

(No Model.)

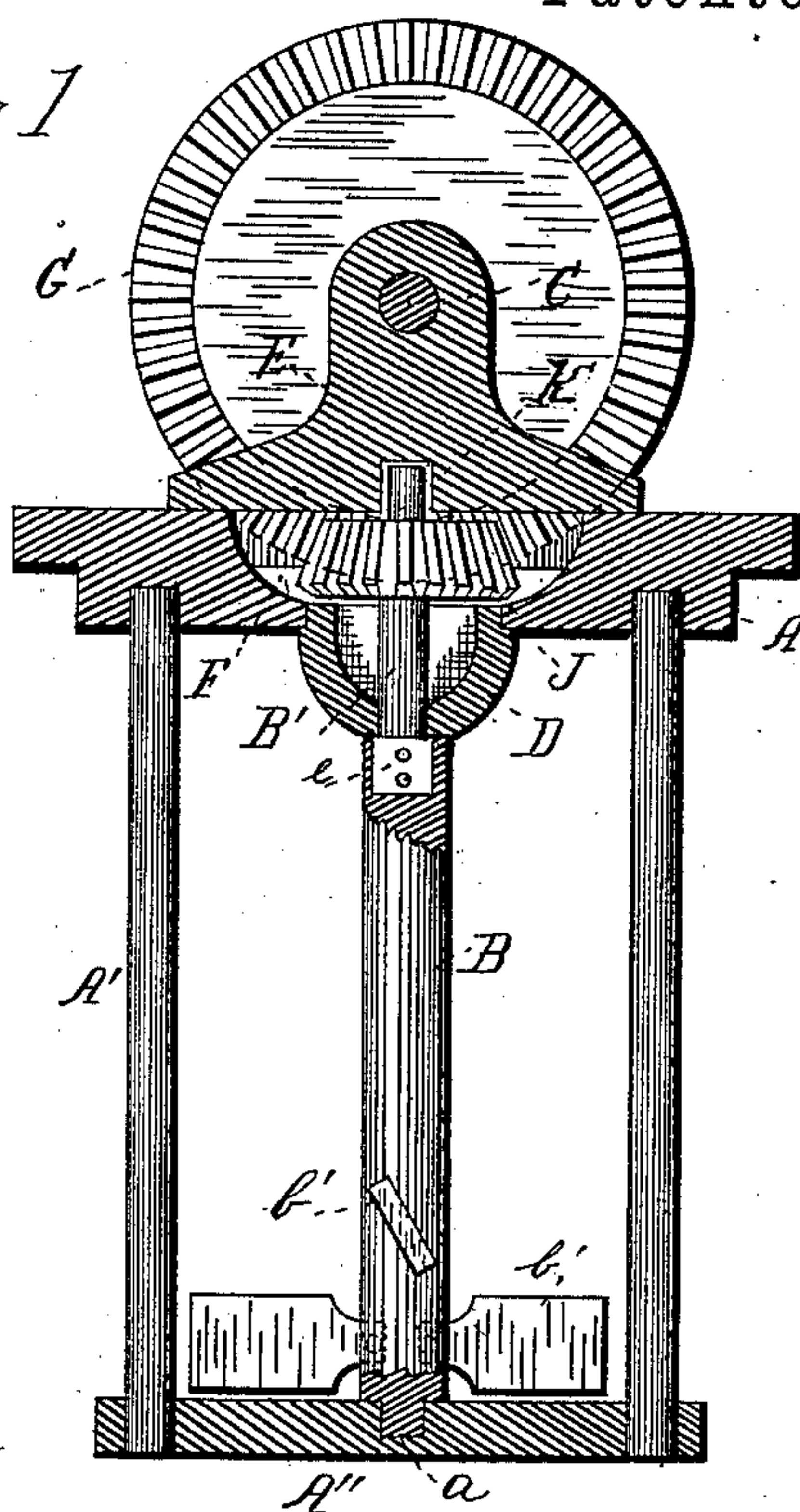
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CHURN.

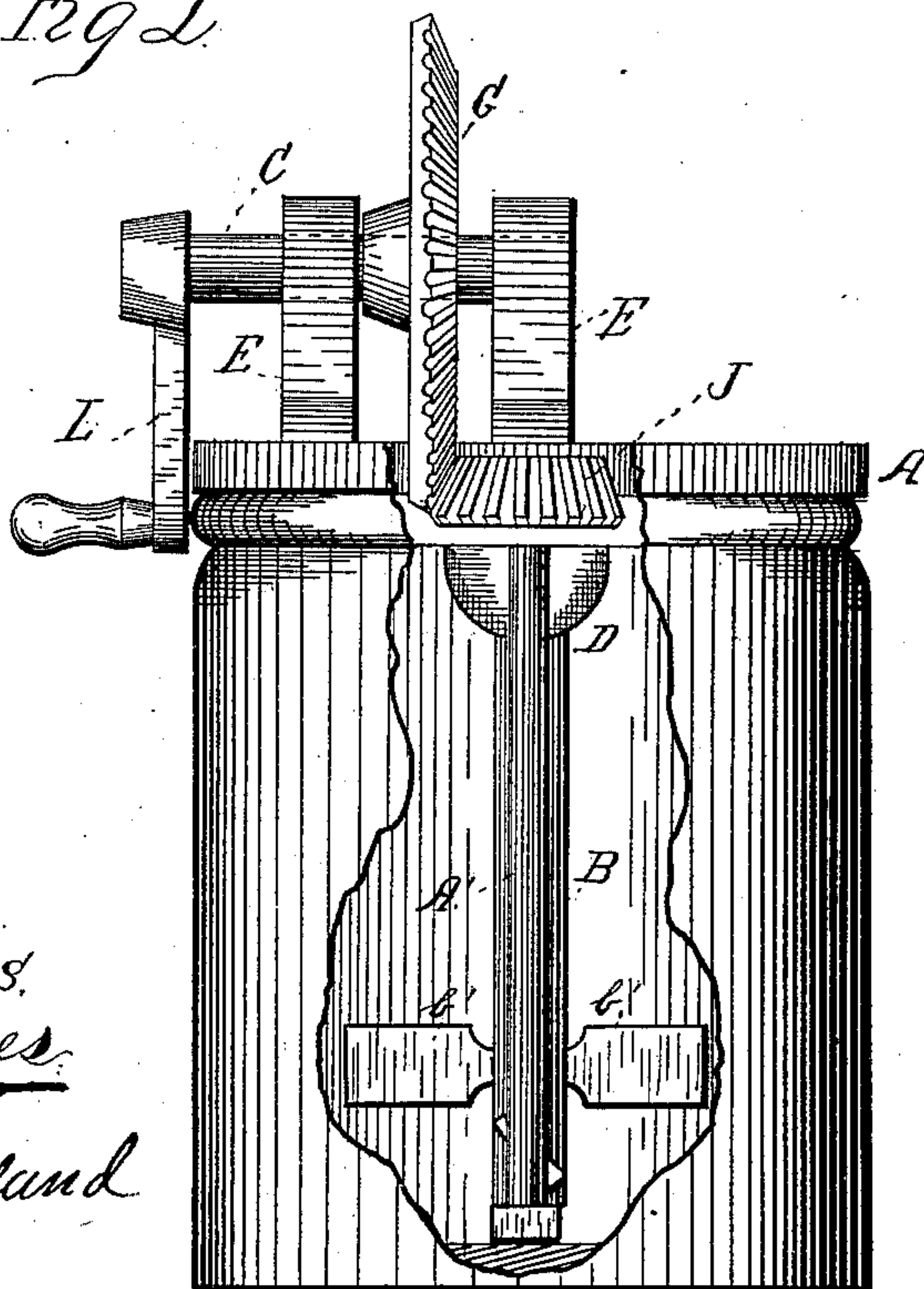
No. 297,191.

Patented Apr. 22, 1884.

*Fig 1*



*Fig 2*



Witnesses:  
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James de Holland

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Attys

# UNITED STATES PATENT OFFICE.

ORAN F. STEED AND EZRA A. NIXON, OF LITTLE RIVER, KANSAS.

## CHURN.

SPECIFICATION forming part of Letters Patent No. 297,191, dated April 22, 1884.

Application filed December 7, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, ORAN F. STEED and EZRA A. NIXON, citizens of the United States, residing at Little River, in the county of Rice and State of Kansas, have invented certain new and useful Improvements in Churns; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this improvement is to produce a simple and efficient rotary churn that can be made and sold at a small price. The invention consists in the peculiar construction and arrangement of the parts, as will be hereinafter fully explained and specifically claimed, reference being had to the drawings herewith filed as part hereof, in which similar letters of reference denote the same parts.

Figure 1 is a vertical section. Fig. 2 is a side elevation, partly in section.

A A' A'' represent the shaft-supporting frame. B is the rotary shaft, provided with the ordinary agitators at its lower end, where it rests on and revolves in the lower frame-piece, A''. A metal piece, B', having a flattened end, *e*, is fitted to a corresponding slot in the shaft B, and is secured thereto by wood or metal pins passing through the shaft and holes in the piece, as shown at *e*. Over the shaft-extension B' is tightly fitted a bowl-shaped shield or fender, D, which abuts against a shoulder at the connection with the shaft B, and snugly fits the circular opening in the churn-cover A, and thus prevents the cream from working through when the churn is in

use. The shaft-extension B' is provided with a gear-wheel, J, located in the cavity F in the churn-cover, and enters a socket, K, in the pillow-block E, attached to the churn-cover, whereby the shaft is securely held in a vertical position. A driving gear wheel, G, is affixed to shaft C, supported by pillow-blocks E E, and the mechanism is put in operation by means of the crank L. The pillow-blocks are made of wood, and secured to the churn-cover by screws. The churn-cover is made thicker than for ordinary tops, and is provided with a cavity for containing the gear-wheel G, in order that the pillow-blocks may be made as low as possible, and connect with the churn-cover by uninterrupted joint, as shown, whereby an economical and abundantly-strong means are obtained for securing the position of the shaft B B' and supporting the driving-wheel G. The driving-shaft may be made either of wood or metal.

Having thus explained the construction and operation of our improvement, what we claim as new, and desire to secure by Letters Patent, is—

The combination of the shaft B B', carrying gear-wheel J, the bowl-shaped shield D, churn-cover A, having gear-wheel cavity F, the pillow-blocks E, and driving mechanism G C, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

ORAN F. STEED.  
EZRA A. NIXON.

Witnesses:

J. A. SWENSON,  
FRANKLIN MILLERD.