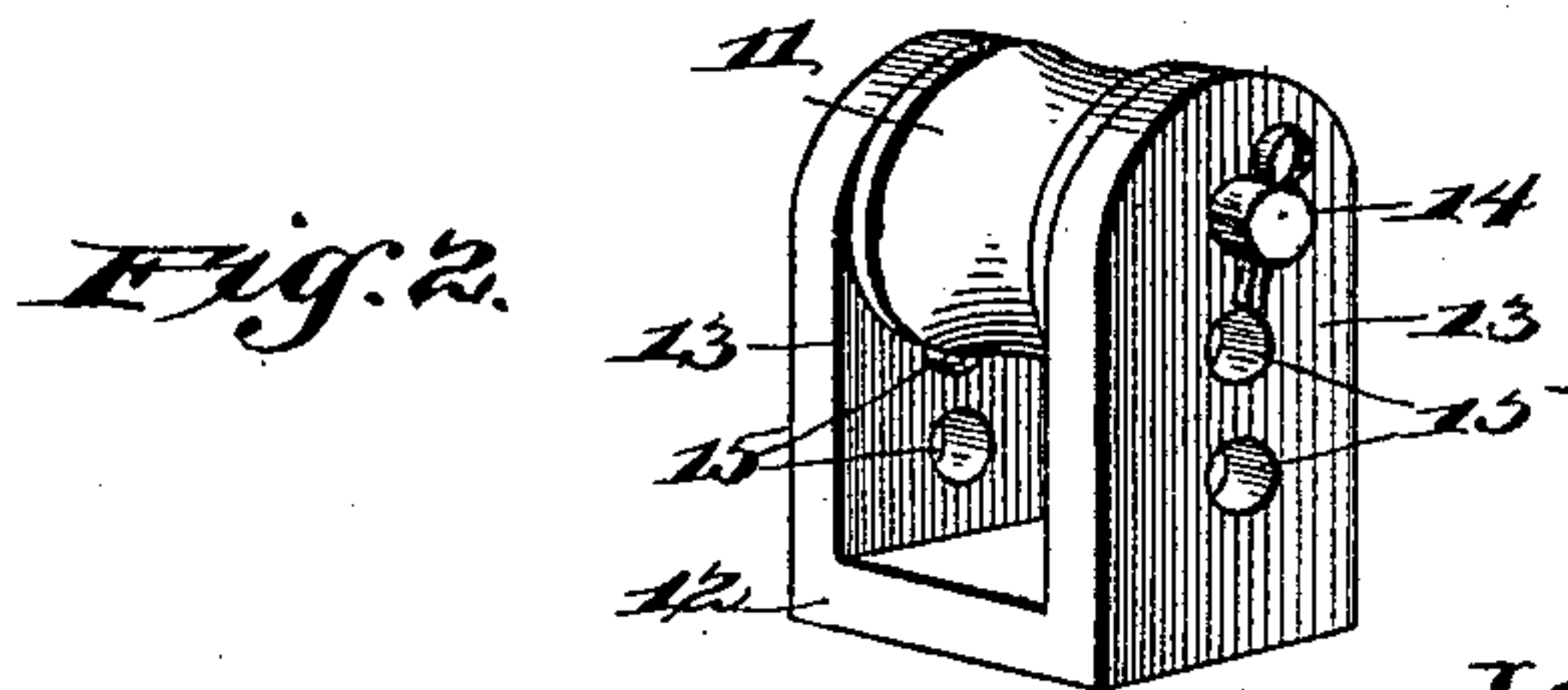
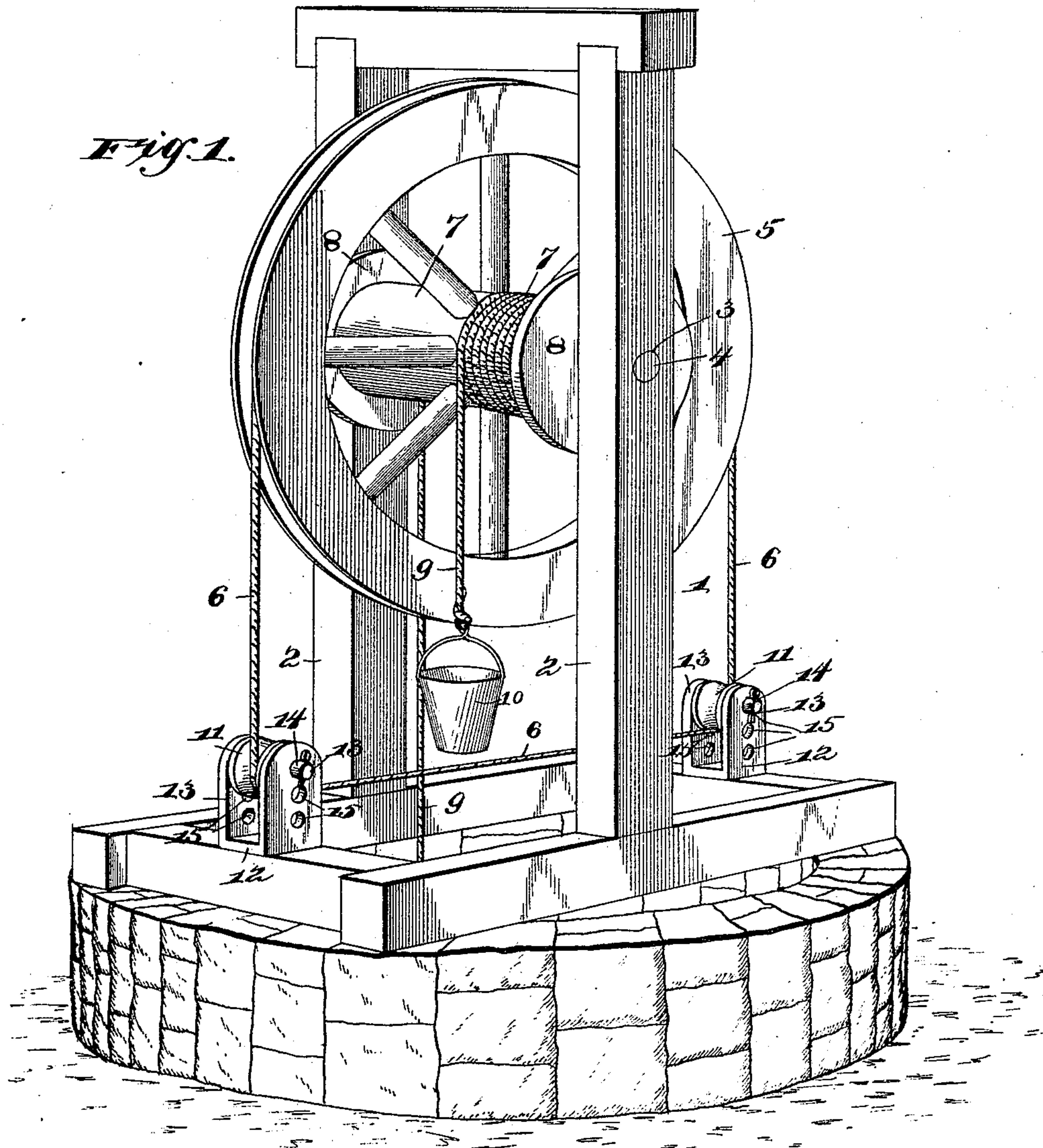


(No Model.)

J. B. TAYLOR.
WATER ELEVATING DEVICE.

No. 538,437.

Patented Apr. 30, 1895.



Inventor

James B. Taylor.

Witnesses

Wm. B. Doyle.

By his Attorneys.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JAMES B. TAYLOR, OF UNITY, TEXAS.

WATER-ELEVATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 538,437, dated April 30, 1895.

Application filed August 22, 1894. Serial No. 521,015. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. TAYLOR, a citizen of the United States, residing at Unity, in the county of Wilson and State of Texas, have invented a new and useful Water-Elevating Device, of which the following is a specification.

My invention relates to water elevating mechanism designed for use in elevating water from wells, cisterns, &c., for domestic and analogous uses, and the object in view is to provide simple, inexpensive, efficient and durable devices whereby the power may be increased to enable an operator to raise large quantities of water with facility.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of an elevating mechanism embodying my invention. Fig. 2 is a detail view of one of the direction-pulleys and the standard in which it is mounted.

Similar numerals of reference indicate corresponding parts in both figures of the drawings.

1 designates a frame adapted to be erected upon the coping of the well or cistern, and in the side uprights 2 thereof are formed bearings 3 in which are mounted the terminals of the spindle 4 of the power or elevating wheel 5. The periphery of this wheel is grooved for the reception of an operating rope 6, and its hub is extended laterally to form the opposite drums 7 having the terminal guard flanges 8. Attached to these drums, and adapted to wind in opposite directions thereon, are the lifting ropes or cables 9 which support the buckets or receptacles 10, and the guard flanges prevent the displacement of these lifting ropes.

Upon opposite sides of the vertical plane of the axis of the power or elevating wheel, and preferably close to the ground or at the feet of the operator, are the direction pulleys 11, around which the endless operating rope passes, and by pulling downward upon the portion of this rope between the large wheel

and the adjacent direction-pulley, or that portion of the rope which is out of contact with said wheel and pulley, motion is imparted to the power wheel to reel and unreel the lifting ropes or cables, respectively.

The direction-pulleys are mounted in standards 12, which are bifurcated to form opposite cheeks 13 between which the pulley is arranged, and the spindle 14, upon which the pulley is mounted is fitted at its ends in openings 15 in said cheeks. I preferably form a series of these perforations or openings in the cheeks of the standards, to provide for adjustment of the pulleys to take up slackness in the operating rope.

Having thus described my invention, I claim—

A water elevating device for wells or cisterns, the same comprising a frame, a peripherally grooved power or operating wheel approximately equal in diameter with the well or cistern, whereby its opposite sides approach or are arranged approximately over the corresponding sides of the well or cistern, drums carried by said power or operating wheel, lifting ropes attached to said drums and reeled in opposite directions thereon, said lifting ropes being adapted to support buckets or receptacles, direction pulleys arranged upon the frame, respectively under the opposite sides of the power or operating wheel and below the plane of the lowermost point of the periphery of said wheel, an endless operating rope extending around the power or operating wheel and said direction pulleys, whereby the portion of said rope between each side of the power wheel and the contiguous subjacent direction pulley is arranged vertically, and means for adjusting the direction pulleys toward and from the power wheel to vary the tension of the operating rope, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES B. TAYLOR.

Witnesses:

D. N. CANANT,
J. D. FERGUSON.