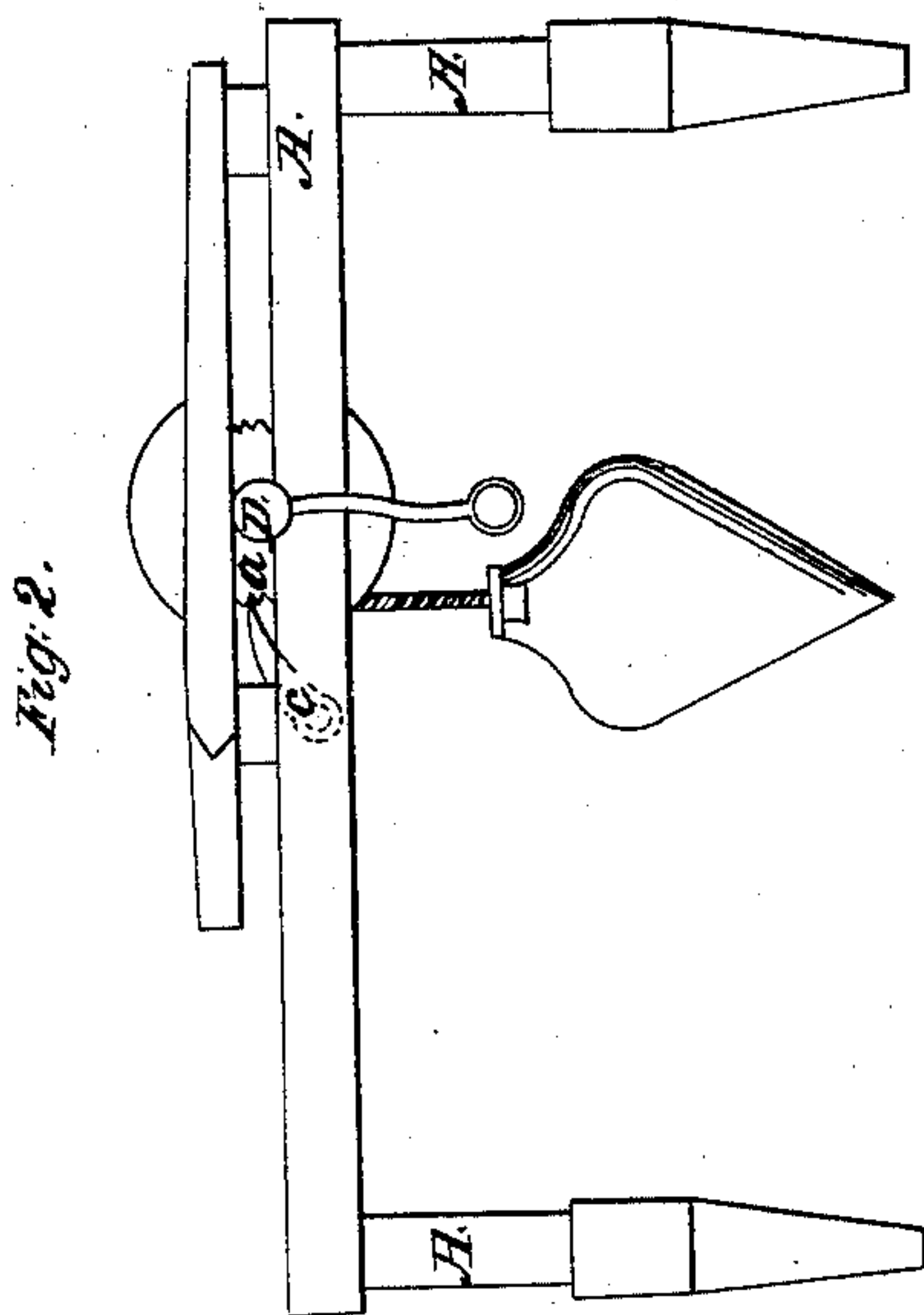
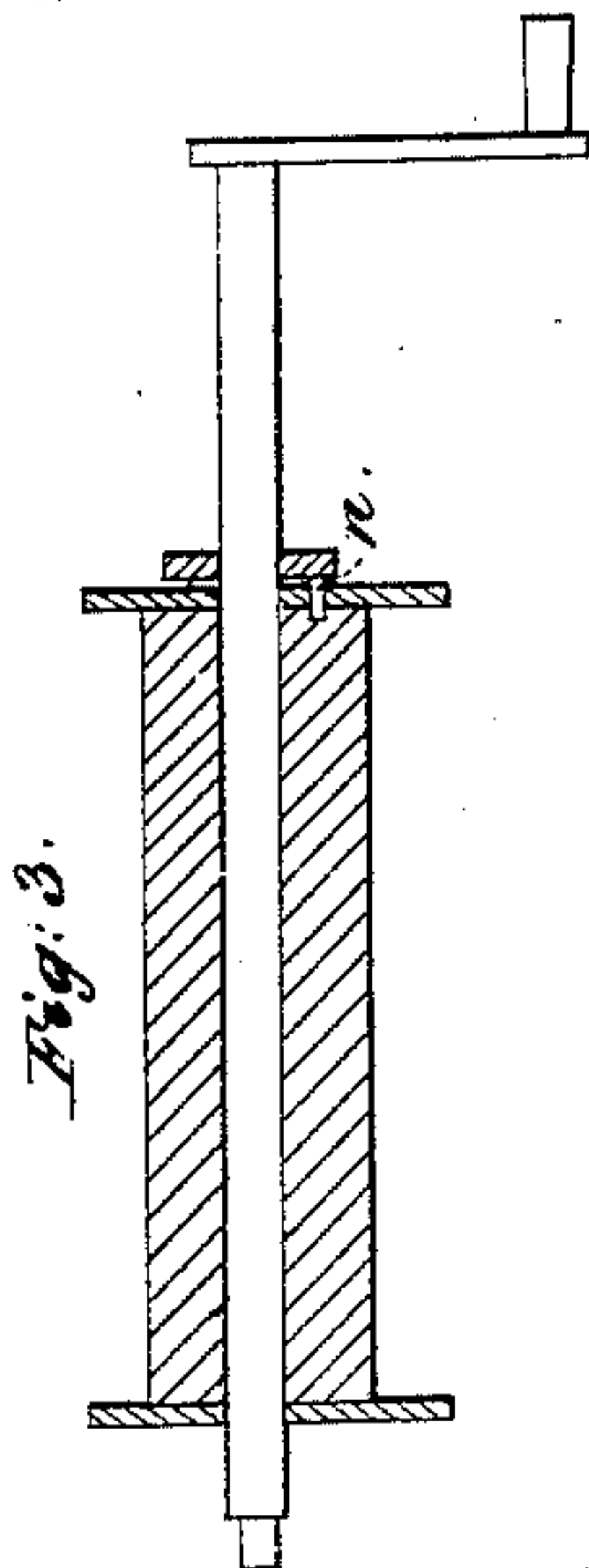


G. D. Cotton,
Windlass Water Elevator,
No 30,616, Patented Nov. 13, 1860.



Witnesses:

Wm. C. M. Alexander
A. A. Yeatman.

Inventor:

G. D. Cotton

UNITED STATES PATENT OFFICE.

G. D. COLTON, OF GALESBURG, ILLINOIS.

APPARATUS FOR DRAWING WATER FROM WELLS.

Specification of Letters Patent No. 30,616, dated November 13, 1860.

To all whom it may concern:

Be it known that I, G. D. COLTON, of Galesburg, in the county of Knox and State of Illinois, have invented certain new and useful Improvements in Machines for Drawing Water; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in constructing and arranging the several parts of this machine substantially in the manner hereinafter set forth.

In the figures A represents a substantial frame made of wood or any other suitable material which is placed over the well or cistern from which water is to be drawn.

D represents a shaft which has its bearings upon the frame A, and which is provided with a crank handle as shown in the figures. Surrounding the shaft D, between the frame pieces is a cylinder E, to which a cord is attached and around which it winds as is shown in Figure 1. This cylinder is secured loosely upon the shaft and may be made to revolve independently upon it, or to turn with it as may be necessary.

a, represents a ratchet wheel which is secured permanently upon the shaft D, in close proximity to the cylinder. This wheel is provided on one face with a pin *n*, which catches into holes or openings in the end of the cylinder next to the wheel and serves to station the cylinder upon the shaft. When the cylinder is shoved endwise so that the pin on the wheel does not touch it, it revolves loosely upon the shaft.

e, is a spring around the shaft D, which serves to press the cylinder against the pin upon the ratchet wheel.

c, represents a ratchet tooth which is secured to the frame, and which catches into

the teeth of the wheel *a* for stationing it at any desired point.

F, represents a clutch lever which is pivoted to the frame and which is provided with a metallic piece *s*, in which is cut a slot as shown in Fig. 1. The flange *i* on the end of the cylinder enters the slot in the piece *s*. It will thus be seen that the lever F serves not only to throw the cylinder in and out of connection with the wheel *a*, but serves as a clutch to stop the cylinder when desired. The water bucket is attached to the cord on the cylinder, and when drawing water it is necessary to turn the shaft D, in but one direction. The bucket is let down into the well by allowing the cylinder to turn upon the shaft. The cylinder is then thrown in connection with the wheel *a* and the bucket is drawn up by turning shaft D. The ratchet tooth catching in the wheel *a* prevents the shaft from turning in an opposite direction from that desired when drawing up a bucket of water from the well. Sometimes great damage is done where the person drawing water, through some mishap allows the handle to slip from his grasp. This arrangement effectually remedies this difficulty and makes a very effective and cheap machine for drawing water.

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

The employment of the shaft D, the cylinder E, the lever F, the ratchet wheel *a* and ratchet *c*, together with the stop *n*, the several parts being constructed and arranged substantially as and for the purpose herein specified.

G. D. COLTON.

Witnesses:

WILLIAM NELSON,
PETTER NELSON.