S. S. ZAHM.

Churning Apparatus.

No. 207,233. Patented Aug. 20, 1878.

Fig. 1.

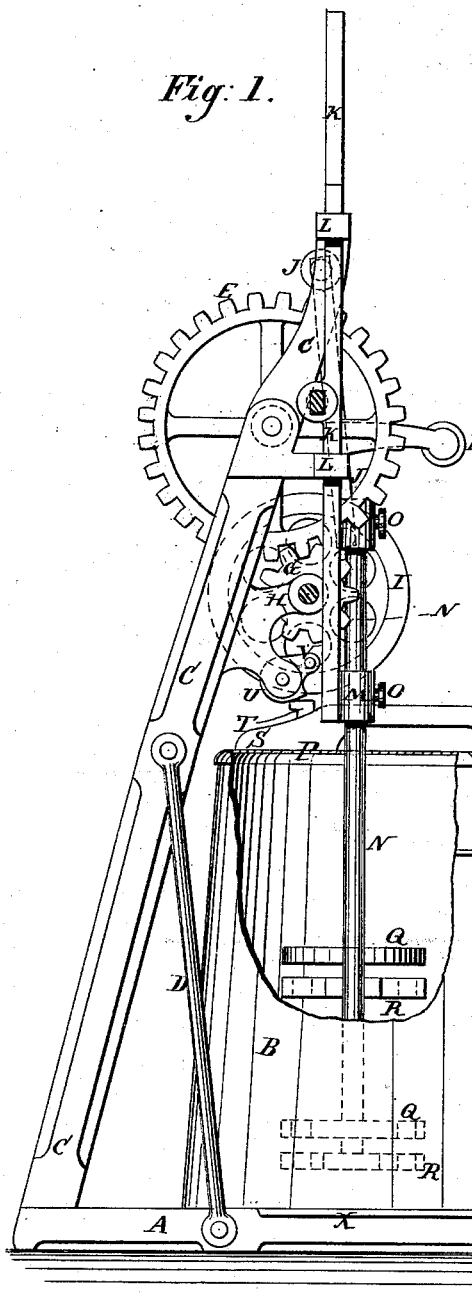


Fig. 3.

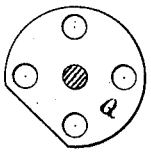


Fig. 4.

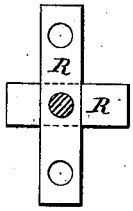
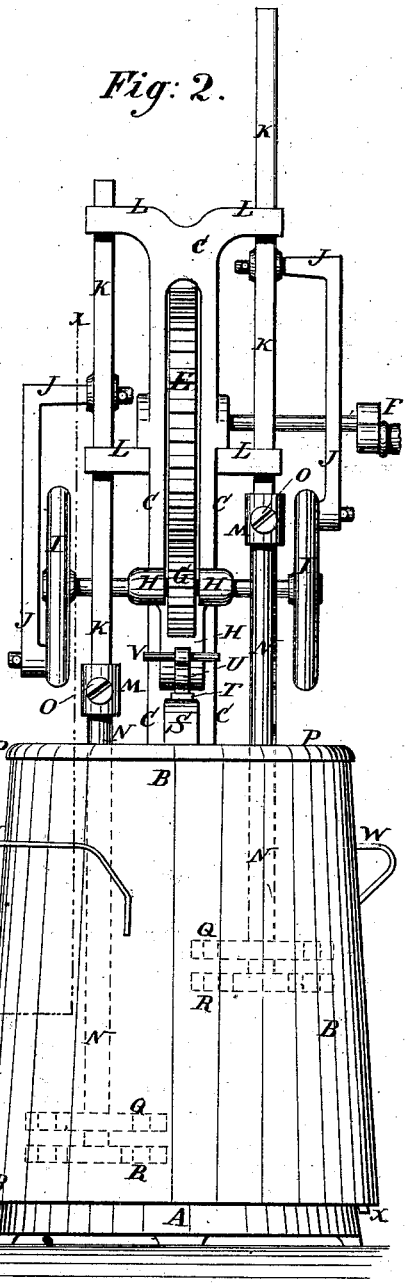


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

SIMON S. ZAHM, OF HUNTINGTON, INDIANA.

IMPROVEMENT IN CHURNING APPARATUS.

Specification forming part of Letters Patent No. **207,233**, dated August 20, 1878; application filed June 6, 1878.

To all whom it may concern:

Be it known that I, SIMON S. ZAHM, of Huntington, in the county of Huntington and State of Indiana, have invented a new and useful Improvement in Churning Apparatus, of which the following is a specification:

In the accompanying drawing, forming part hereof, Figure 1 is a side view of my improved churning apparatus, partly in section, through the line *x x*, Fig. 2. Fig. 2 is a front view of the same. Fig. 3 is a detail top view of the upper part of a dasher. Fig. 4 is a detail top view of the lower part of a dasher.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved churning apparatus which shall be simple in construction, convenient in use, easily operated, and effective in operation, bringing the butter in a very short time, and with a comparatively small amount of labor.

A is a platform or frame to receive the churn B. To the rear end of the platform A is attached the lower end of a post, C, which inclines forward, so that its upper end may be over the center of the churn B.

The post C is strengthened in position by two braces, D, the lower ends of which are attached to the rear parts of the sides of the platform A, and their upper ends are attached to the opposite sides of the middle part of the post C. The braces D also serve as guards to prevent the churn B from being pushed too far back.

The upper part of the post C is slotted, and to it, within the said slot, is pivoted a large gear-wheel, E, one of the journals of which projects, and to it is attached the crank F, by means of which the apparatus is operated. The teeth of the gear-wheel E mesh into the teeth of the small gear-wheel G, pivoted to lugs or an arm, H, attached to the post C.

The journals of the small gear-wheel G project, and to them are attached the two crank-wheels I, which are made heavy, so as to serve also as fly-wheels. To the crank-pins of the wheels I are pivoted the lower ends of the connecting-rods J, the upper ends of which are bent inward, and are pivoted to lugs or bearings formed upon or attached to the sliding bars K.

The bars K slide up and down in guide-holes in the arms L, formed upon or attached to the post C.

To the lower ends of the sliding bars K are attached sockets M, to receive the ends of the dasher-handles N, which are secured in place by set-screws O, passing in through the sides of the said sockets, and resting against the sides of the said dasher-handles. The dasher-handles N pass through holes in the churn-cover P, and to their lower ends are attached the dashers Q R. The upper part, Q, of the dashers is made in the form of a circle or disk, has a number of holes formed through it, and is secured to the dasher-handles N a little above their lower ends. The lower part, R, of the dashers is formed of two bars, crossing each other at right angles, has holes formed through its arms, and is secured to the lower ends of the dasher-handles N.

If desired, the adjacent edges of the dashers Q R may be cut off, to allow the said dashers to be made larger than would otherwise be possible.

The churn-cover P is provided with a handle, S, for convenience in putting it on and taking it off. To the rear part of the handle S or cover P is attached a projection, T, for the cam U, pivoted to the lower part of the lower arm, H, to operate upon to hold the said cover securely in place.

The cam U is provided with a handle, V, for convenience in operating it to fasten and release the cover P.

To the sides of the churn B are attached handles W, for convenience in placing it upon and removing it from the platform A, and the said churn has bars X attached to its bottom, to prevent it from having any lateral movement upon the said platform A.

With this construction the guide-braces D and the bars X keep the churn in place when in use, and also center it when being placed upon the platform A.

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

1. The combination, with dashers Q R and rods N, of the bars K K, connected by sockets to the dasher-rods, the post C, having arms L, the connecting-rods J, the crank-wheels I I, and the wheels G E, as shown and described, for the purpose specified.

2. The combination of the locking-cam U with the post C and the cover P of the churn B, substantially as herein shown and described.

SIMON S. ZAHM.

Witnesses:
OWEN BUCHANAN,
L. P. BOYLE.