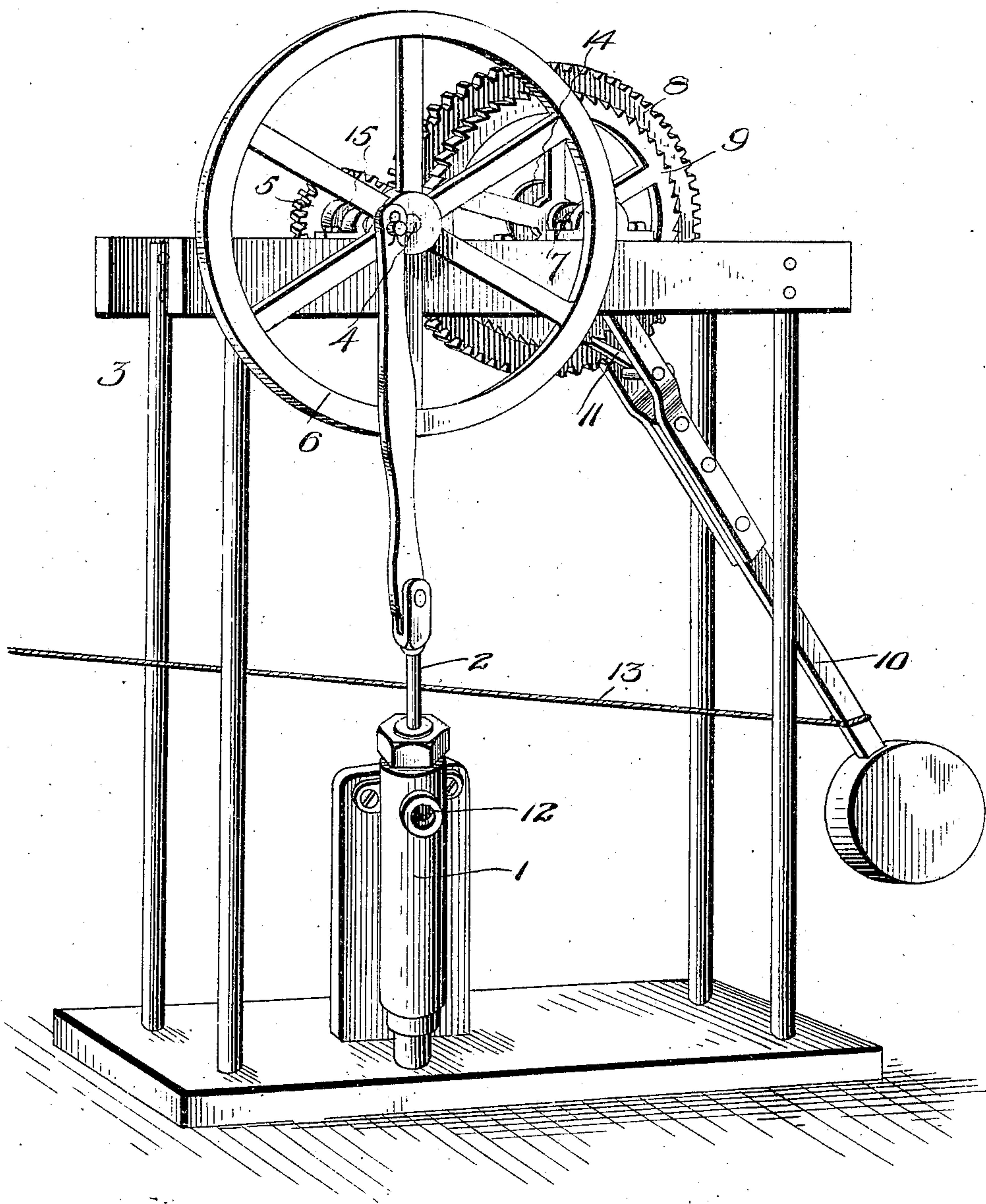


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J. M. BRANAM.
PUMPING JACK.

APPLICATION FILED APR. 10, 1905.



Inventor

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JAMES M. BRANAM, OF CARROLLTON, ILLINOIS.

PUMPING-JACK.

No. 847,229.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed April 10, 1905. Serial No. 254,859.

To all whom it may concern:

Be it known that I, JAMES M. BRANAM, a citizen of the United States, residing at Carrollton, in the county of Greene and State of Illinois, have invented certain new and useful Improvements in Pumping-Jacks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to pumping-jacks.

The object of the invention is to provide a pumping-jack which may be operated at a place remote from that where the pumping-jack is located. For instance, if the pumping-jack be connected up with a well at some distance from a house desired to be supplied with water, the outlet-pipe from said jack extending to said house, all that will be necessary is to operate a rope or cable at the house to start the pumping-jack in motion, thereby rendering it wholly unnecessary for the occupants of the house to walk back and forth in carrying the water from the well to the house.

With this object in view the invention consists in certain features of construction and combination of parts, which will be hereinafter fully set forth.

In the accompanying drawing I have represented my invention in perspective.

Referring to said drawing, 1 denotes the pump-stock, which may be of any well-known or approved construction, and 2 the pump-rod.

3 denotes a frame supported adjacent to the pump-stock and having mounted thereon a crank-shaft 4, one end of which is provided with a pinion 5 and the other end with a fly-wheel 6. A pitman connects the crank of the shaft to the upper end of the pumping-rod and imparts to said rod a reciprocatory movement when said fly-wheel is rotated.

7 denotes a power-shaft journaled in suitable bearings secured to the frame and provided with a large gear-wheel 8, which meshes with a pinion and with a ratchet-wheel 9. A suitably-mounted pendulum 10 is provided and carries a pawl 11, which is adapted on the forward stroke of the pendulum to engage the ratchet-wheel and lock it to the pendulum, so as to rotate said wheel and, through the intermediate gearing, reciprocate the pump-rod. On the back or return stroke of the pendulum the pawl slides over the ratchet-teeth, while the inertia im-

parted to the fly-wheel by the forward stroke of the pendulum is sufficient to cause said wheel to continue in its revolution during the backward swing of the pendulum, which may be again drawn forward. This operation may be repeated until the desired amount of water has been raised in the well.

12 denotes an outlet-pipe connected to the pump-stock and leading to the point where it is desired to discharge the water, and 13 denotes a cord or rope connected to the pendulum and leading to the same point. It will thus be seen that by operating said cord the water may be pumped from the well, which may be situated at a considerable distance from the house, and thus obviate the objection of a person carrying water from the well. The power-shaft, if desired, may be provided with a winding-drum 14, from which a cable may be suspended when it is desired to convert the pumping-jack into a lifting-jack. A similar drum 15 may be secured to the crank-shaft and be used for the purpose of lifting the pump from the well when it is desired.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my invention will be readily understood without requiring an extended explanation. The device is exceedingly useful for the purpose for which it is designed and may be placed upon the market at a comparatively small cost.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

The herein-described pumping-jack consisting of a frame, a crank-shaft 4 journaled on the frame, a pitman connected at one end to a crank-pin on said crank-shaft and at the opposite end to a connecting-rod 2, a fly-wheel 6 fixed to the crank-shaft, a pinion 5 fixed on said shaft, a power-shaft 7 journaled on said frame, a large gear-wheel 8 fixed to said power-shaft and in mesh with said pinion, a ratchet-wheel 9 fixed to the power-shaft at one side of said gear-wheel, a pendulum 10 provided with spaced arms pivoted to the power-shaft, and straddling said large gear-wheel and said ratchet-wheel, a pawl 11 pivoted between said arms and engaged with

said ratchet-wheel to partially rotate it when the pendulum swings in one direction and a cord or cable 13 connected at a point near the lower end of the pendulum, and leading to a
5 distance from the jack for operating the same, substantially as described.

In testimony whereof I have hereunto set

my hand in presence of two subscribing witnesses.

JAMES M. BRANAM.

Witnesses:

JAMES CRANFIELD,
ELIJAH ETTER.