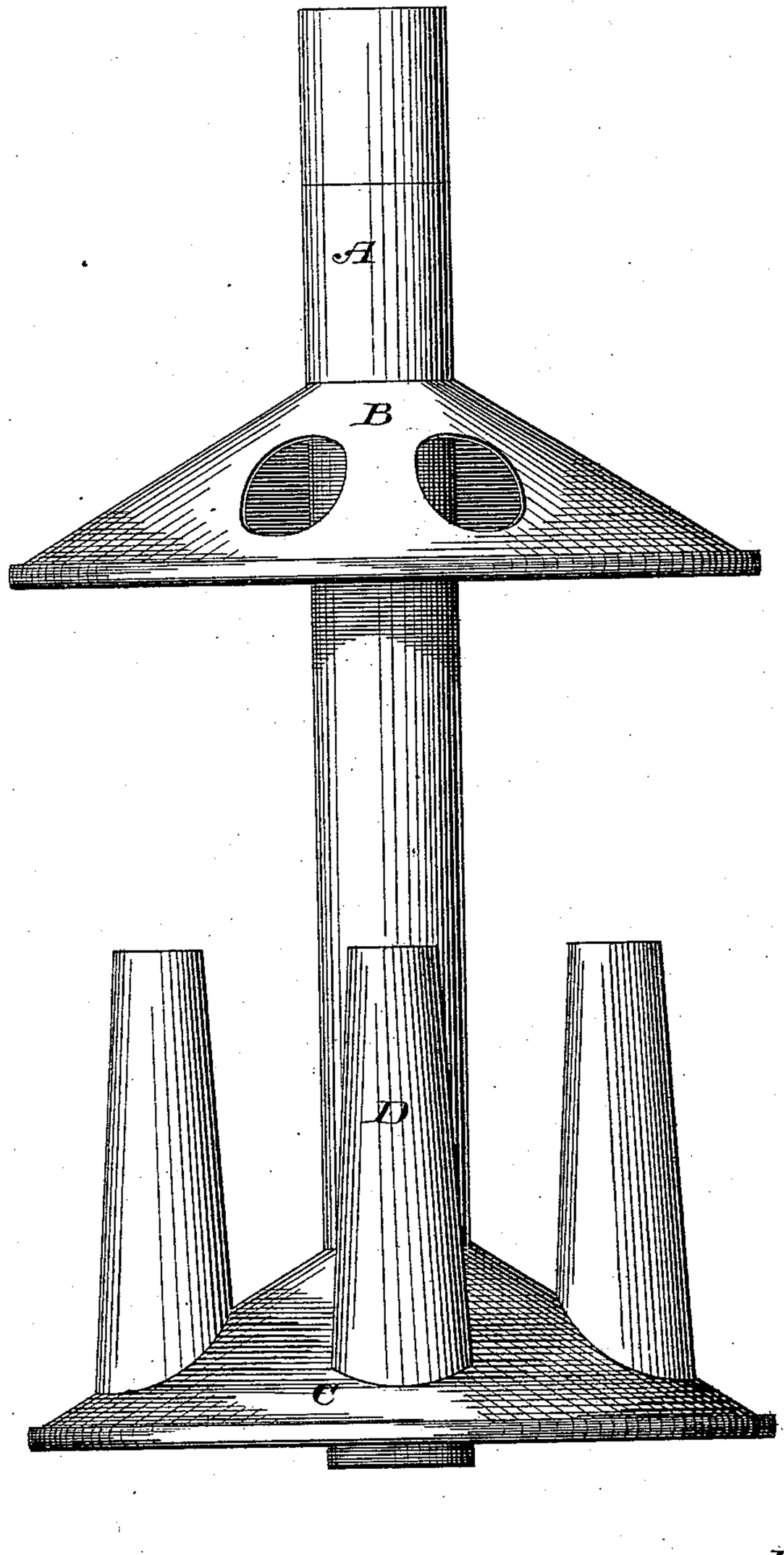
J. W. TATUM.

Churn-Dasher.

No. 208,212. Patented Sept. 17, 1878.

Fig 1



Attest:

James H. Lockh
William Wester

Inventor:

John W. Tatum

UNITED STATES PATENT OFFICE.

JOHN W. TATUM, OF CENTRE, ALABAMA.

IMPROVEMENT IN CHURN-DASHERS.

Specification forming part of Letters Patent No. **208,212,** dated September 17, 1878; application filed April 11, 1878.

To all whom it may concern:

Be it known that I, JOHN W. TATUM, of the town of Centre and State of Alabama, have invented a new and Improved Churn-Dasher, of which the following is a specification:

The invention is of the class of reciprocating dashers.

The accompanying drawing is a side elevation, showing all the parts of one side of the dasher excepting equivalent and homologous parts.

A is a cylinder of metal incasing the churn-staff. B is a hollow cone-shaped dasher, having any desired number of equidistant holes therein. C is an exactly similar dasher, having cone-shaped tubes D, one for each of the holes in upper dasher or cap, but pointing to the intermediate spaces between said holes. Tubes D are parallel to staff, are open at both ends, and the diameter of the lower openings about one-fourth greater than that of the upper. The entire dasher is made of sheet metal, preferably tin. The dasher-disks B and C and tubes are secured with solder—the disks soldered to cylinder A, the tubes to C.

The operation of this dasher is, first, that of an ordinary dasher, with two disks or caps; second, the lower dasher, by its concave form, forces the cream into the tubes D, whence it is ejected upward in a number of jets against dasher B, which said jets meet in its descent. The agitation of the cream and the force of the upward jets are much increased by the cone shape of the tubes, which act in a manner analogous to the diminishing nozzle of a syringe. In like manner the hollow cone of the upper cap and the perforations therein cause a second series of currents favorable to the rupture of the butter-globules, and in combination with the lower disk constitute a new and useful feature of this invention.

I am aware that dashers with holes in the lower cap, in combination with an upper cap without holes, the lower perforations being the equivalent of tubes, are not new; also, that lower and upper caps, both perforated with shallow holes not the mechanical equivalent of tubes, are not new. I claim neither; but I do claim—

1. A dasher with two caps, of which the lower is provided with cone-shaped tubes.

2. The combination of a dasher-disk, with cone-shaped tubes, with a cone-shaped upper disk or cap, having perforations therein, substantially as and for the purpose described.

JOHN W. TATUM.

Attest:

JAMES H. LEATH,
WILLIAM WESTER.