

CASE & PRATT.

Churn Dasher.

No. 55,622.

Patented June 19, 1866.

Fig. 1.

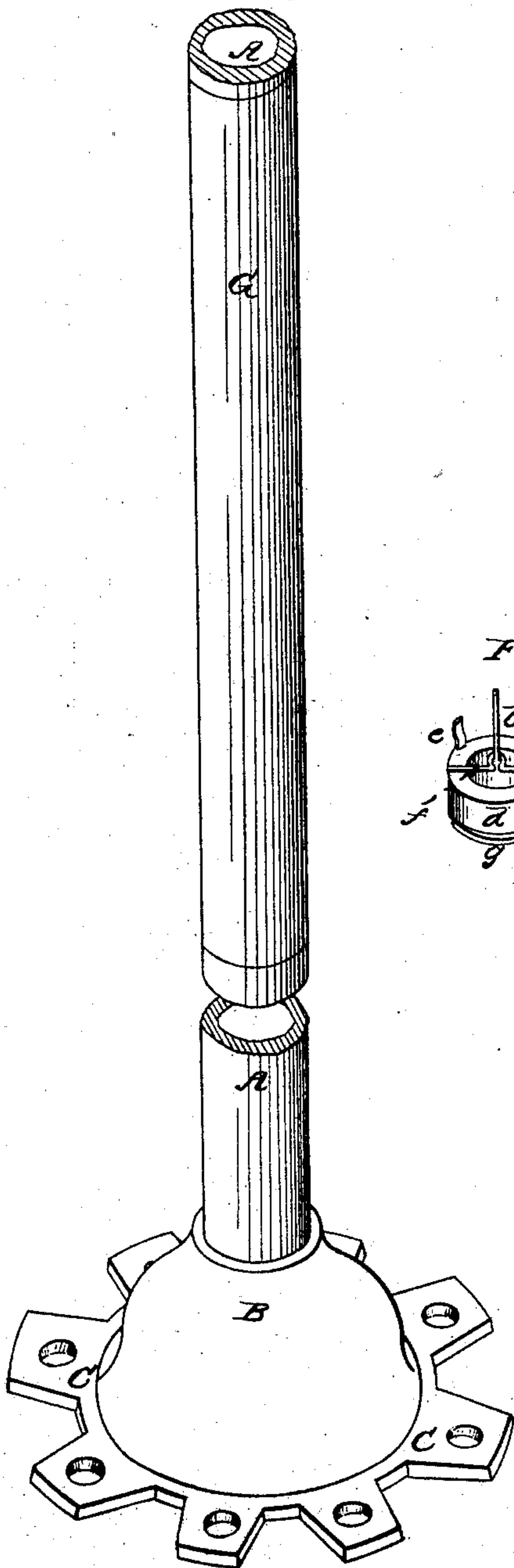


Fig. 2.

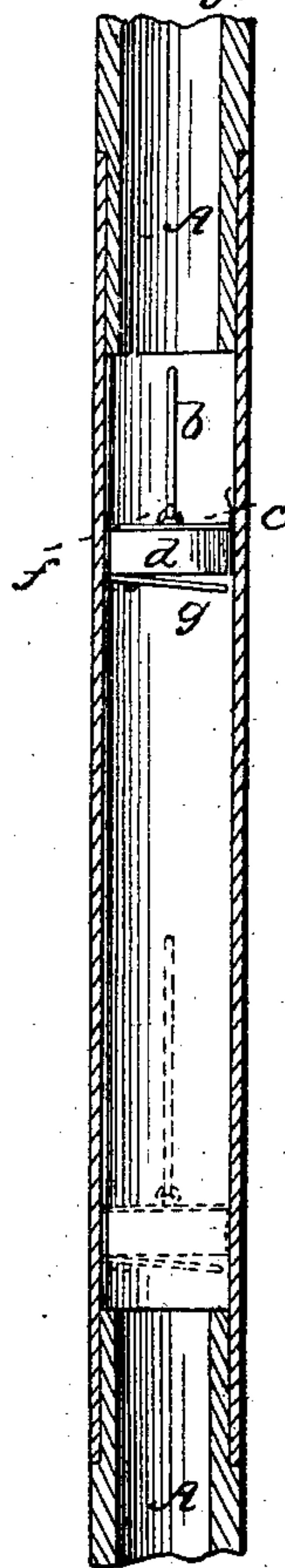
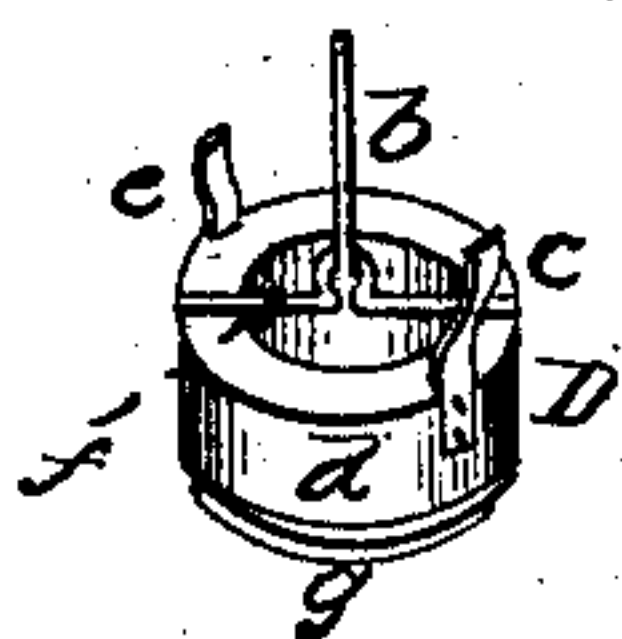


Fig. 3.



Witnesses.  
R. F. Cogswell  
J. W. Davis

Inventors.  
J. Case  
A. W. Pratt  
By J. F. Fraser & Co.  
Attys

# UNITED STATES PATENT OFFICE.

S. CASE AND A. W. PRATT, OF PULTNEYVILLE, NEW YORK.

## IMPROVEMENT IN ATMOSPHERIC CHURN-DASHERS.

Specification forming part of Letters Patent No. 55,622, dated June 19, 1866.

*To all whom it may concern:*

Be it known that we, SCHUYLER CASE and AARON W. PRATT, of Pultneyville, in the county of Wayne and State of New York, have invented a new and useful Improvement in Atmospheric Churn-Dashers; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a perspective view of a portion of our improved dasher; Fig. 2, a central vertical section of the same; Fig. 3, a perspective view of the adjustable valve detached.

Like letters of reference indicate corresponding parts in all the figures.

Our invention consists in the combination of a valve with a hollow dasher-rod, so arranged that said valve is removable at pleasure and adjustable to different positions; also, in the particular form and arrangement of the bulb or head of the dasher, whereby it is adapted to receive wings of different sizes, to fit large or small churns.

As represented in the drawings, A is a hollow dasher-rod, and B the enlarged inverted bulb or air-chamber which acts upon the cream. The lower edge of this bulb is cut with a depression, *a*, on its outside, forming a seat for the annular dasher-wings C, which fits over the rim, and may thus be removed at pleasure.

Within the dasher-rod rests a valve, D, fitting the sides of the tube, and made to adjust to any position, higher or lower, as indicated by black and red lines, Fig. 2. This adjustment may be accomplished in any desirable manner. In the drawings a hook-rod, *b*, is employed for the purpose. The valve may be held in any desirable position by springs *c c*, which bear against the sides of the tube. The valve itself consists simply of a seat, *d*, with a bearing, *f*, and a hinged flap, *g*, on the bottom covering the passage for the air.

We prefer to make the dasher-rod in two sections, connected by a metallic tube, G, within which rests and adjusts the valve. The lower section is fast to it, but the upper section is

made to be easily removable. By this arrangement we are enabled to insert or remove the valve easily, and to locate it at the desired position, which is at such a point above the cream that the latter cannot be dashed up the tube against it, and at such a distance from the top of the dasher-rod that the height of the column of imprisoned air shall not be so great as to neutralize its desired effect by reason of its yieldingness or compressibility. This desired point of location of the valve, which varies, of course, with the amount of cream to be churned, is readily obtained by the adjustment described. It is obvious that the valve located midway is more effective than at the bottom, where the contact of the cream will obstruct it, or at the top, where the column of air passing down will be of such height as to yield in the downstroke, so as to neutralize the pressure of the air upon the cream.

We are enabled to locate the valve in the proper position by the particular construction and arrangement before described.

The seat *a* at the bottom of the bulb allows dasher-wings of varying sizes to be applied, and therefore the same size of rod is adapted to different sizes of churns. This form of the bulb and dasher, in connection with the constant current of air passing down through the hollow rod and valve, not only produces a thorough agitation, but also an effective intermingling of air, which, as is well known, is of much advantage in producing butter.

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination of the adjustable and removable valve D with the rod A and tube G, substantially as and for the purpose described, the rod being provided with the bulb B, having the seat *a* for the reception of different-sized wings, as set forth.

SCHUYLER CASE.  
AARON W. PRATT.

Witnesses:

W. S. THROOP,  
CHARLES ROBISON.