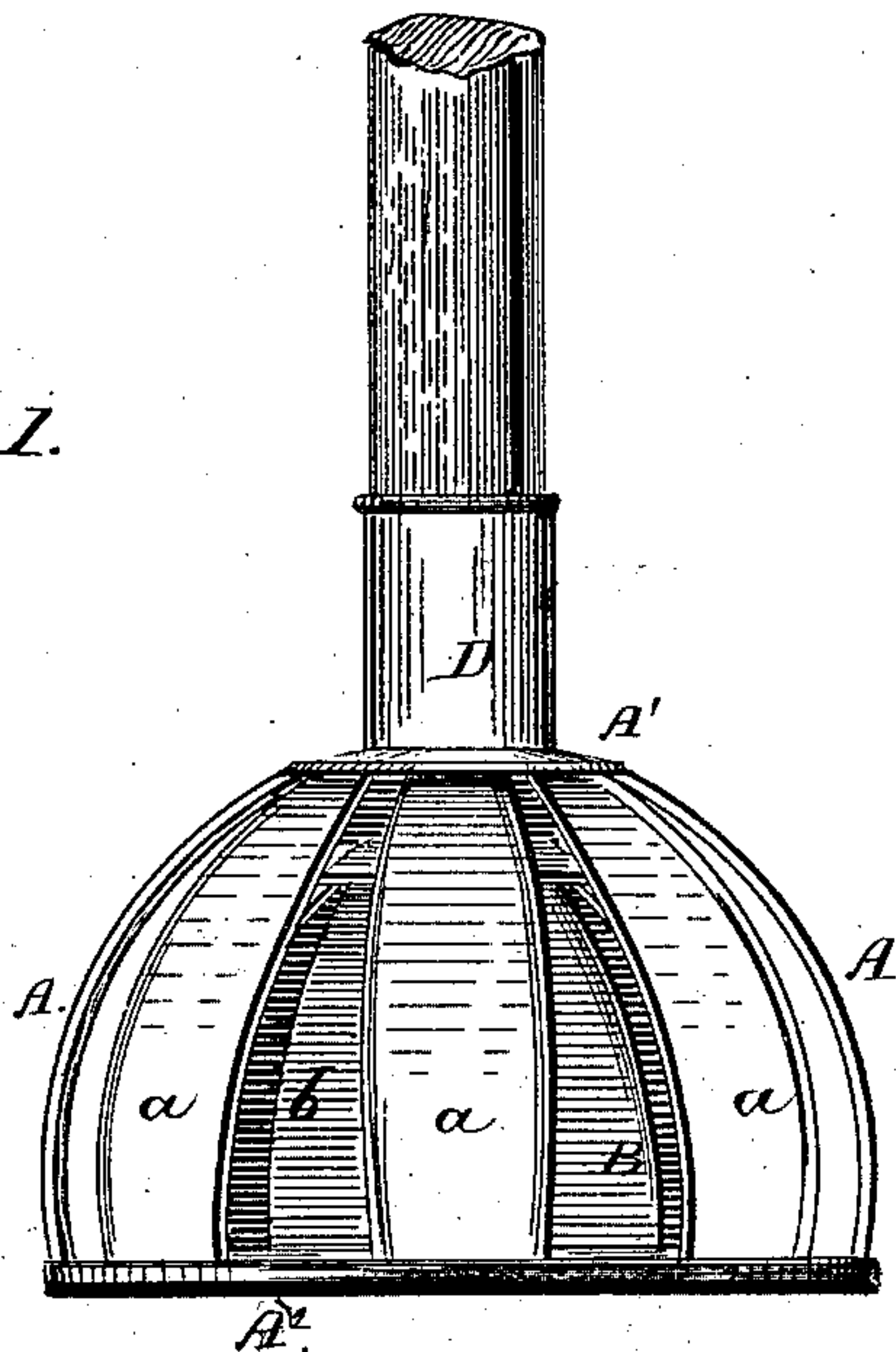


A. A. WOODSON, J. J. PATTON, A. J. EARLY &  
W. F. WOODSON.  
Churn Dashers.

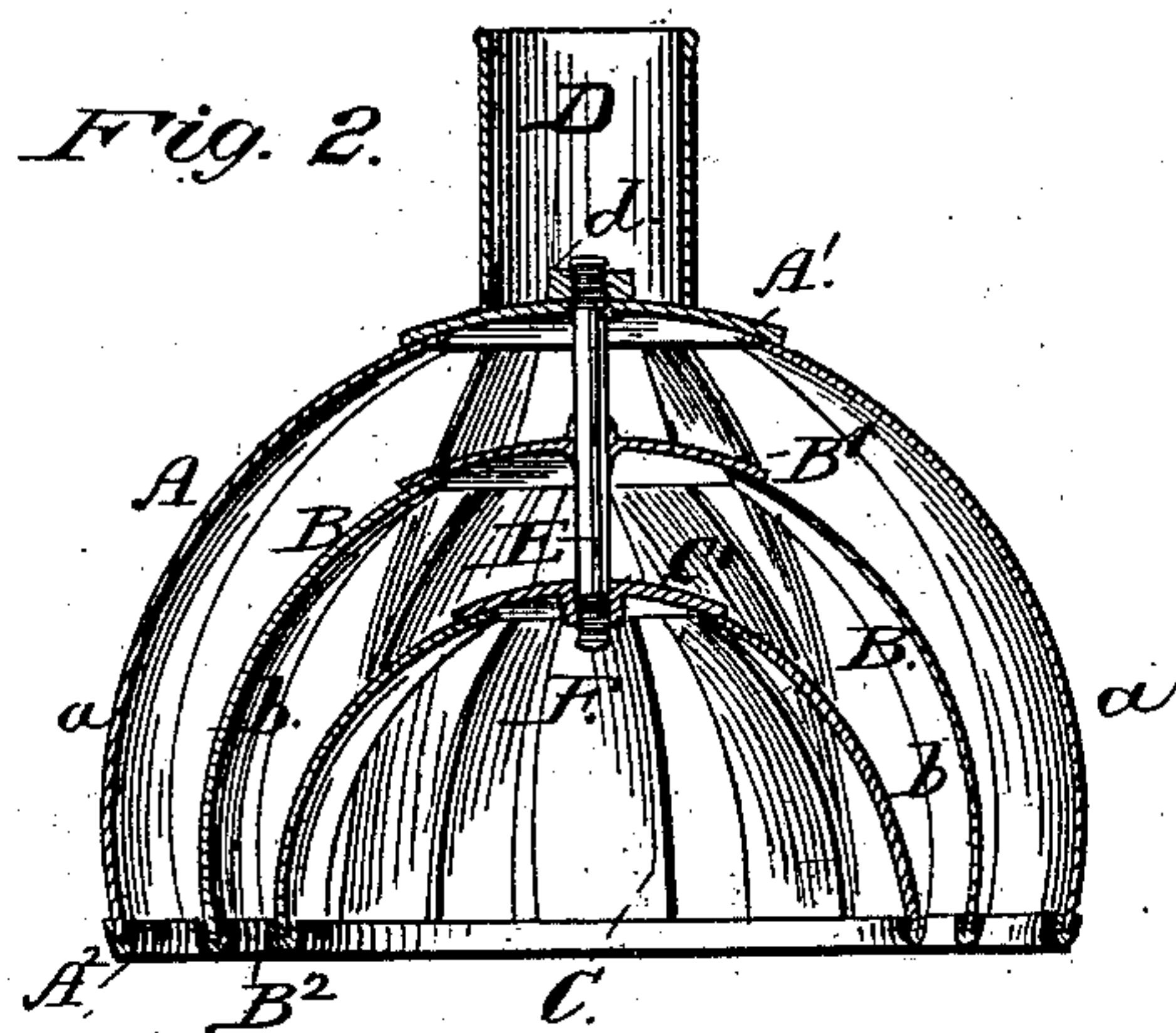
No. 222,170.

Patented Dec. 2, 1879.

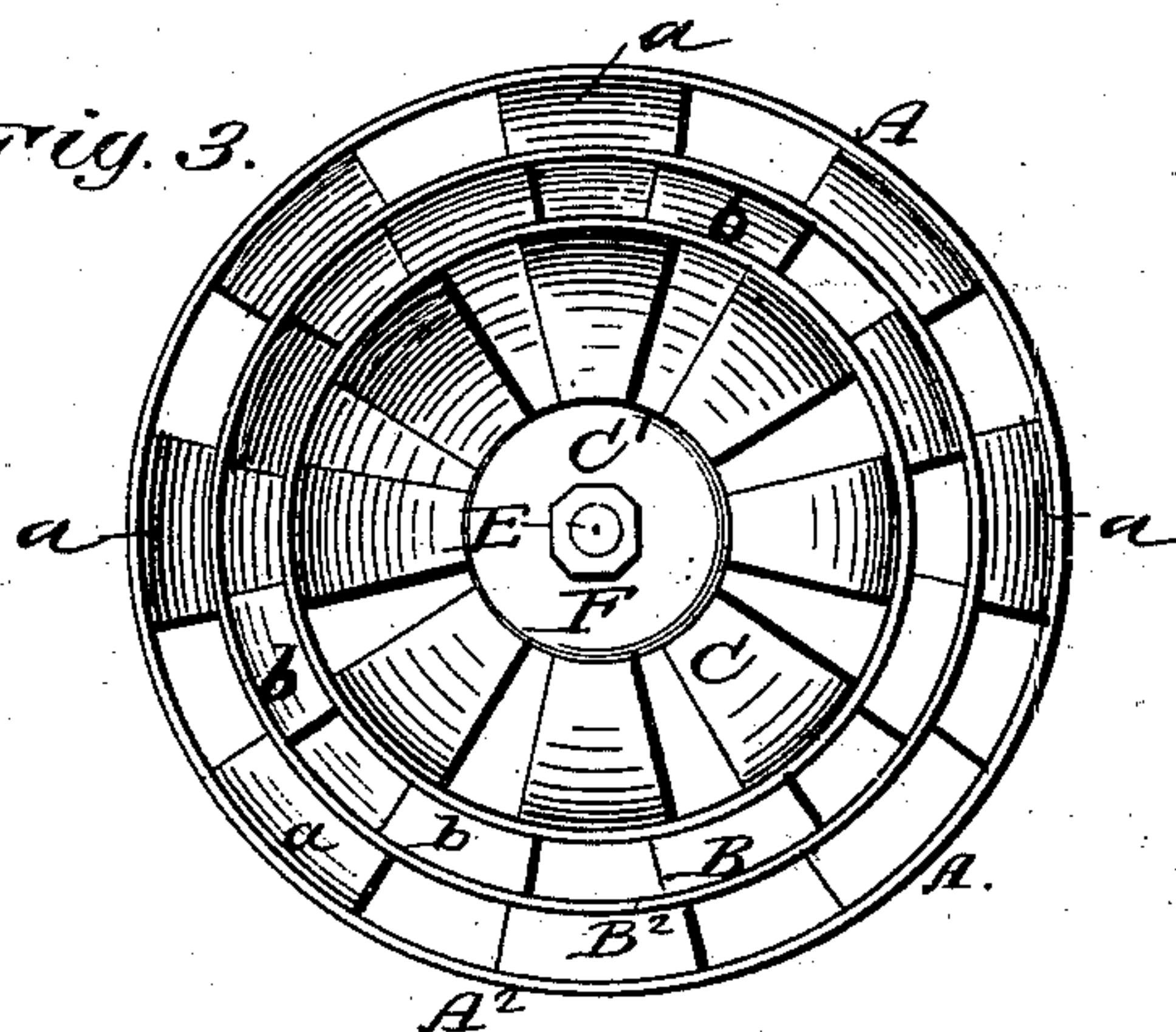
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses  
Red. G. Dietrich  
John Kricson

Inventors:  
Austin A. Woodson, John J. Patton,  
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# UNITED STATES PATENT OFFICE.

AUSTON A. WOODSON, JOHN J. PATTON, ANDREW J. EARLY, AND WILLIAM F. WOODSON, OF SINKS GROVE, WEST VIRGINIA.

## IMPROVEMENT IN CHURN-DASHERS.

Specification forming part of Letters Patent No. 222,170, dated December 2, 1879; application filed September 8, 1879.

*To all whom it may concern:*

Be it known that we, AUSTON A. WOODSON, JOHN J. PATTON, ANDREW J. EARLY, and WILLIAM F. WOODSON, of Sinks Grove, in the county of Monroe and State of West Virginia, have invented certain new and useful Improvements in Churn-Dashers; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of our improved dasher. Fig. 2 is a vertical section taken through its center; and Fig. 3 is a bottom plan.

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

This invention relates to reciprocating churn-dashers; and it consists in the construction and arrangement of parts of a convexo-concave or cup-shaped dasher consisting of three ribbed cups, one arranged within the other, substantially as hereinafter more fully set forth.

In the drawings, A is the outer cup of our improved dasher, which is composed of a series of ribs, *a a*, increasing in width downward, and secured at the top in a circular shield or plate, A', and at the bottom in an annular rim, A<sup>2</sup>.

We prefer to make the curved ribs *a* of sheet metal, with beaded edges, and each rib being made slightly concave or bulging.

Secured centrally upon the shield or top plate, A', is a cylindrical thimble, D, made with a screw-tap, *d*, at its bottom; and the handle or staff for operating the dasher is inserted into the said thimble D, and fastened thereto by screws, rivets, or otherwise.

The second or intermediate cup, B, is of a construction similar to A, having a flat circular top plate or shield, B', a lower rim, B<sup>2</sup>, and concave ribs *b b*; but in place of the cylindrical thimble D it is provided with a central screw-threaded bolt, E, projecting equal distances on both sides of plate B<sup>2</sup>, the upper screw-threaded end of which fits into the screw-threaded tap, *d*, of the thimble D, while its lower end fits into a similar tap, F, secured upon the under side of the central top plate or shield, C', of the innermost cup, C, the con-

struction of which, except that it is smaller, does not otherwise differ from that of its surrounding cups B and A.

The several cups A B C are so arranged relative to each other that the ribs of the intermediate cup, B, shall be exactly opposite to the openings between the ribs in A and C; and it follows that, in operating or reciprocating the dasher in the churn, the cream is thoroughly cut up before it can escape from the inner cup out between the openings of the several cups, causing the butter to come very rapidly.

Again, the construction of this dasher is such as to require but very little exertion or expenditure of power on the part of the operator, while at the same time the circular shields A' B' C' effectually prevent the cream from flying upward, so that this dasher may be used in an open churn without waste.

The several cups may readily be detached from each other for cleaning or for other purposes, whenever desired.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

1. The combination, with the cup-shaped dasher A, having ribs *a a*, shield or top plate, A', and lower rim, A<sup>2</sup>, and provided with the thimble D and screw-threaded tap, *d*, of the second dasher, B, having ribs *b b*, shield or top plate, B', and lower annular rim, B<sup>2</sup>, and provided with the central screw-threaded bolt, E, substantially as and for the purpose herein shown and set forth.

2. The combination of the outer dasher, A, having thimble D and screw-threaded tap *d*, intermediate dasher, B, having vertical double-threaded bolt E, extending on both sides of its central shield or top plate, B', and interior dasher, C, having shield or top plate, C', provided with the central screw-threaded nut or tap F, substantially as and for the purpose herein shown and set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

AUSTON A. WOODSON.  
JOHN J. PATTON.  
ANDREW J. EARLY.  
WILLIAM F. WOODSON.

Witnesses:

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B. S. COOK.