G. HART.

Churn.

No. 48,277. Patented June 20, 1865.

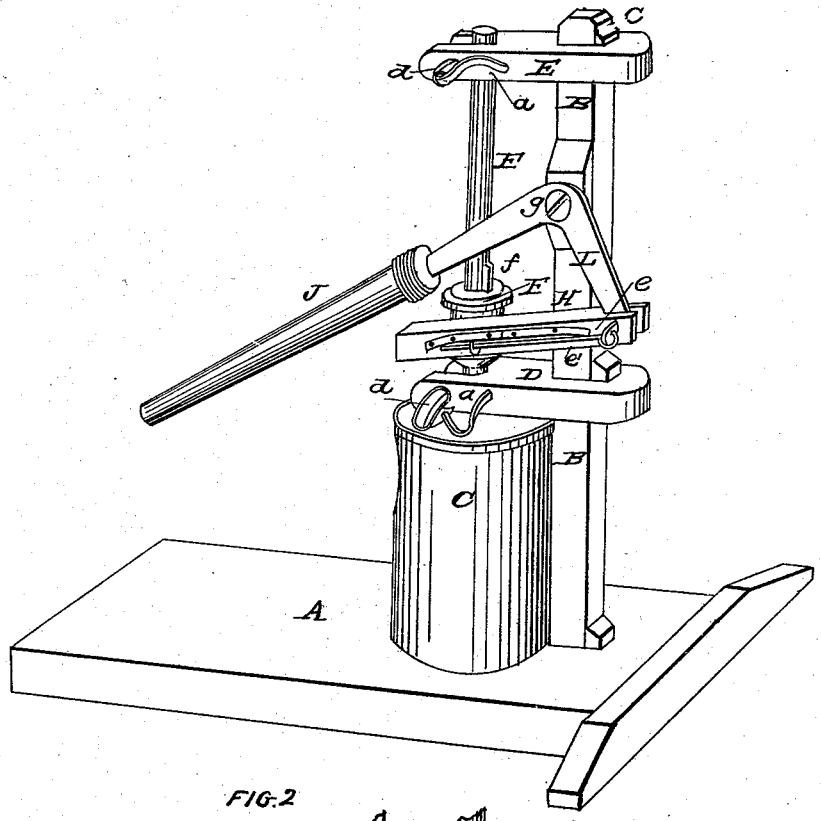


FIG. 2

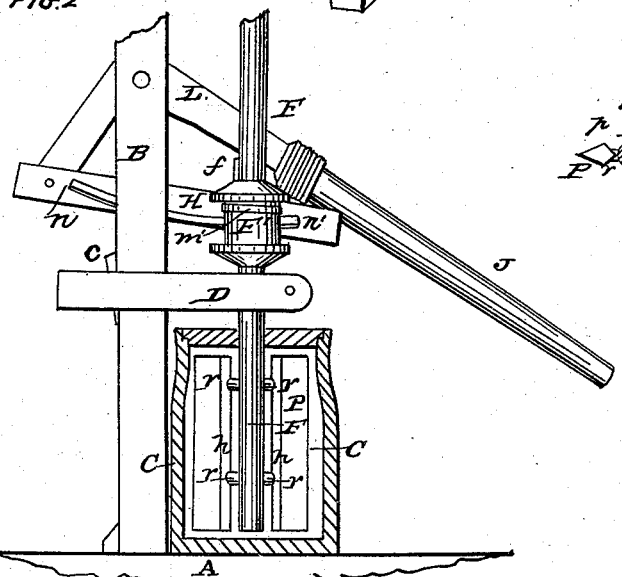
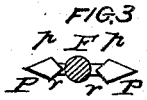


FIG. 3



WITNESSES

W. H. Burridge

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INVENTOR

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GEORGE HART, OF ATWATER, OHIO.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **48,277**, dated June 20, 1865.

To all whom it may concern:

Be it known that I, GEO. HART, of Atwater, in the county of Portage and State of Ohio, have invented certain new and useful Improvements in Churns; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the churn. Fig. 2 is a side view with a part of the churn removed to show the beaters. Fig. 3 is a top view of the dasher.

Like letters of reference refer to like parts in the views.

My improvement relates to churns, as hereinafter described.

A is a base-board or platform, in which is secured an upright standard or post, B. Beside this standard is placed the churn C, as represented.

D and E are arms, through one end of which the standard B passes. These arms are secured on the standard in any desired place by means of keys *c*. Through a slot in the other end of the arms extends the shaft F of the dasher when the churn is adjusted into place, and the shaft is retained there by pins *d* being put across through holes in the arms.

The pins are hung to the arms by straps *a*, so as to be always convenient and ready for use.

H is a guide, in one end of which is connected a lever, L, by a pin, *e*, that is kept in place by a spring, *e'*.

The lever is formed as shown in Figs. 1 and 2, and is pivoted at *g* to the standard B, and to the other end is secured the handle J, by which it is operated.

To the guide is attached straps *m m'*, that extend along one side from *n* to *n'*, passing round a pulley, F', on the shaft F, and are fastened at the ends in the pulley, one above the other, and pass around the pulley in different directions, so that as the lever is raised and lowered, moving the guide back and forth, the pulley will be turned reversely, operating the dasher in the desired manner. When the lever is raised the strap *m'* revolves the pulley in the direction of the arrow, and when it is lowered the strap *m* will reverse the motion of the pulley and shaft. Thus the dasher or beaters P are turned back and forth in the churn about half-way round (more or less) every stroke.

The beaters consist of paddles or wings P, secured to the shaft at *r*, and are shaped transversely, as shown in Fig. 3, which is a top view representing them pointed at the outer and inner edges, and also on the sides at *p*, forming inclined surfaces and edges to strike against the milk.

The dasher extends from near the bottom to near the top of the churn, and as it revolves it agitates the entire quantity of milk, so as to churn it thoroughly in a very short time.

With this arrangement a churn of any size or height can be used, for the arms D and E can be elevated or lowered by means of the keys *c*, and the pulley F' can be adjusted accordingly by the key *f* on the shaft.

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

The guide H, straps *m m'*, and lever L, in combination with the pulley F' and beaters P, when arranged and operating as and for the purpose set forth.

GEO. HART.

Witnesses:
W. H. BURRIDGE,
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