(No Model.) 2 Sheets—Sheet 1.

J. E. SELKIRK.

MOTOR FOR PUMPING, &c.

No. 461,963. Patented Oct. 27, 1891.

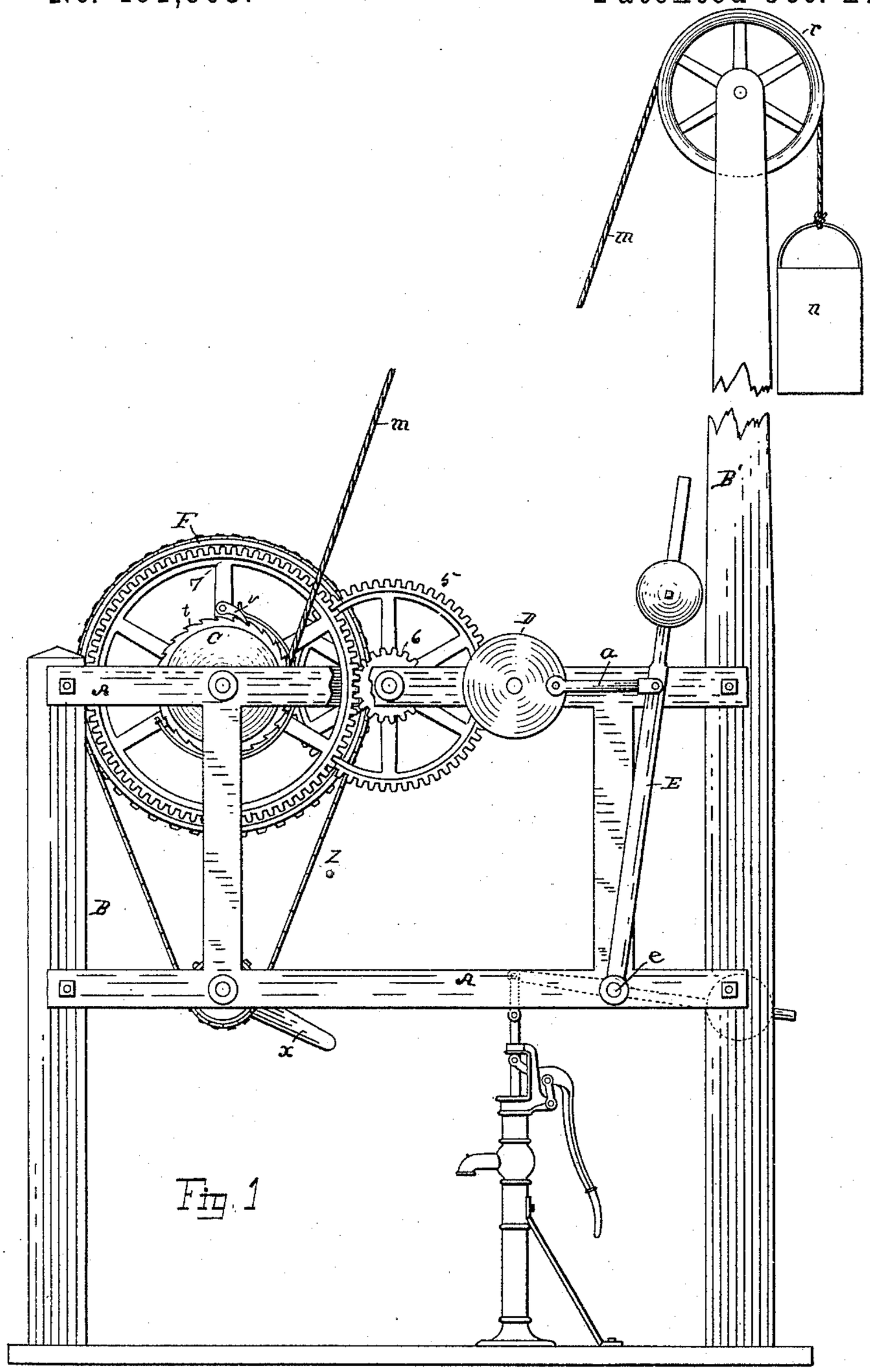

Fig. 1

Witnesses:
Walter S. Woods
Geo. H. Fisher

Inventor.
James E. Selkirk
By Lucius C. West
Att'y.

(No Model.) 2 Sheets—Sheet 2.

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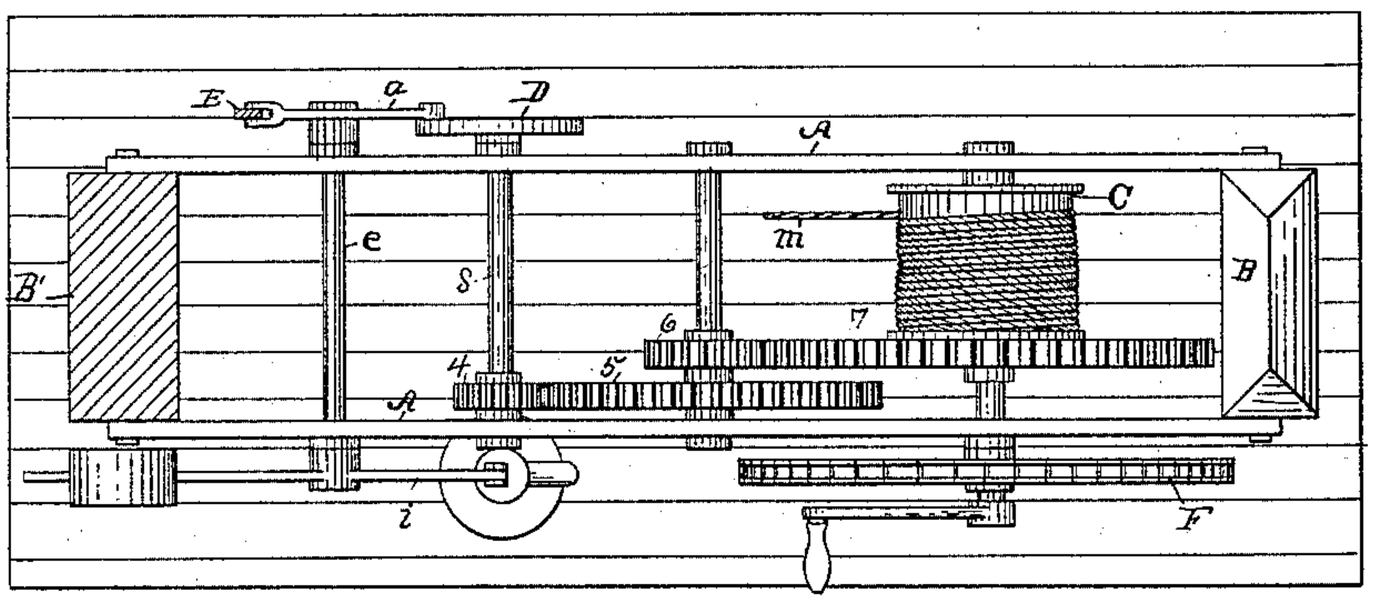

Fig. 3

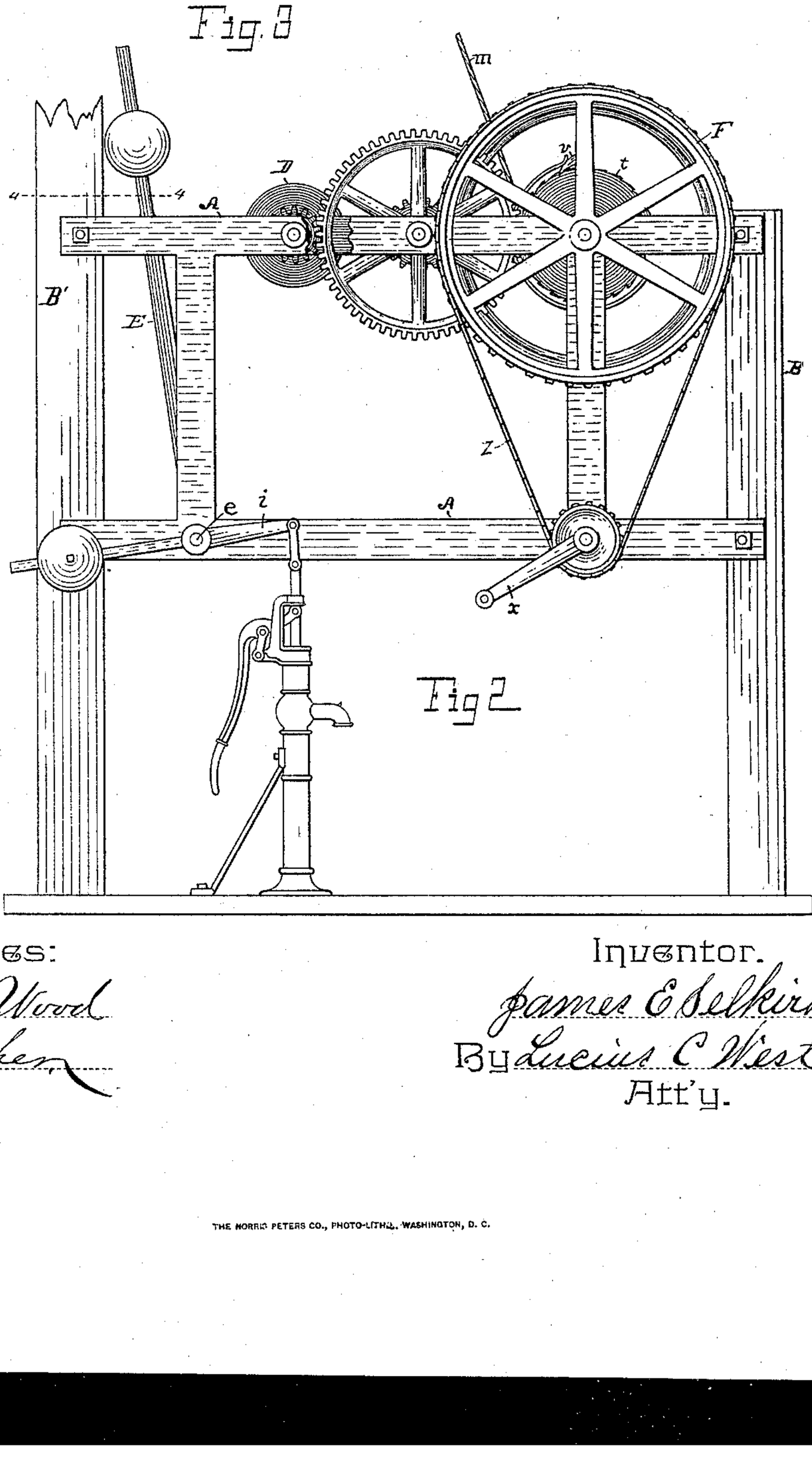

Fig 2

Witnesses:
Walter S. Wood
Geo. H. Fisher

Inventor.
James E. Selkirk
By Lucius C. West
Att'y.

UNITED STATES PATENT OFFICE.

JAMES E. SELKIRK, OF HOPKINS, MICHIGAN.

MOTOR FOR PUMPING, &c.

SPECIFICATION forming part of Letters Patent No. 461,963, dated October 27, 1891.

Application filed February 9, 1891. Serial No. 380,792. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. SELKIRK, a citizen of the United States, residing at Hopkins, (Bradley P. O.,) county of Allegan, State of Michigan, have invented a new and useful Motor for Pumping, &c., of which the following is a specification.

This invention relates to that class of power-motors the propelling-force of which consists of a weight. The present construction is more especially designed for pumping; and it has for its object a novel construction and combination of parts, substantially as below described and claimed.

In the drawings forming part of this specification, Figure 1 is a side elevation. Fig. 2 is a side elevation showing the opposite side of Fig. 1; and Fig. 3 is a plan view of Fig. 2, parts being in section on line 4 4 in said Fig. 2.

Referring to the lettered parts of the drawings, B B are the end standards, and A A are the cross-beams attached to said standards and constitute the frame-work for supporting the mechanism. Mounted in this frame is a windlass C, provided at one end with a sprocket-wheel F. This windlass is operated by crank *x* and sprocket-chain *z*. The windlass-shaft is provided with a ratchet and dog in the ordinary manner to lock the windlass from turning the wrong way. This windlass-shaft is gear-connected to a shaft S by the series of gears 4, 5, 6, and 7, so graduated as to impart greater speed to the shaft S than that of the windlass. The governor-arm E is attached at its lower end to a shaft *e*, and is connected in a pivotal manner with the shaft S by a connecting-rod *a* and crank-disk D. (More clearly shown in Fig. 1.) The upper end of the governor-arm is provided with an adjustable weight. Of course the object of the governor-arm is to control and govern the speed of the machine.

The shaft *e* has bearings in the frame, and to the end of said shaft opposite the governor-arm is attached the horizontal lever *i* between its two ends, as in Fig. 2. The outer end of this lever is provided with a weight, which of course may be adjustable thereon in accordance with the speed of the motor and the work being done. This weight steadies the movement and assists in raising the pump-rod, said rod being pivoted to one end of said lever.

A cable *m* is attached to the windlass and passed up over the pulley *r* in an elevated post or standard, as in Fig. 1, the free end of said cable being provided with a weight *n*. As the weight moves down, oscillating motion is imparted to the pendulum E, shaft *e*, and lever *i*, and a vertical reciprocating motion to the pump-rod.

Of course it will be understood that motion can be transmitted to operative devices or machines other than pumps, and also that the particular number and size of the gears here shown may be changed.

In lieu of elevating the weight above the ground to obtain proper distance for it to descend, it might be arranged to descend down a hole in the ground.

Of course, in lieu of winding the cable on the windlass by hand with a crank to elevate the weight *n*, horse-power might be employed for the purpose, if found necessary.

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

The power-machine herein described, consisting of a frame-work, a windlass, a weighted cable wound on said windlass, a governor-arm shaft, the weighted governor-arm attached at its lower end to said shaft, a crank-shaft, gear connecting the windlass with said crank-shaft, a connecting-rod pivotally attached to said crank-shaft and to the governor-arm, and a lever attached between its two ends to the governor-arm shaft, one end of said lever bearing a weight and the other end being adapted for attachment to a pump-rod or other mechanism, substantially as set forth.

In testimony to the foregoing I have hereunto subscribed my name in the presence of two witnesses.

JAMES E. SELKIRK.

Witnesses:

EUGENE SCOTT,

GEO. STEERS.