

Improvement in Churns.

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Witnesses.

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IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 130,836, dated August 27, 1872.

Specification describing a certain new and useful Improvement in Churns, invented by WILLIAM E. BARR, residing in Ripley's, county of Tyler and State of West Virginia.

In the annexed drawing, Figure 1 represents a longitudinal vertical section of my improved churn, and Fig. 2 is a plan view of the same with the cover of the receptacle carrying or containing the mechanism through which increased motion is imparted to the dasher-staff removed.

Like parts in both figures are designated by corresponding letters of reference.

This invention relates to an improvement in churns of that class in which the propelling power is transmitted from the occupant of a chair, susceptible of rocking motion and suitably connected with the churn, through intermediate gearing and other mechanism; and it consists of the combination and arrangement of some of the devices of which it is constituted, substantially as hereinafter more fully set forth and specifically pointed out in the claim.

To enable others to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawing, A refers to an ordinarily-constructed chair, which has its hind legs pivoted to the board or floor B by any suitable means and in any desired manner, the front legs thereof resting directly above or upon flat metallic springs *b b* fastened to the said floor, the object of which being to relieve the chair from the jar which it usually receives where the legs thereof fall directly in contact with the floor during the operation of churning. C C refer to crank-rods or treadles, which are rigidly secured, by means of screws or staples, or by other suitable means, to the chair-legs, and thence caused to extend into a receptacle, D, having vertical slots *d* for their passage or admission thereto. The ends of the said bars, after having passed through said slots, are connected by pivots to other bars, D' D', which are, in turn, pivoted at their opposite ends to one end of the receptacle D, or to a bar, *d'*, placed therein, and at said point. E refers to the driving-wheel, which is supplied with a weight, *e*, so placed thereon as that when the said wheel ceases to revolve it will leave the trea-

dles or bars D and the cranks upon the shaft of said wheel in a partly elevated position, to enable the machine to be readily put in motion. The axle or shaft *e'* of this wheel is journaled in the sides of the receptacle D, and provided with cranks *e² e²*, to which are attached or connected the bars D' by means of the plates or links *f*. F is a pinion or cog-wheel, gearing with the driving-wheel, and located upon a shaft, *f'*, having its bearings within the sides of the receptacle D, and carrying the ordinary fly-wheel F'. G is also a pinion or cog-wheel, the axle or shaft *g* of which is journaled in the sides of the receptacle D and supplied with cranks *g' g'*. H refers to rods which connect the crank *g' g'* to the upright vertically-movable bars I, to the connecting-bar or beam I' of which is suitably attached the dasher-staff J, working in a vertical plane within the vessel J', which receives and holds the cream or milk to be converted into butter. A frame, K K, is mounted upon and secured to the upper side of the cover *k* of the receptacle D in any suitable manner, and by means of mortises and tenons or otherwise. To the inner sides of the vertical portions K of the said frame are supplied perforated blocks or guides *k' k'*, within which slide vertically the bars I. A cover, L, is placed over the protruding portion of the driving-wheel, and then hooked to the vessel J. M is a lid, hinged to the cover *k*, the use of which is apparent without further elucidation thereof.

The operation of my churn is obvious from the above description of the construction and arrangement of its parts.

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

The chair A, springs *b b*, treadles C C, receptacle D, bars D' D', gearing-bars or links *f* H, bars I I', dasher-staff J, vessel J', and frame K K', all combined and arranged substantially as and for the purpose set forth.

In testimony whereof I have hereunto signed my name this 8th day of July, A. D. 1872, in presence of two subscribing witnesses.

WILLIAM E. BARR.

Witnesses:

JAMES PIPES,
L. H. LONG.