

(No Model.)

T. H. HANLIN.

CHURN DASHER.

No. 385,351.

Patented July 3, 1888.

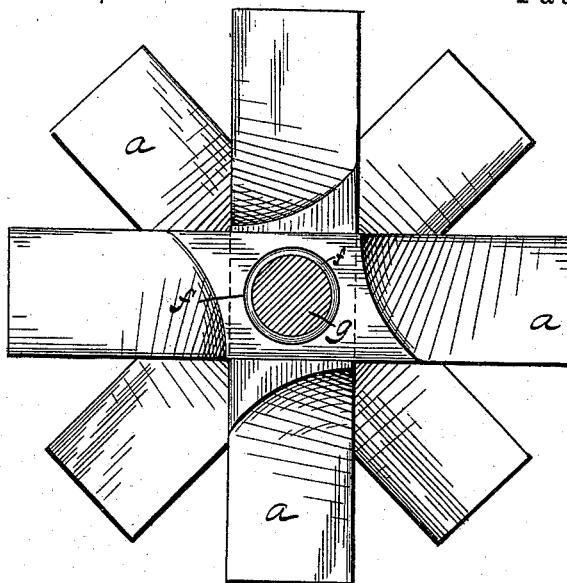


Fig. 1.

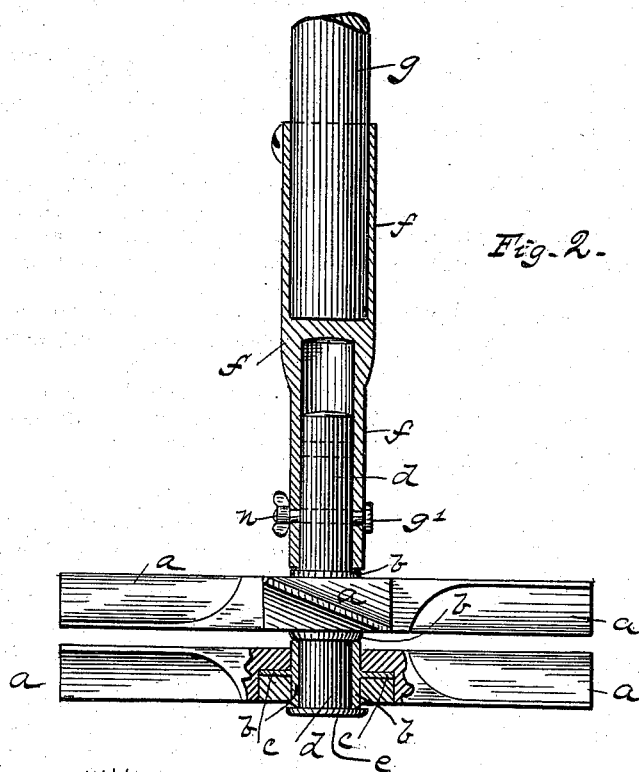


Fig. 2.

WITNESSES:
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UNITED STATES PATENT OFFICE.

THOMAS H. HANLIN, OF PITTSBURG, PENNSYLVANIA.

CHURN-DASHER.

SPECIFICATION forming part of Letters Patent No. 385,351, dated July 3, 1888.

Application filed February 10, 1888. Serial No. 263,647. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. HANLIN, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Sectional Rotary Churn-Dashers; 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to rotary dashers in upright churns, tubs, or boxes, the object being to provide churns which are made in the ordinary upright form with a sectional extension rotary dasher, each alternate section of which is made to revolve in opposite directions by the resistance of the fluid when the staff is raised or lowered in the process of churning.

This invention consists in placing upon a staff two or more sections of a dasher, each section of which is made of two pieces of wood or other suitable material mortised together in the form of a cross with beveled or deflecting arms or blades, and a flanged metal thimble passing through the center of each and slightly projecting at each end for the purpose of giving each section of the dasher a smooth metal bearing at bottom and top, while the angle or inclination of the blades of each section of the dasher, being set in opposite directions, causes the alternate sections, when the staff is raised or lowered, to revolve in opposite directions at the same time by the resistance offered by the fluid in the churn.

In the accompanying drawings, similar letters indicate like parts.

Figure 1 is a sectional plan view. Fig. 2 is a sectional elevation.

a a represent the blades of the dasher; *b*, the thimble in the center of each section, having an annular flange, *c*, projecting laterally therefrom and inserted or fitted in the blades of the dasher; *g*, staff; *f*, sleeve or sheath on the end of the staff with a cylindrical or tubular neck; *d*, extension-shaft upon which the sections of the dasher revolve; *g'*, bolt passing through sheath and staff, securing the dasher to the staff; *n*, nut holding bolt in position.

I use a dasher constructed in sections, each section of which is made of two pieces of wood or other suitable substance mortised together

in the form of a cross, with arms or blades *a a* beveled or inclined in such a manner that in coming in contact with the fluid in the process of churning the resistance offered by the same will cause each section of the dasher to revolve in a direction corresponding to the direction of the angle of the blades. The number of sections to be used at one time (not less than two) being governed by the quantity of milk in the churn, I place one section of the dasher above the other upon the extension-shaft *d*, which has a rim or collar, *e*, on the lower end to prevent the sections from dropping off, and bolt-holes at proper distances to receive any desired number of sections of the dasher, and also corresponding to the bolt-holes in the neck of the sheath *f*, into the neck of which the extension-shaft *d*, upon which the sections of dasher revolve, is inserted and secured by the bolt *g'* and nut *n*, when the staff *g* is operated, allowing the dasher to be readily detached from or connected with the staff *g*.

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

1. The combination of a sleeve fixed to a staff or handle and having a socket in its lower end, a spindle adjustable longitudinally in the socket and having means for holding it in position therein, and the metallic sleeves *b*, fitted loosely on the lower end of the spindle and provided with the annular flanges, which are inserted in the blades of the dashers, substantially as and for the purpose described.

2. The combination of a sleeve having open sockets in its opposite ends, a staff fixed in the upper socket of the sleeve, a spindle adjustable longitudinally in the lower socket of the sleeve and having a flange, *e*, at its lower extremity, a bolt for securing the spindle to the sleeve, the dashers, and the sleeves fitted loosely on the spindle and provided with the annular rims, which are fixed to the blades of the dashers, substantially as and for the purpose described.

In testimony that I claim the foregoing I hereunto affix my signature this 27th day of January, A. D. 1888.

THOMAS H. HANLIN. [L. s.]

In presence of—

C. C. LEE,
M. E. HARRISON.