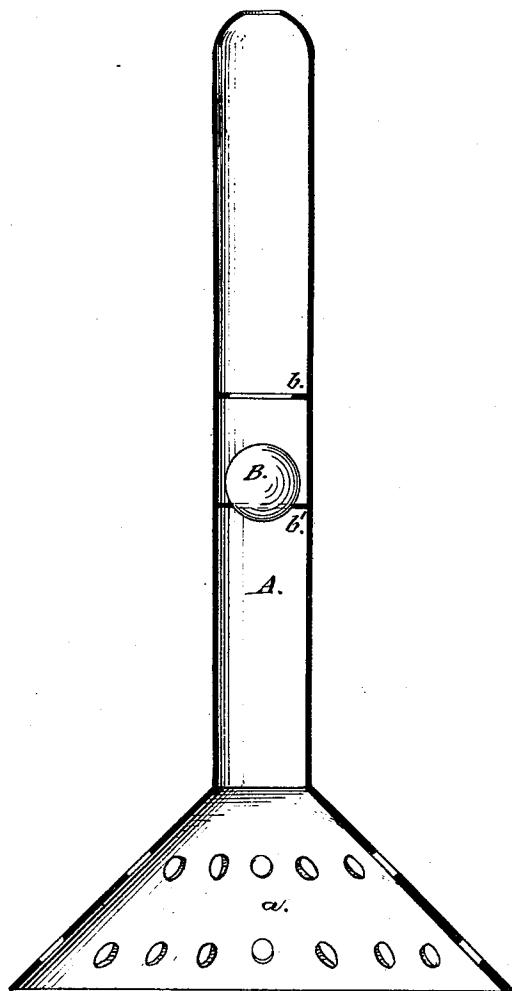


J. Harris,

Churn Dasher.

No. 106,935.

Patented Aug. 30, 1870.



Witnesses:  
E. R. Brown  
W. Mitchell

Inventor:  
John Harris.  
per  
J. C. Sheaker  
attorney.

# United States Patent Office.

JOHN HARRIS, OF PALESTINE, ILLINOIS.

*Letters Patent No. 106,935, dated August 30, 1870.*

## IMPROVEMENT IN CHURN-DASHER.

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, JOHN HARRIS, of Palestine, in the county of Crawford and State of Illinois, have invented a new and useful Improvement in Churn-Dashers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification and to the letters of reference marked thereon.

The nature of my invention consists in the arrangement of a ball-valve within a tubular dasher-rod, in such a manner as to open and admit air as the rod is elevated, and to close and force air into the cream as the rod is depressed.

To enable those skilled in the art to which my invention appertains to make and use the same, I will proceed to describe its construction and operation.

In the drawing—

A represents a tubular dasher-rod, to the lower end

of which is attached a funnel-shaped perforated dasher, *a*.

Inside the tube or dasher-rod A, about midway the length, is a ball, B, which plays loosely in said tube between two annular seats, *b b'*.

When churning with this dasher, as the rod ascends, the air enters the tube as far down as the ball B, which rests upon the lower seat *b'*. As the rod descends, the ball B rises in the tube until it comes in contact with the upper seat *b*, when the air in the tube below the ball is forced down into the cream.

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

The arrangement of the ball B and seats *b b'* in the tubular rod A, provided with the funnel-shaped perforated dasher *a*, as shown and described.

Witnesses:

ERASTUS LOGAN,  
DAVID BEACH.

JOHN HARRIS.