

(No Model.)

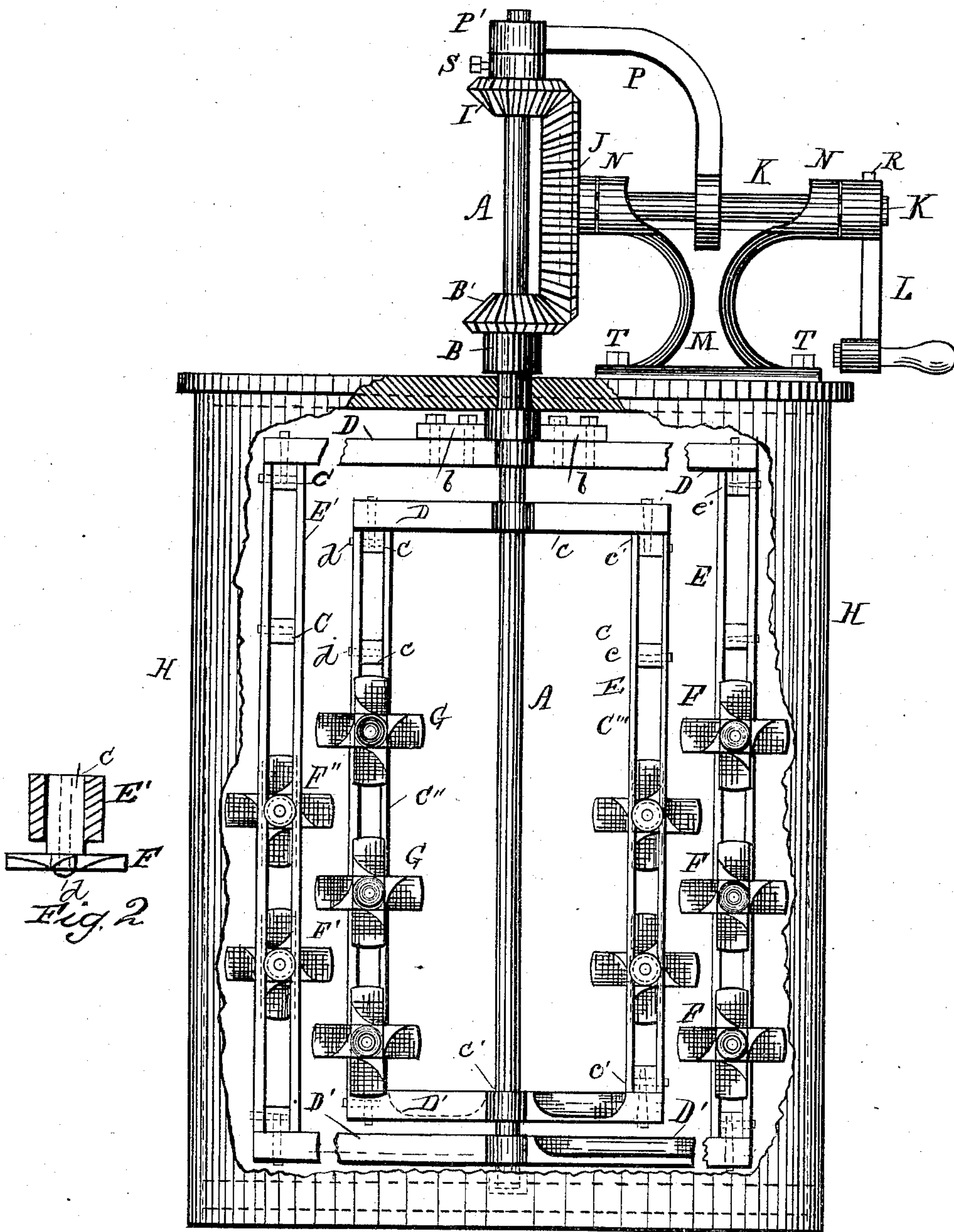
P. A. CARTER.

CHURN.

No. 314,797.

Patented Mar. 31, 1885.

Fig. 1



Witnesses.
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UNITED STATES PATENT OFFICE.

PHILANDER A. CARTER, OF ASHLEY, ILLINOIS.

CHURN.

SPECIFICATION forming part of Letters Patent No. 314,797, dated March 31, 1885.

Application filed January 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, PHILANDER A. CARTER, a citizen of the United States, residing at Ashley, in the county of Washington and State of Illinois, have invented certain new and useful Improvements in Churns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to improvements in churns; and it consists in the construction and novel arrangement of devices, as will be hereinafter more fully set forth, and particularly pointed out in the claim appended.

The main object of the invention is to provide a pair of oppositely-rotating dashers which will permit of a quick and easy attachment of rotating devices, as will be presently explained.

In the accompanying drawings, Figure 1 is a side view of a churn partly broken away to show the dashers with my improvements applied; and Fig. 2 is an edge view of one of the rotators, showing its journal or bearing block in cross-section.

Referring to the said drawings by letter, H indicates a churn-body, which may be of any suitable form, but is preferably annular in cross-section, so as to adapt itself to the path of the dashers.

M indicates a bracket for supporting the churn-operating mechanism. This bracket is arranged upon the upper side of the cover by bolts or other suitable fastening devices, so that the same, together with the dashers, may be removed from the body of the churn when the cover is taken off. This bracket is provided at its upper opposite ends with horizontal annular bearings N N, in which is journaled the power-shaft K, having at its outer end a crank-lever, L, and at its inner end a vertically-fixed bevel-gear, J, which engages with horizontal pinions I and B', secured, respectively, to the vertical dasher-rod A, the upper one being fixed to the said rod and the lower one fixed to a sleeve, B, which is se-

cured at its opposite end to the outer dasher-frame, as shown.

E indicates vertical arms, which are secured at their upper ends to the outer ends of the radial arms D, and are held at suitable intervals by means of interposed blocks c, the blocks being held in place by means of transverse pins or bolts d, as shown.

P indicates a curved arm, which has its bearing upon the bracket M, with its opposite end loosely engaging the upper end of the dasher-rod. The vertical arms of the dasher-frame are connected at their lower ends by means of cross-bars D', which also radiate from the dasher-rod, and are provided with an aperture for the passage of the same.

F indicates the rotators, which are of a form substantially as shown, and provided with a central lateral annular bearing, c², adapted to enter an aperture in the said blocks c, where they may be secured by means of a transverse pin or bolt.

While I have described the entire construction of the churn, it will be understood that the novelty relied upon is mainly in the peculiar formation of the dasher-frames, which contemplate the receptacles for the rotators.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a churn, the combination, with the dasher-frames composed of the upper and lower radial-arms, D and D', and the vertical bars E, secured to the outer ends of the said arms, as shown, with the interposed bearing and bracing blocks c, of the rotators F, having the central lateral annular projection, c², and means, substantially as described, for securing the same to the said dasher-frames, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

PHILANDER A. CARTER.

Witnesses:

GEORGE W. MILLER,
S. G. HOUSE.