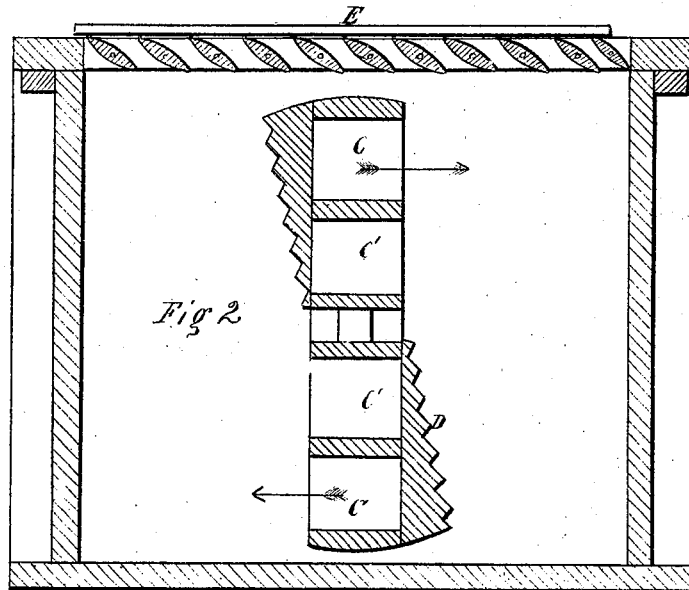
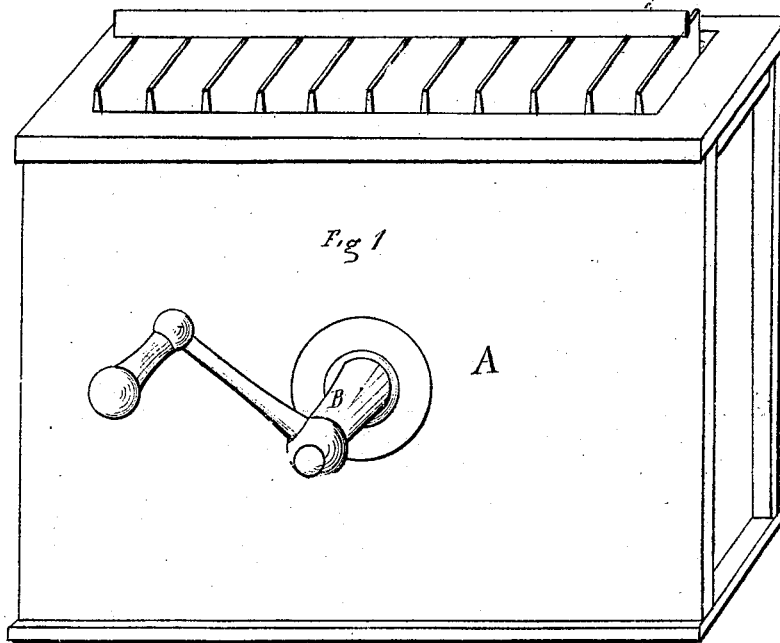


*L. Dedrick,*

*Churn.*

*No. 107,464.*

*Patented, Sept. 20, 1870.*



*Witnesses*

*John W. Barker*  
*Wm. H. Haman*

*Inventor:*

*Levi. Dedrick*  
*Daniel. Breed. Atty*

# United States Patent Office.

LEVI DEDERICK, OF NEW YORK, N. Y.

*Letters Patent No. 107,464, dated September 20, 1870.*

## 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, LEVI DEDERICK, of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Churns; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

In the accompanying drawing—

Figure 1 is a perspective view of my improved churn.

Figure 2 is a vertical section through the same.

In the construction of my improved churn, any suitable box, A, may be made, with a crank-shaft, B, passing through the box.

Upon this shaft are hung two revolving boxes or beaters C C', fig. 2.

As these boxes revolve in the direction indicated by arrows, the cream is carried up into the air and poured out, to run down over the corrugated surfaces D, thus effectually mixing with the air, while it is also thoroughly agitated. As the boxes descend they carry air down into the cream.

By making the boxes in two or more divisions on each side of shaft, as shown at C and C', the air is carried, in part, very near the bottom of the churn or box, and, also, part of the cream is carried near to the top of the churn, where it is poured out, mixing with the air as it falls or flows down.

The corrugated surface D is very efficient in agi-

tating the cream, and in mixing the same with the air.

I have so arranged the respective parts as to give just enough agitation, and, also, the requisite amount of air, for efficient churning.

The top of the box is covered by a set of revolving slats, E, similar to a Venetian window-blind.

By this construction, more or less air may be admitted, as desired, and yet prevent the cream from spattering or splashing over the top of the box. It is, also, easy to examine the cream, and notice when the churning is completed.

I propose to revolve the beaters or boxes very slowly, yet I find that the butter is produced and collected into balls in a very short time.

Having described my invention,  
I claim—

1. The use of the revolving beater, constructed with boxes C C', and alternate corrugated surfaces D, or their equivalent, substantially in the manner and for the purpose set forth.

2. In combination with the above and the box, the cover, consisting of revolving slats, substantially as set forth.

LEVI DEDERICK.

Witnesses:

JAMES L. BALDWIN,  
STEWART J. DEDERICK.