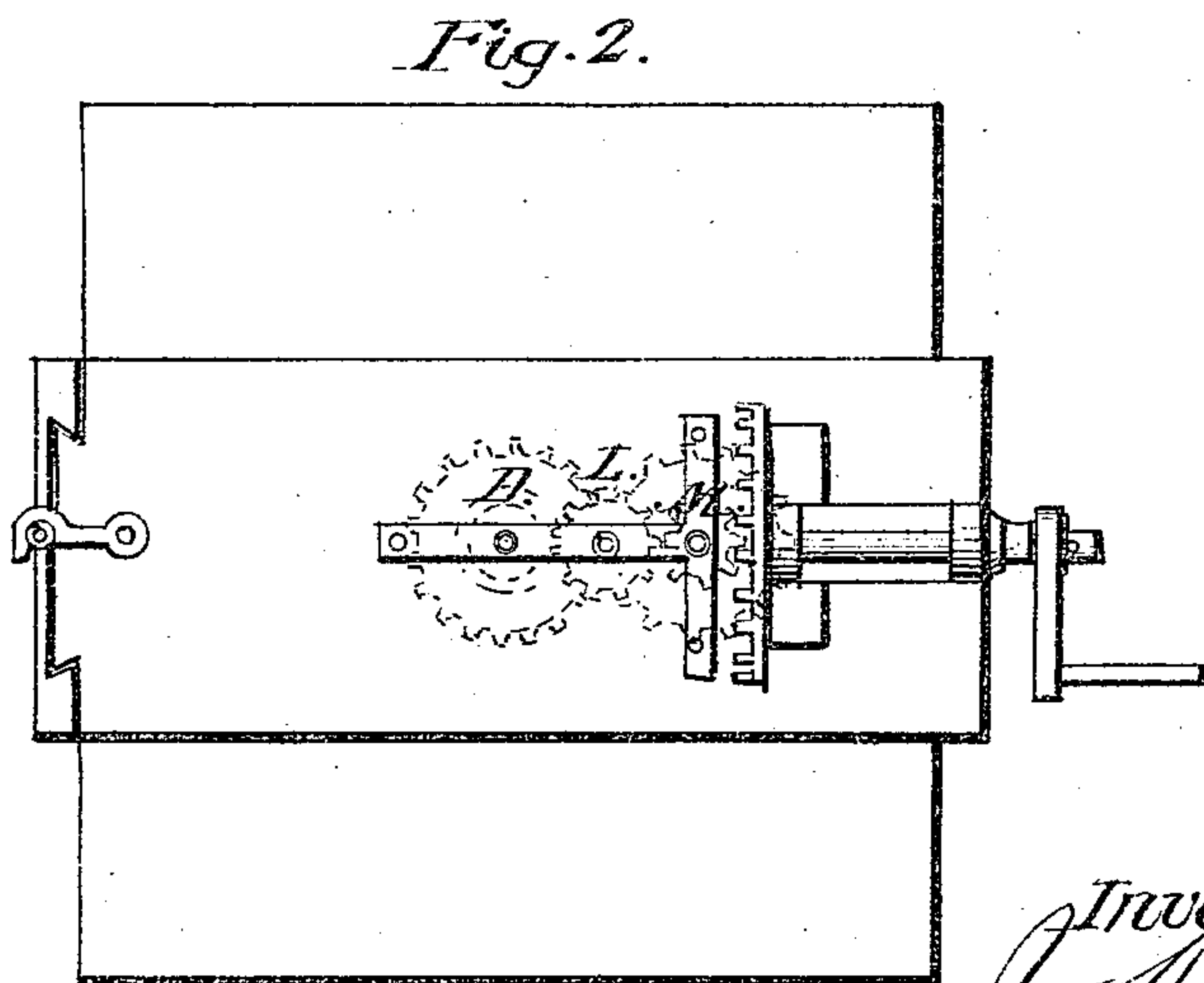
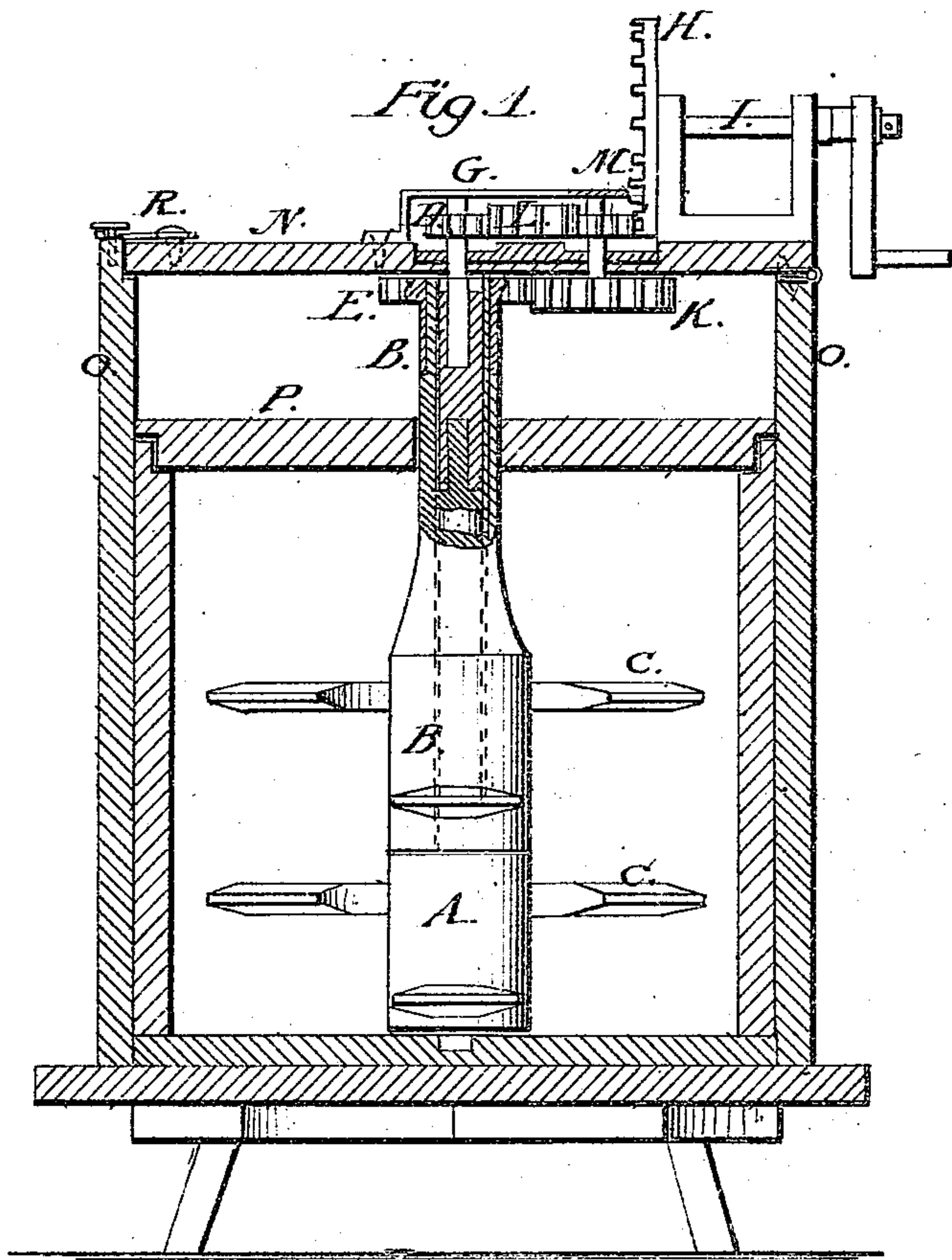


# Ham & Carpenter, Churn.

Nº 94,311.

Patented Aug. 31. 1869.



Witnesses:  
O. Hinchman.  
Jno. R. Brooks.

Inventors:  
J. A. Ham  
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# United States Patent Office.

J. A. HAM AND W. CARPENTER, JR., OF BARRY, MISSOURI.

Letters Patent No. 94,311, dated August 31, 1869.

## IMPROVEMENT IN CHURNS.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern:*

Be it known that we, J. A. HAM and W. CARPENTER, Jr., of Barry, in the county of Clay and State of Missouri, have invented a new and useful Improvement in Churns; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of this invention is to provide an improved arrangement of means for operating a double churn-dasher or agitator in opposite directions simultaneously; also, for removing the operating-machinery when access to the interior of the churn is desired, as hereinafter specified.

Figure 1 represents a sectional elevation of our improved churn, and

Figure 2 represents a plan view of the same.

Similar letters of reference indicate corresponding parts.

The dasher or agitator, which we propose to make of wood, as a preferable substance for contact with the milk, is made in two parts, A and B, each having beaters or paddles, C.

The part B has a hole through its longitudinal centre, through which a reduced portion of the part A extends, to receive a driving-wheel, D, at the top.

The top of the part B is also provided with a driving-wheel, E, and both derive motion from a short, vertical shaft, G, which is operated by a large wheel, H, on the crank-shaft I.

The wheel E is driven directly from its corresponding wheel K, on the shaft G, while a wheel, L, is interposed between the wheel D and its driving-wheel

M, on the said shaft G. This gives motion to the two parts of the dasher in opposite directions.

All the driving-wheels and their bearings except the wheel E, are supported on a hinged bar, N, supported transversely of the churn upon the posts O, above the top P, and the lower end of the shaft of the wheel D is angular, and projects into a corresponding socket in the top of the reduced extension of the part A of the agitator.

This permits the operating-mechanism to be readily swung out of the way when access to the interior of the churn is required, the said shaft of the wheel D slipping out of the socket, and the wheel K rising out of gear with the wheel E.

When in the working-position, the bar N is held in place by a hook, R.

The top, P, of the churn, is free to be removed, and the removal of this top permits the removal of the dasher for cleaning the interior.

Having thus described our invention,

We claim as new, and desire to secure by Letters Patent—

1. The combination of the wheels H L M K E, and the shafts on which they rotate, with the top, N, of the churn, the three first mentioned of said wheels being arranged above, and the remaining two below the said top, in the manner shown and described.

2. The subject-matter of the above clause, in combination with the double dasher, as and for the purpose specified.

J. A. HAM.

W. CARPENTER, JR.

Witnesses:

ROBT. REDDISH,

M. T. SAMUEL.