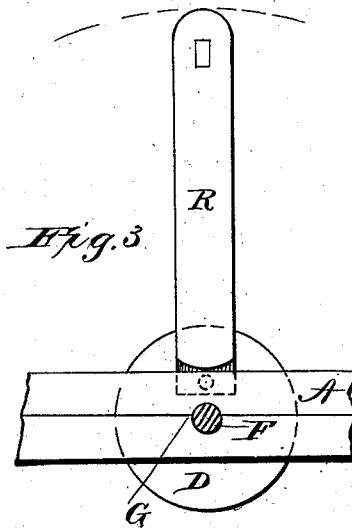
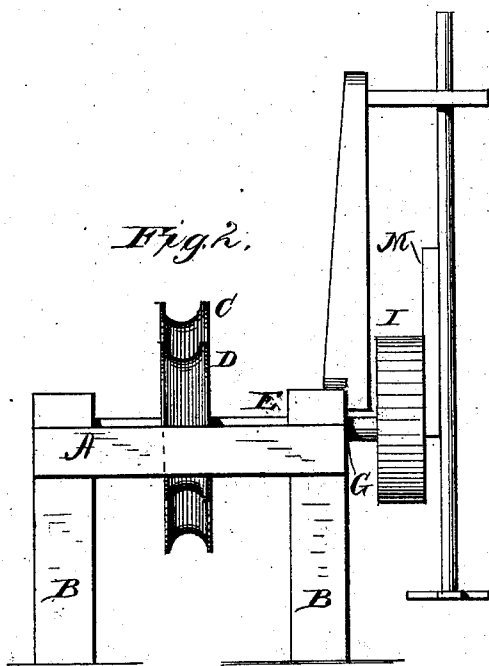
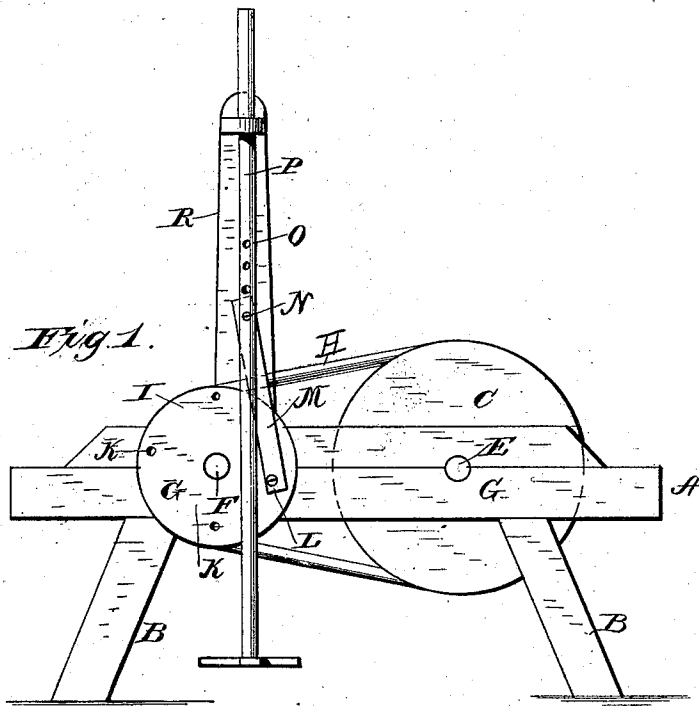


T. J. BRITAIN.
Churn-Power.

No. 224,767.

Patented Feb. 24, 1880.



WITNESSES

A. L. Overland
E. H. Bradford

INVENTOR
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UNITED STATES PATENT OFFICE.

THOMAS J. BRITAIN, OF NACOGDOCHES, TEXAS, ASSIGNOR OF ONE-HALF
OF HIS RIGHT TO A. H. MORGAN, OF SAME PLACE.

CHURN-POWER.

SPECIFICATION forming part of Letters Patent No. 224,767, dated February 24, 1880.

Application filed October 14, 1879.

To all whom it may concern:

Be it known that I, THOMAS J. BRITAIN, of Nacogdoches, in the county of Nacogdoches and State of Texas, have invented certain new and useful Improvements in Churn-Powers; and I do hereby 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to a new mechanical movement; and it has for its object to provide a means for converting a rotary into a reciprocating movement and regulating the range of the reciprocating mechanism, as more fully hereinafter specified.

To this end the invention consists in two pulleys of different diameters, mounted upon shafts journaled in bearings in a suitable supporting-frame, the said pulleys being connected by an endless band, the shaft of one pulley having a crank or other mechanism for applying power to the apparatus, the shaft of the other being provided with a disk having a series of connecting-points at varying distances from the center, to either of which connecting-points one end of a link may be attached, as desired, the other end being adapted to be secured to varying connecting-points on a vertically-reciprocating rod adapted to move in an adjustable standard, whereby the range of the reciprocating rod may be regulated as desired, as more fully hereinafter set forth.

In the drawings, Figure 1 represents a side elevation of my improved motive power. Fig. 2 represents an end elevation of the same, and Fig. 3 a detached view of the adjustable standard which carries the reciprocating shaft.

The letter A indicates a supporting-frame, constructed of any suitable material, and supported on standards or legs B. The letters C and D indicate two pulleys of different diameters, mounted on shafts E and F, journaled in

bearings G in the frame A. The shaft E has secured to one end a crank or other device by which it may be rotated, and the two pulleys are connected by means of an endless band, H, passing over their peripheries. One end of the shaft F has secured to it a disk, I, which is provided at varying distances from its center with connecting-points K, to which the detachable pivot L may be secured, as desired, the said pivot being secured to one end of a link, M, the other end of which is provided with a similar pivot, N, which is adapted to be secured in any one of a series of attaching-points, O, on the reciprocating shaft P. Said shaft plays in an adjustable standard, R, pivoted at its lower end to the frame A in such manner that the shaft may be arranged to reciprocate vertically or at an angle, according to the purpose to which the mechanism is to be applied.

The operation of my invention will be readily understood in connection with the above description. Upon rotating the pulleys the disk I will be rotated, and, by means of the link pivoted to it and to the reciprocating shaft, will impart a reciprocating movement to said shaft. To vary the range of the reciprocating movement of the reciprocating shaft it will only be necessary to change the connecting-points of the link with said disk and shaft, as will be evident.

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

In combination with the disk and reciprocating rod and the attaching-link, the adjustable standard, whereby the direction in which the rod reciprocates may be varied, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of August, 1879.

THOS. J. BRITAIN.

Witnesses:

W. H. MILNER,
A. H. MORGAN.