

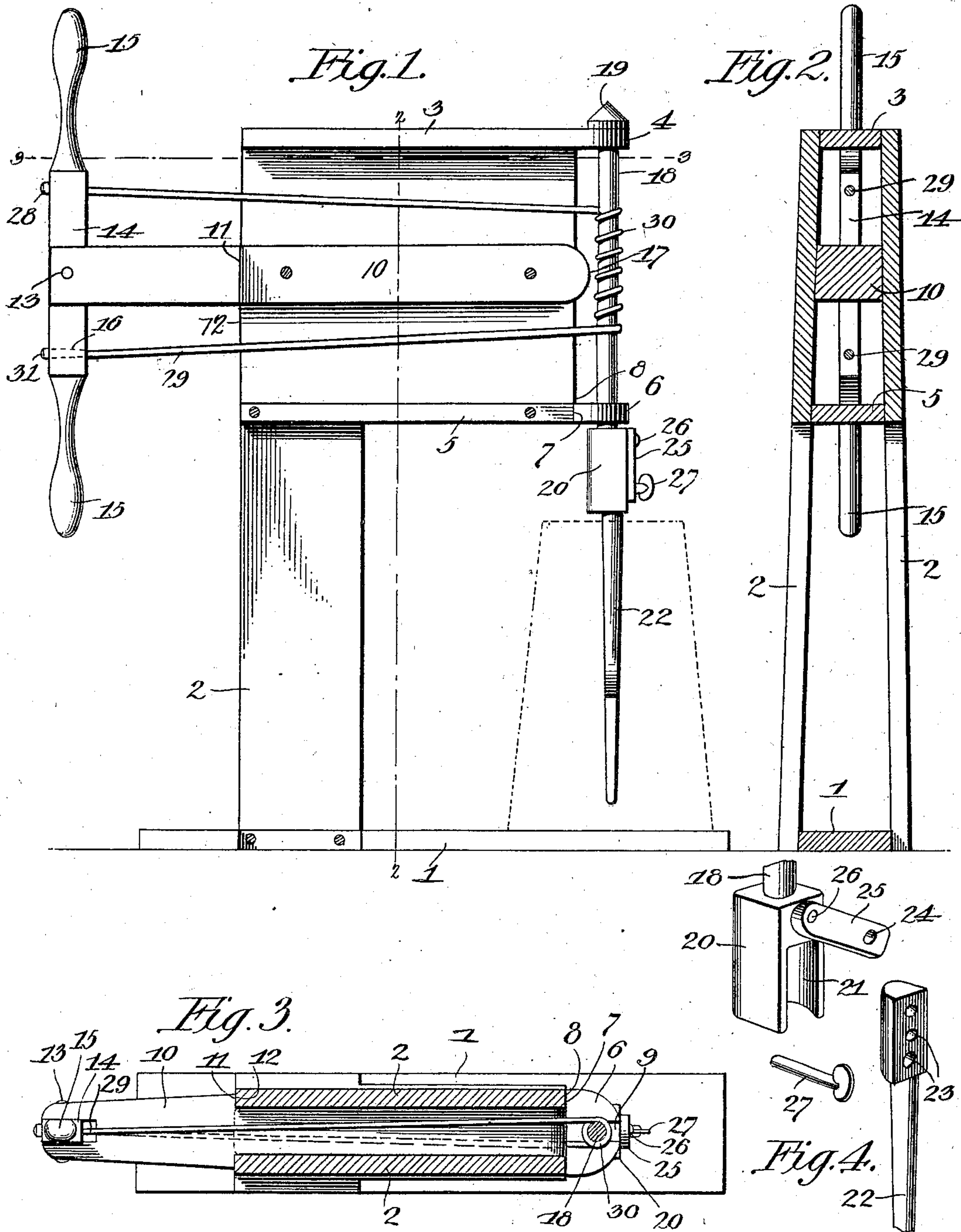
No. 725,597.

PATENTED APR. 14, 1903.

F. F. SIMS.
CHURN POWER.

APPLICATION FILED FEB. 28, 1903.

NO MODEL.



Witnesses
E. F. Stewart
J. H. Jochem, Jr.

F. F. Sims, Inventor.
by *C. A. Snow & Co.* Attorneys

UNITED STATES PATENT OFFICE.

FOREST FRANCIS SIMS, OF ST. BETHLEHEM, TENNESSEE, ASSIGNOR OF ONE-HALF TO L. E. WEBB, OF ST. BETHLEHEM, TENNESSEE.

CHURN-POWER.

SPECIFICATION forming part of Letters Patent No. 725,597, dated April 14, 1903.

Application filed February 28, 1903. Serial No. 145,580. (No model.)

To all whom it may concern:

Be it known that I, FOREST FRANCIS SIMS, a citizen of the United States, residing at St. Bethlehem, in the county of Montgomery and State of Tennessee, have invented a new and useful Churn-Power, of which the following is a specification.

My invention relates to churns, and more particularly to that class in which is employed a rotatable dasher attached to a staff, which staff is given a rapid vibratory movement by means of an encircling belt, the free ends of which are attached to an operating lever or handle.

The object of the invention is to produce a churn which is easy to operate, simple in construction, and cheap to manufacture; and to these ends my invention consists in the details of construction, as hereinafter more fully described and claimed, and as illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation with one side of the framework or casing removed. Fig. 2 is a vertical section on line 2 2 of Fig. 1 looking toward the operating-lever. Fig. 3 is a horizontal sectional view taken on line 3 3 of Fig. 1; and Fig. 4 is an enlarged detail view of the dasher-staff socket, upper end of the dasher, and securing-pin.

Referring more particularly to the drawings, the numeral 1 designates the base or platform of the supporting-framework. 2 designates the sides or standards thereof, and 3 the transverse top bar of the framework, which is extended forward beyond the front of the framework or standards 2 and bifurcated at the end 4, for a purpose hereinafter set forth.

5 is a cross rail or bar, which is secured between the standards 2 somewhat remote from the base thereof and at a short distance from the top and parallel to the top or bar 3. Said rail is enlarged at its forward end 6, so as to form the shoulders 7, which project beyond the side thereof and are adapted to abut against the front edges 8 of the upper portion of the standards 2, as shown in Fig. 3, when secured in position and is provided in its extreme forward end with a bifurcation 9.

Secured between the upper portions of the standards 2 and extending to the rear there-

of for some distance is a central longitudinal partition or strip 10, and said strip is enlarged to form shoulders 11, which abut against the rear edges 12 of the standards 2, and pivoted between its ends, as at 13, and to the rear extremity of the partition or strip 10 is a lever 14, provided with operating-handles 15. Said lever is also provided near each handle with a transverse aperture 16, and the forward end of the partition 10 is rounded or beveled, as at 17.

The numeral 18 designates a dasher-staff, which is provided at its upper end with a head or button 19, and its lower end is enlarged, as at 20, and mortised, as at 21, to form a socket for the end of the dasher 22. Said dasher is provided near one end with a plurality of transverse apertures 23, adapted to register alternately with the aperture 24 in the button or cap 25 at the end of the dasher-staff. Said button or cap is connected to the front of the enlarged portion 20 of the dasher-staff by means of the screw 26, and 27 is a transverse pin adapted to be inserted in the registering apertures of the members to hold the dasher in position. Secured within one of the apertures 16 in the lever 14 by means of a plug 28 is the free end of a cord or belt 29. Said cord is passed through the framework above the partition 10 and below the top 3, then wrapped spirally around the dasher-staff 18, as at 30, and the dasher-staff then inserted in the bearings 4 and 9, so that the top 19 will rest upon the upper face of the bar 3. The free extremity of the belt or cord 29 is returned through the framework, but below the central partition 10 and above the cross-bar 5, and its extremity is secured within the opening near the lower handle of the lever 14 by means of the plug or wedge 31. The receptacle containing the milk can then be placed upon the base 1 beneath the dasher-staff, the dasher placed in position, and the machine is ready for operation.

It will be seen that a rapid movement of the lever 14 backward and forward by means of the handles 15 will cause the dasher-staff 18 to rapidly vibrate through the medium of the cord or belt 29, and in so doing the belt will at times become slack and have a tendency to "whip," and the upper and lower

parts would become tangled and the whole would ride up and down the dasher-staff 18, tending to raise the same. In order to obviate this difficulty, I have provided the central partition or strip 10, which separates the upper and lower strands of the belt, supporting the upper one and holding down the lower one, thus preventing the rope and coil 30 from slipping or riding up and down on the dasher-staff 18. The beveled or rounded end 17 thereof prevents the corners from cutting said belt.

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

1. A device of the class described comprising a pair of standards, transverse parallel cross-bars secured to said standards, and provided with journals in their forward ends, and a vertical dasher-staff mounted in said journals, a horizontal partition secured between the standards intermediate the cross-bars, said partition extending for some distance to the rear of the standards, a lever pivoted between its ends to the free extremity

of the partition and a cord or rope, surrounding the dasher-staff, the ends of said rope passing through the standards, one above and one below the central portion, and having their extremities secured to the lever.

2. A device of the class described comprising supporting members transversely-disposed bars secured thereto and provided with bearings, and a vertically-disposed dasher-staff mounted therein, a horizontal partition disposed between said bars to form therewith, two independent guideways, a lever pivoted to said partition at a point remote from the supporting members, and a cord or rope, surrounding said dasher-staff, passing through each guideway and having their free ends secured to said lever, on either side of its pivot-point.

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

FOREST FRANCIS SIMS.

Witnesses:

L. W. BYERS,
D. P. THOMAS.