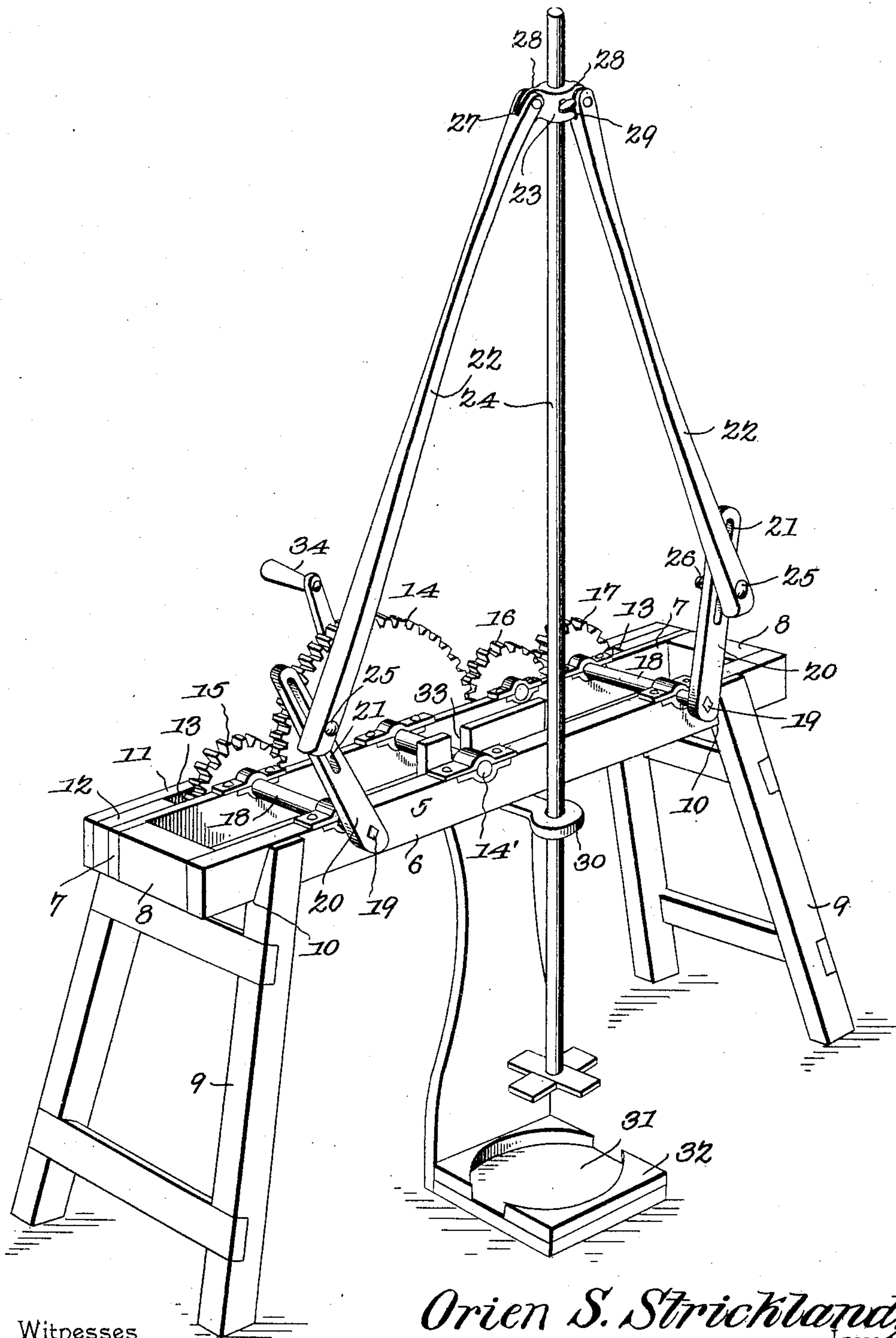


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O. S. STRICKLAND.
CHURNING MACHINE.

APPLICATION FILED OCT. 5, 1903.



Witnesses

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UNITED STATES PATENT OFFICE.

ORIEN S. STRICKLAND, OF COOPER, TEXAS.

CHURNING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 785,775, dated March 28, 1905.

Application filed October 5, 1903. Serial No. 175,911.

To all whom it may concern:

Be it known that I, ORIEN S. STRICKLAND, a citizen of the United States, residing at Cooper, in the county of Delta and State of Texas, have
5 invented a new and useful Churning-Machine, of which the following is a specification.

This invention relates to certain improvements in churns, and more particularly to mechanism for imparting a reciprocatory motion to the churn-dasher.
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The object of the invention is to improve, simplify, and cheapen the construction of devices of this character whereby the churning operation is greatly facilitated and the labor
15 involved reduced to a minimum.

A further object of the invention is to provide a pair of slotted crank-arms having pitman-rods adjustably connected thereto and to the upper portion of the churn-dasher, so that
20 by adjusting the pitman-rods longitudinally of said crank-arms the vertical movement or throw of the dasher may be regulated at will.

In the accompanying drawing, forming a part of this specification, and in which corresponding parts are indicated by like numerals of reference, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements herein exhibited
25 may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the spirit thereof.

The churn-operating mechanism forming the subject-matter of the present invention is
35 mounted on a supporting-frame 5, substantially rectangular in shape, as shown, and formed of wood, metal, or other suitable material.

The supporting-frame consists of a pair of
40 longitudinal beams 6 and 7, connected in any suitable manner by cross-beams 8, said frame being supported by divergent legs 9, the upper ends of which are recessed, as indicated at 10, for the reception of the frame. Arranged
45 parallel with the longitudinal beam 7 is a similar beam 11, said beams being spaced apart by blocks 12, thereby defining a pocket or housing 13, in which is mounted a train of gear forming a part of the churn-operating mechanism.
50

The master-gear 14 is mounted on a transverse shaft 14', journaled in the longitudinal beams of the frame, said master-gear meshing on one side thereof with a pinion 15 and on the other side, through the medium of an intermediate gear-wheel 16, with a similar pinion 17. The pinions 15 and 17 are keyed or otherwise rigidly secured to transversely-disposed shafts 18, the ends of which extend beyond the longitudinal beams 6 and are provided
55 with terminal squared portions 19, which engage the correspondingly-squared sockets of crank-arms 20. The crank-arms 20 are provided with longitudinally-disposed slots or recesses 21, and adjustably mounted in said slots
60 are pitman-rods 22, the upper ends of which are connected, through the medium of a collar or sleeve 23, to the churn-dasher 24.

The pitman-rods 22 are adjustably connected to the crank-arms by means of bolts 25, which
70 pass through the slots 21, so that by moving the pitmen longitudinally and tightening the clamping-nuts 26 said pitman-rods may be adjusted to vary the throw of the churn-dasher. The upper ends of the pitman-rods are bifurcated, as indicated at 27, and are pivoted to oppositely-disposed ears or lugs 28 on the collar 23, the latter being adjustable on the dasher and secured in fixed position by a set-screw
75 29. The dasher, which may be of any approved construction, reciprocates in a guiding-bracket 30, secured to the longitudinal beam 6, and arranged at the rear of said dasher is an angularly-disposed supporting-table 31,
80 adapted to receive the vessel containing the cream to be churned. The table is provided with one or more cleats 32 for preventing accidental displacement of the creaming vessel, said table being centered with respect to the dasher by means of a vertical slot 33, which
85 engages the transverse shaft of the master-gear 14, as shown.

The device may be operated by a motor or other suitable source of power by mounting a pulley on the shaft of the master-gear 14; but
90 in the present instance I have shown the said shaft provided with a terminal crank 34 for operating the machine manually.

From the foregoing description it is thought that the construction and operation of the ma-
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chine will be readily understood by persons skilled in the art and further detailed description thereof is deemed unnecessary.

Having thus described the invention, what is claimed is—

1. The combination with a supporting-frame, of a reciprocating dasher, a pair of shafts journaled in the frame and each provided at one end with a pinion and at the other
10 with a slotted crank-arm, a collar adjustably secured to the dasher, pitman-rods having their upper ends pivoted to the collar and their lower ends adjustably secured to said slotted crank-arms, means for guiding the dasher, and
15 an intermediate master-gear meshing with said pinions for reciprocating said dasher.

2. The combination with a supporting-frame, of a reciprocating dasher, a pair of shafts journaled in the frame and each provided at one end with a pinion and at the other
20 with a slotted crank-arm, a collar provided with oppositely-disposed ears or lugs adjustably secured to the churn-dasher, pitman-rods having their upper ends pivoted to said ears
25 or lugs and their lower ends adjustably secured to said slotted crank-arms, a master-gear meshing with one of the pinions and an

intermediate gear meshing with the master-gear and the opposite pinion.

3. The combination with a supporting- 30
frame having its longitudinal side beams spaced apart to form a housing, a main shaft journaled in the frame and provided with a master-gear mounted for rotation in said housing, a pair of auxiliary shafts arranged one 35
on each side of the main shaft and provided with terminal slotted crank-arms, a reciprocating churn-dasher, pitman-rods adjustably secured to the slotted crank-arms and pivotally connected to the upper end of the dasher, 40
pinions secured to the auxiliary shafts and rotated by the master-gear, and a table provided at its base with vessel-supporting means and having an angularly-disposed arm extending
in a vertical plane at the rear of the dasher 45
and provided with a terminal slot adapted to receive the main shaft.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

O. S. STRICKLAND.

Witnesses:

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