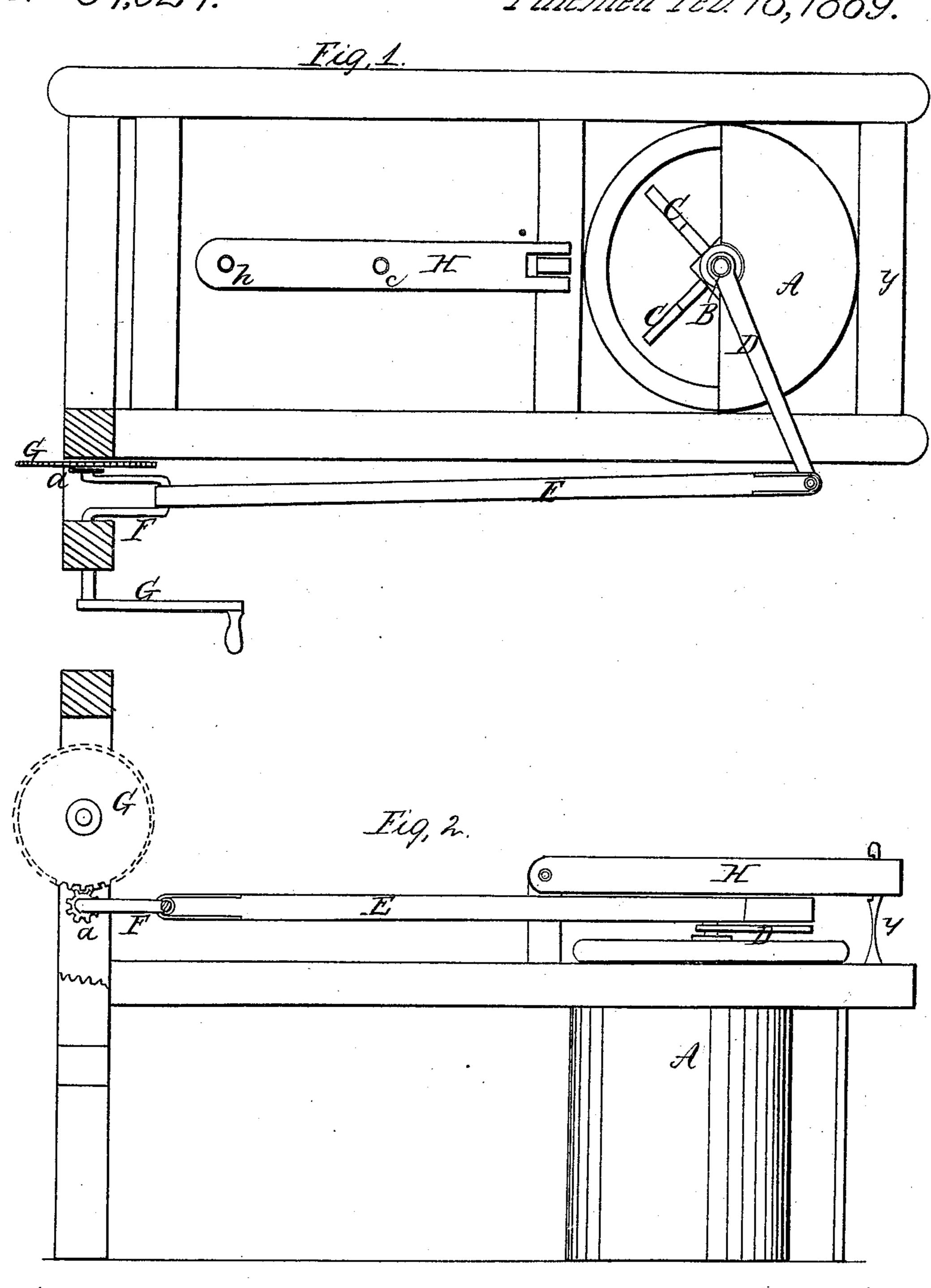
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Witnesses, Il Smith Paul G. Macenberger Inventor, Moses Clifton Chipman Horner & artys



MOSES CLIFTON, OF PEORIA, ILLINOIS.

Letters Patent No. 87,027, dated February 16, 1869.

IMPROVEMENT IN CHURNS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Moses Clifton, of Peoria, in the county of Peoria, and State of Illinois, have invented a new and valuable Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1, of the drawings, is a representation of a plan view of my churn, with a portion of the cover removed.

Figure 2 is a side view thereof.

My invention relates to that class of churns in which the cream or milk is agitated by rotating dashers; and

It consists in providing means for producing a rapid forward and backward movement of such dashers, and thereby causing greater agitation than is possible when the dashers are moved entirely around.

My invention also consists in providing novel and useful means for holding the dashers in place, as well as for removing them.

The letter A, of the drawings, represents a tub, or jar, in the form of an ordinary churn, set in a frame as shown.

Letter B is an upright standard, adjusted in said churn in the usual manner, and

Letters C are the churn-dashers, attached thereto. Letter D is a lever, attached to the top of standard B at one end, while its opposite end is united, as shown, to the piston E, next mentioned.

Letter E is the piston, connected, at its front end, with the lever D, while its rear end is joined to the crank F.

The crank **F** is adjusted, as shown, in an upright frame. It is united with the piston **E**, and has upon its inner arm a pinion, marked *a*.

The letter G is a crank-and-cog wheel, adjusted as shown, the cogs of which wheel operate the pinion a and its connections.

The letter H is a hinged bar, the hinge of which is arranged on the top of an upright on the frame, as represented. When this bar is lowered over the churn, the opening c passes over and holds the extended upright stem of standard B, and opening h passes over

and down the spring y until the top of the bar reaches a point below the shoulder thereon.

The letter y is an upright spring, set in the front cross-bar of the frame, the object of which is to serve as a ready means of holding the bar H securely in place, or of releasing the same at will. When said bar is pressed downward over the churn, said spring enters the opening y, and when the top of the bar passes below a shoulder cut in said spring, the bar is held securely. To release the bar, the top of the spring is crowded outward.

Thus, it will be perceived that, while the opening c in bar H furnishes pivotal bearings for the top of standard B, the spring y serves as a fastener for the bar, and makes it removable at will. It will readily be seen that, by removing the bar H, the cover of the churn is reached, and may be removed, as well as the standard and dashers inside the churn.

To operate my churn, turn the crank. The cogged wheel G meshes with and rotates the pinion a, which, in turn, operates the crank F, piston E, lever D, standard B, and the dashers thereon. The result is a sharp and extremely rapid back-and-forth motion of the dashers, and a violent agitation of the cream or milk in the churn.

Butter is held in cream or milk in the form of a fatty substance, encased in sacs, like the capsules of the druggists, and the process of churning consists in breaking these sacs, releasing the fat, and collecting it together in masses. My device, with its rapid backand-forth movement, breaks these sacs readily, and cohesion draws the unctuous particles into one mass, when the movement is continued.

What I claim as my invention, and desire to secure by Letters Patent, is—

A churn, having standard B, bar H, spring y, lever D, piston E, crank F, pinion a, and crank and wheel G, constructed, arranged, combined, and operating substantially as herein specified.

In testimony that I claim the above, I have hereunto subscribed my name, in the presence of two witnesses.

MOSES CLIFTON.

Witnesses:

FRANK PURPLE, GEO. PUTERBAUGH.