(No Model.)

J. R. DOUGLASS.

CHURN POWER.

No. 341,893. Patented May 18, 1886.

Fig. 2.

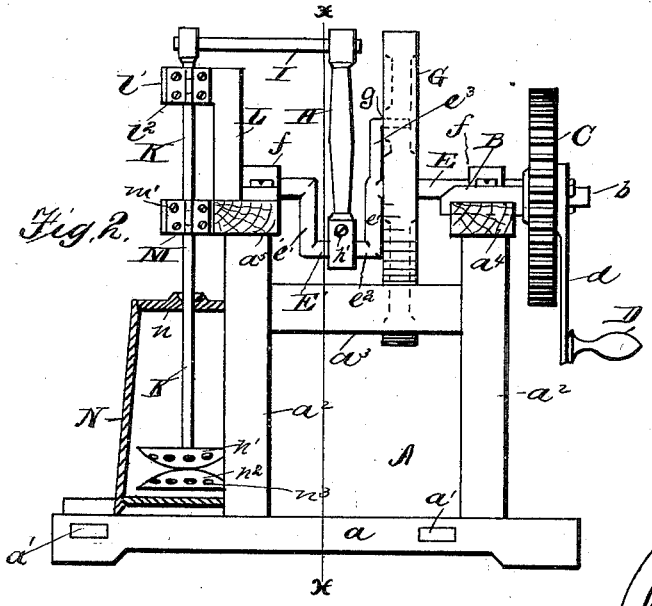
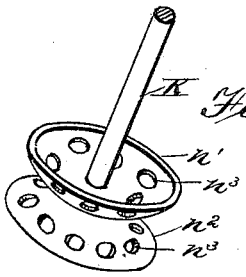


Fig. 4.



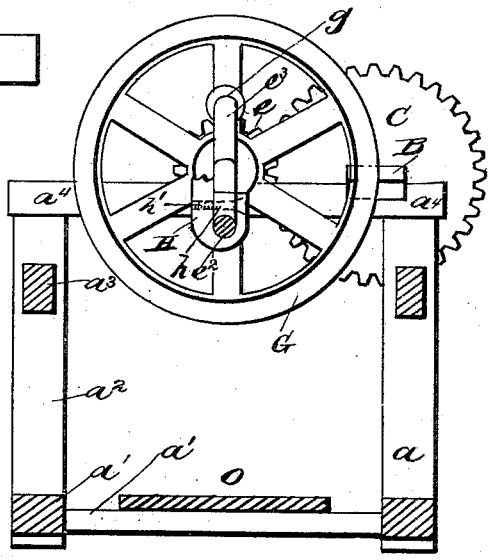
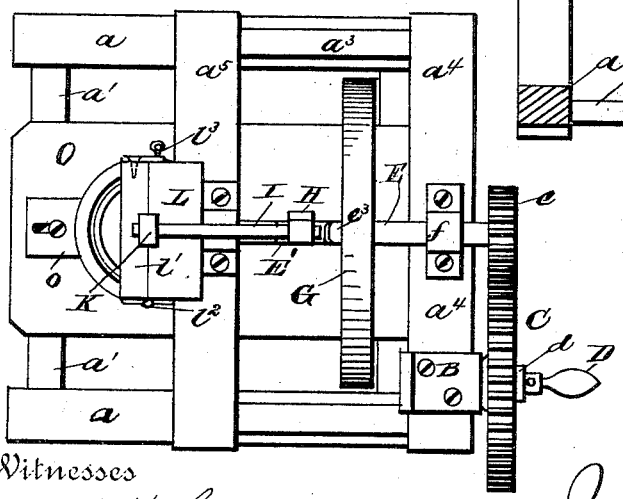


Fig. 3.

Fig. 1.



Witnesses
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E. G. Siggers.

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By his Attorneys
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UNITED STATES PATENT OFFICE.

JAMES ROBBERT DOUGLASS, OF SEBA, ARKANSAS.

CHURN-POWER.

SPECIFICATION forming part of Letters Patent No. 341,893, dated May 18, 1886.

Application filed February 13, 1886. Serial No. 191,852. (No model.)

To all whom it may concern:

Be it known that I, JAMES ROBBERT DOUGLASS, a citizen of the United States, residing at Seba, in the county of Benton and State of Arkansas, have invented a new and useful Improvement in Churn-Powers, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to churn-powers; and the novelty consists in the construction, arrangement, and combination of the several parts, substantially as hereinafter described, and specifically pointed out in the claims.

In the drawings, Figure 1 represents a plan view of a churn-power embodying my improvements. Fig. 2 is a side elevation thereof. Fig. 3 is a section on the line *x x* of Fig. 1; and Fig. 4 is a detail perspective view of the dash-rod and dashers detached from the churn.

Referring to the drawings, in which similar letters of reference denote similar parts, A designates the frame of the machine, consisting of the base timbers or sills *a*, connected together by rails *a'*, corner-posts a^2, connected by transverse rails a^3, near their upper ends, and rails a^4 a^5, that extend longitudinally and are secured to the upper ends of the corner-posts.

B designates a block secured at one end upon the upper surface of the rail a^4, near one end thereof, and provided upon its outer surface with a stud, *b*, upon which is loosely mounted a spur-gear wheel, C, having a crank-arm, *d*, secured to its outer surface, and provided with a handle, D, by which the machine is operated. The wheel C is provided with teeth that engage with teeth upon a pinion, *e*, mounted upon a crank-shaft, E, journaled in boxes *f*, secured to the upper surface of the rails a^4 a^5.

E' designates the crank, formed upon the shaft E, near one end thereof. This crank consists in sides *e'*, bent at right angles to the axis of the shaft E, and connected at their outer ends by a part, e^2, to which the lower end of the pitman-rod is coupled.

e^3 designates a projection formed upon the shaft E, opposite to and in alignment with one of the sides *e'* of the crank, the upper end of which part or projection e^3 is bent laterally and enters an aperture, *g*, formed through a fly or balance wheel, G, mounted upon the shaft E, beside the crank E' thereon. The fly-wheel is thus secured to the shaft E, as will be very readily understood.

H designates the pitman-rod, the lower end of which is bent backward to form a loop that encircles the part e^2 of the crank E.

h designates a block placed between the jaws of the pitman-rod and bearing against the part or crank-arm e^2, and said block is held in place by a screw, *h'*. The upper end of the pitman-rod has a horizontally-projecting arm, I, to the outer end of which is connected the upper end of the vertically-movable dasher-rod K. This rod works in boxes *l'* and M, which are secured to a vertical standard, L, by means of hinges l^2 and *m'*. The free ends of the boxes are provided with securing devices l^3, by means of which they may be secured to the standard. When the free ends of the boxes are swung outwardly from the standard the dasher-rod is released, and may then be withdrawn from the arm I and the churn. The dash-rod K passes freely through the cover *n* of the churn N, and is provided upon its lower end within the churn with two circular disks, *n' n²*, having a concavo-convex form and provided with apertures n^3, through which the milk passes when the dash-rod is operated up or down.

I place importance upon the construction of the disks *n' n²*, as by such I am enabled to accomplish results heretofore unattainable in churn-dashers—as, for instance, the disks may be used as a strainer to separate the butter from the milk and to remove the butter from the churn.

N designates the churn of the ordinary style.

O designates a platform consisting of a plank extending transversely of the machine upon and secured to the rails *a'*. If desired, this platform may be provided with sliding clamping-blocks *o*, to more securely hold the churn in position.

Modifications in detail of construction may be made in the within-described invention without departing from the spirit or sacrificing the advantages thereof.

I claim—

1. The combination of the frame A, having the hinged boxes, the crank-shaft E, journaled to the frame and having the arm e^3, provided

with the laterally-projecting stud, the fly-wheel on the shaft, and provided with the opening *g*, to receive the projecting stud, the pitman connected to the crank and having the arm I, the churn and the dasher-rod secured in opening made partly in the hinged boxes and partly in the opposing position of the frame and free to move vertically therein, and having its upper end attached to the arm I, substantially as described.

2. In a churn-power, the crank-shaft E, having the arm e^3, provided with the laterally-projecting stud and the fly-wheel on the shaft, and provided with the opening *g*, to receive the projecting stud, whereby the fly-wheel is secured to the shaft, substantially as described.

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

JAMES ROBBERT DOUGLASS.

Witnesses:
J. H. McCLINTON,
E. S. McDANIEL.