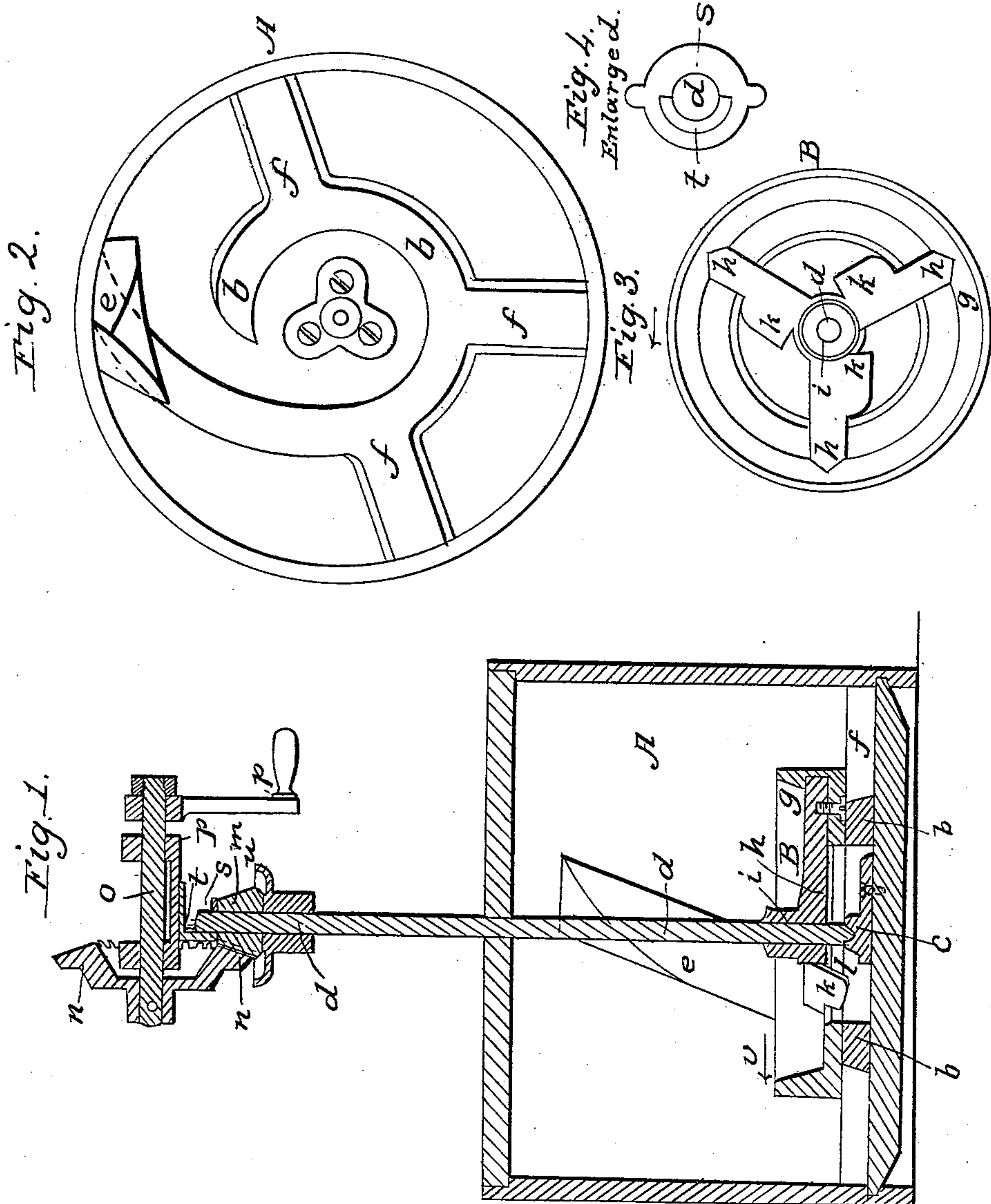


J. C. SCRIBNER.

Churn.

No. 53,352.

Patented March 20, 1866.



Witnesses:
Samuel A. Peper.
A. B. Washburn

Inventor:
John C. Scribner
 by his attorney
P. H. Kellogg

UNITED STATES PATENT OFFICE.

JOHN C. SCRIBNER, OF HOLDERNESS, NEW HAMPSHIRE.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 53,352, dated March 20, 1866.

To all whom it may concern:

Be it known that I, JOHN C. SCRIBNER, of Holderness, in the county of Grafton and State of New Hampshire, have invented an Improved Churn; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a transverse section of it; Fig. 2, a top view of its tub; Fig. 3, a top view of its dasher; Fig. 4, a horizontal section of the upper bearing of the dasher-spindle.

In the drawings, A denotes the tub, and B the dasher, of the churn.

On the bottom of the tub is a spiral or curved ridge, *b*, which encompasses the step *c* of the spindle *d* of the dasher, and unites at its outer extremity with an inclined wing or cleat, *e*, affixed to and projecting from the inner curved surface of the tub, the whole being arranged as shown in Figs. 1 and 2. Three or any other suitable number of current breakers or ridges, *fff*, extend radially on the bottom of the tub and from the ridge *b* to the inner curved surface of the tub.

The dasher B consists not only of an annulus, *g*, formed as shown in the drawings and supported by arms *h h h* extending from a hub, *i*, fastened on the spindle *d*, but of a series of inclined wings, *k k k*, one of which is fastened to each of the said dasher-arms and extends into the space *l* around the step of the spindle. The said spindle has a beveled pinion, *m*, carried on it near its upper journal. This beveled pinion engages with a beveled gear, *n*, fixed on a horizontal shaft, *o*, which is supported in a puppet-head, *p*, sustained by an arched bail that extends upward from and crosses the tub.

A crank, *r*, on the shaft *o* affords a means of rotating the shaft in order to effect a revolution of the dasher. The journal at the upper end of the spindle enters a semi-tubular bearing, *t*, which projects from the bail and is surrounded by an annulus or plate, *s*, formed as shown in the drawings, and constitutes the other part of the bearing. This annulus is to be capable of being slid vertically on the part *t* sufficiently to rise wholly above the spindle

in order that the dasher may be removed from the tub, the annulus, when below the top of the spindle, serving to preserve the top of the spindle in its place in its bearings and step.

An annular cup, *u*, is fixed on the spindle concentrically therewith and just beneath its beveled pinion and gear, the purpose of such cup being to catch any oil which may drop from the spindle bearing or gears and prevent such oil from falling into the tub or down upon its cover.

By revolving the dasher in the direction denoted by the arrow *v*, (marked thereon,) not only will a centrifugal movement be imparted to the cream when in the tub, but the mass of such liquid will be caused to impinge against the inclined wing or cleat *e*, which will direct it toward and into the space *l* below the opening of the dasher. By the peculiar action of the wings of the dasher the cream will also be drawn into the space *l* and thrown upward through the dasher. The auxiliary or radial ridges *fff* also serve to produce more or less agitation of the cream, as well as to arrest its rotary motion near the inner curved surface of the tub, thus facilitating the operation of churning the cream.

The churn so constructed has been found in practice to be of great utility.

I claim—

1. The combination, as well as the arrangement, of the dasher-annulus *g* and its wings *k* with the spiral or curved ledge *b* and the inclined wing or cleat *e*, applied to the bottom and inner curved surface of the tub, substantially as specified.

2. The combination, as well as the arrangement, of the series of auxiliary radial ridges *fff* with the curved ridge *b*, the inclined cleat *e*, and the annular dasher provided with wings, arranged as specified.

3. The combination of the sliding annulus *s* and semi-tubular bearing *t*, as made and applied together and to the bail, as specified.

JOHN C. SCRIBNER.

Witnesses:

FRANKLIN SCRIBNER,
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