

J. F. BURNS.
CHURN.

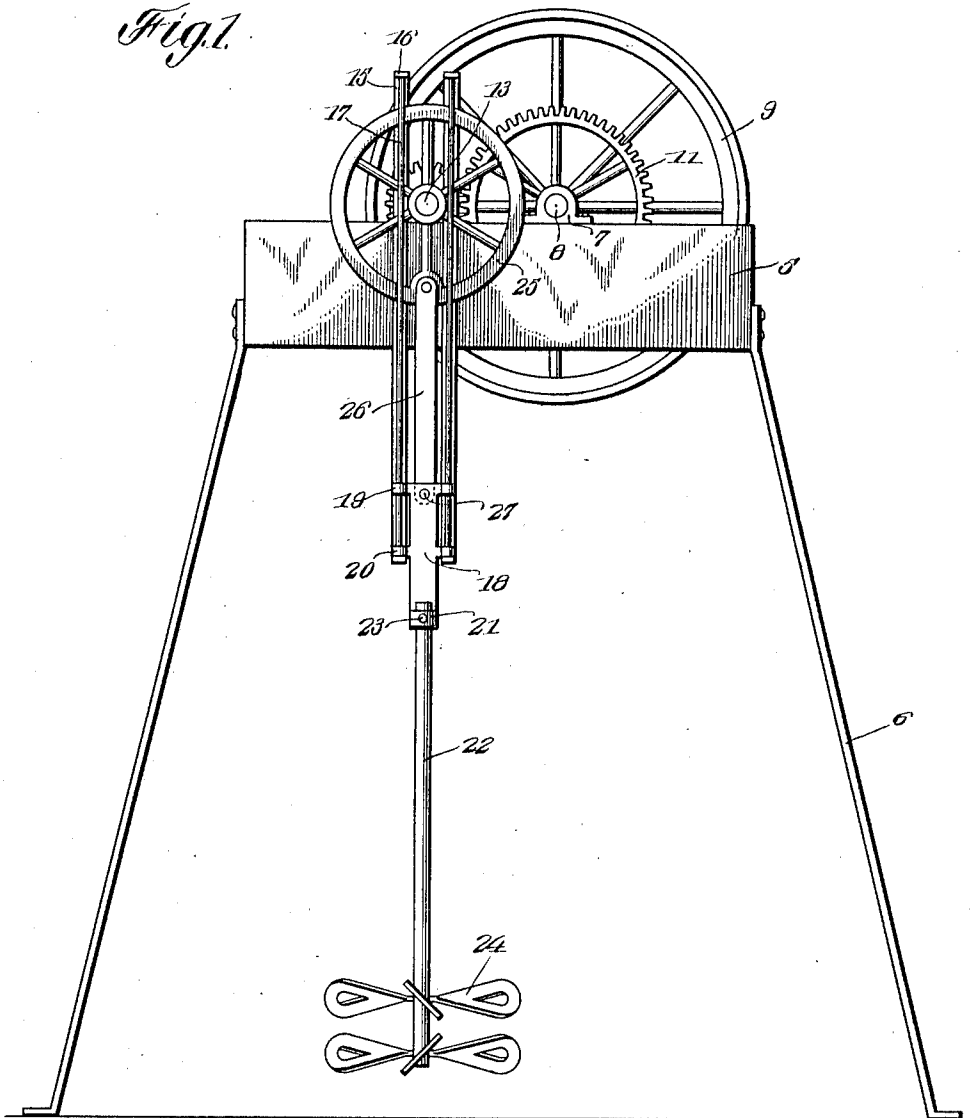
APPLICATION FILED AUG. 28, 1912.

1,061,220.

Patented May 6, 1913.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

J. H. Grayford,
E. A. Mueller

Inventor
J. F. Burns,

By *Victor J. Evans*
Attorney

J. F. BURNS.

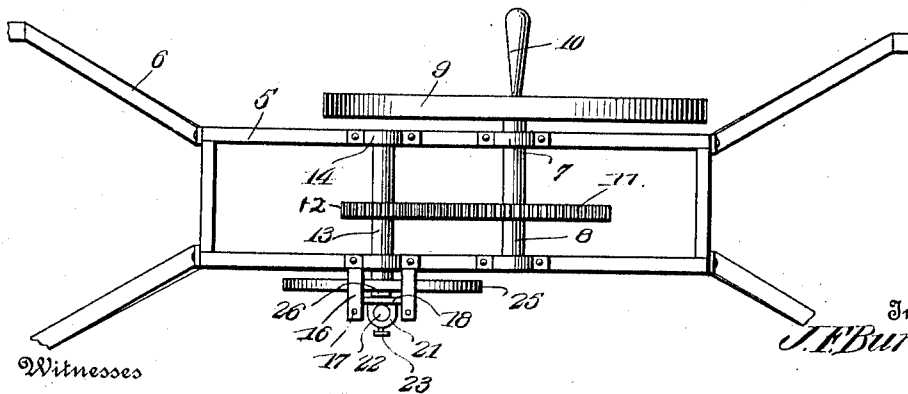
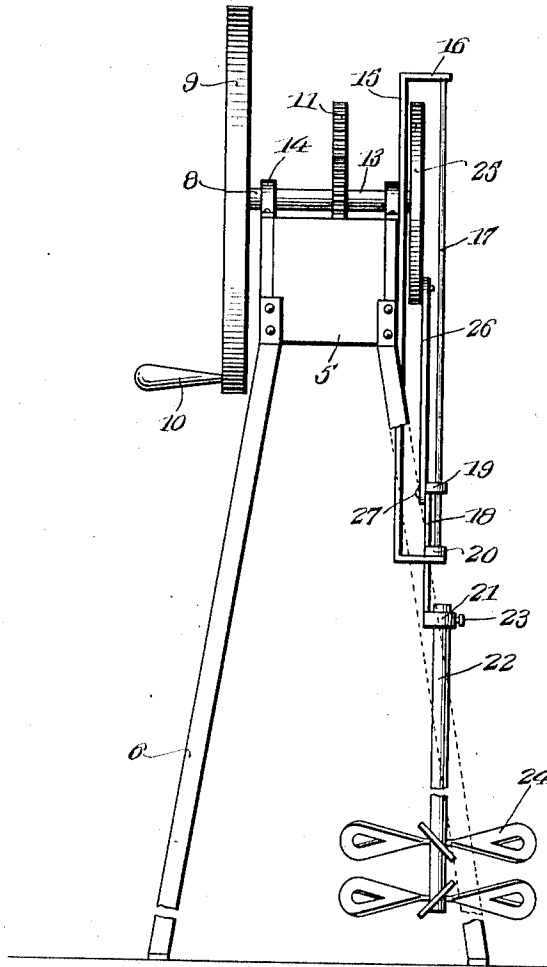
CHURN.

APPLICATION FILED AUG. 28, 1912.

1,061,220.

Patented May 6, 1913.

2 SHEETS—SHEET 2.



Witnesses

J. H. Crawford,
E. S. Mueller

Inventor

J. F. Burns,

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

JOHN F. BURNS, OF BRONSON, TEXAS.

CHURN.

1,061,220.

Specification of Letters Patent.

Patented May 6, 1913.

Application filed August 28, 1912. Serial No. 717,532.

To all whom it may concern:

Be it known that I, JOHN F. BURNS, a citizen of the United States, residing at Bronson, in the county of Sabine and State of Texas, have invented new and useful Improvements in Churns, of which the following is a specification.

The general object of this invention is the provision of a churn of the reciprocating dasher type which is constructed to facilitate the churning process; and to this end the invention consists in certain improved constructions, arrangements and combinations of devices which will be fully described hereinafter and then pointed out in the appended claim.

In carrying out the object of the invention generally stated above, it will be understood, of course, that the essential features thereof are susceptible to changes in details and structural arrangements, one preferred and practical embodiment being shown in the accompanying drawing, wherein:—

Figure 1 is a front elevation of the churn mechanism constructed in accordance with the invention. Fig. 2 is a side elevation thereof. Fig. 3 is a top plan view.

Referring more particularly to the accompanying drawings in which like reference characters designate similar parts, it will be seen that the invention comprises a horizontally arranged substantially rectangular frame 5 which is supported by a plurality of obliquely extending stay rods 6 which are secured to said frame and which support the same in an elevated position above the ground. The top longitudinal edges of the frame 5 have mounted thereon a pair of oppositely disposed bearings 7 in which is mounted a transversely extending drive shaft 8 having a drive wheel 9 mounted upon one end thereof, said wheel being provided with the crank handle 10 whereby the same may be freely rotated. Between the longitudinal sides of the frame 5, said drive shaft 8 has fixed thereon a gear wheel 11 which meshes with a pinion 12 on a second shaft 13 which is mounted transversely of said frame in suitable bearings 14. Arranged on each side of the shaft 13 and secured to the longitudinal side of the frame 5 opposite that upon which the drive wheel is mounted are the vertically arranged spaced supporting arms 15 the ends of which are provided with the short lateral extensions 16 which form bearings for the guide rods

17. A slide head 18 is provided with end and intermediate lateral extensions 19 and 20 respectively having alined openings therein which are adapted to loosely receive the guide rods 17 whereby said head may be guided in its vertical reciprocating movement. The lower end of the head 18 is enlarged to provide a socket 21 adapted to receive the upper end of an adjustable dasher shaft 22 the latter being secured in said socket by means of said screws 23. The lower end of the dasher shaft 22 has secured thereto in any suitable manner a plurality of laterally extending dasher blades 24 of any preferred construction.

The end of the shaft 13 adjacent the supporting arms 15 has mounted thereon an eccentric wheel 25 having one end of a link 26 loosely connected thereto, the other end of said link being provided with a laterally extending pivot pin 27 which is adapted to be connected to a slide head 18. It will thus be seen that upon rotation of the drive wheel 9, a similar rotary movement will be imparted to the eccentric wheel 25 through the medium of the gear and pinion 11 and 12 and by reason of the connection between said eccentric wheel and said head, a vertically reciprocating movement will be imparted to the dasher shaft 22. In use, the mechanism just described is placed above a suitable receptacle containing the liquid to be churned so that the dasher shaft will extend thereto and through the operation previously set forth, said liquid may be churned.

From the foregoing description taken in connection with the accompanying drawings, it will be seen that the invention contemplates providing a churn which is exceedingly simple in construction thus reducing the cost of manufacture of the same to a minimum and which is durable and effective in carrying out the purpose for which it is designed.

What is claimed is:—

A churn comprising a frame, a driving mechanism therefor including a driven shaft, supporting arms secured to one side of the frame on opposite sides of the driven shaft and projecting above and below said frame, the upper and lower terminals of the arms being bent lateral in direction away from the frame, guide rods supported at the free terminals of the lateral projection or said arms whereby said rods are arranged in spaced parallel relation, a slide head com-

prising a plate like member, guide eyes arranged in pairs on each longitudinal edge of said plate each pair being in spaced relation and projecting forwardly from the
5 plate and being arranged in vertical alinement with each other to slidably engage the guide rod, a dasher connection formed on and projecting from the lower edge of said
10 nection between the driven shaft and said

plate, said connection being in alinement with the dasher connection whereby the strain on the slide head is at all times intermediate the guide bars.

In testimony whereof I affix my signature 15 in presence of two witnesses.

JOHN F. BURNS.

Witnesses:

T. G. DRAWHORN,
GEO. H. THOMSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
