S. S. BEEKLY.

Rotary-Churn.

No. 162,995. Patented May 11, 1875.

Fig 1.

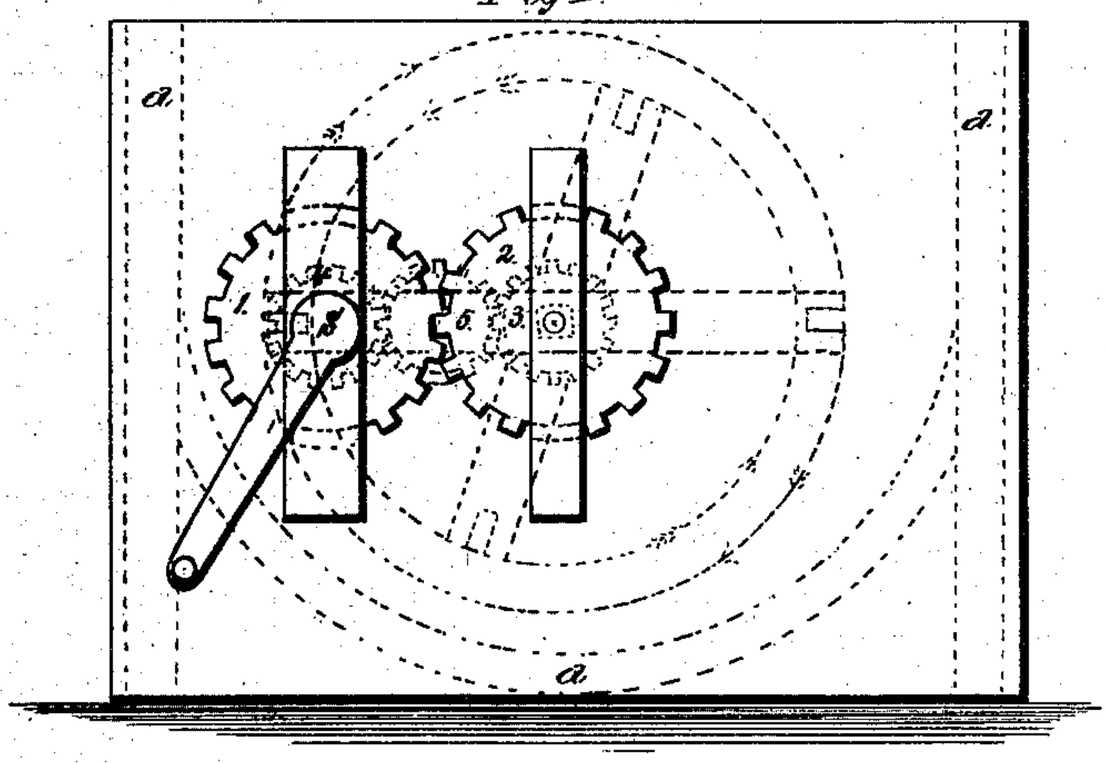
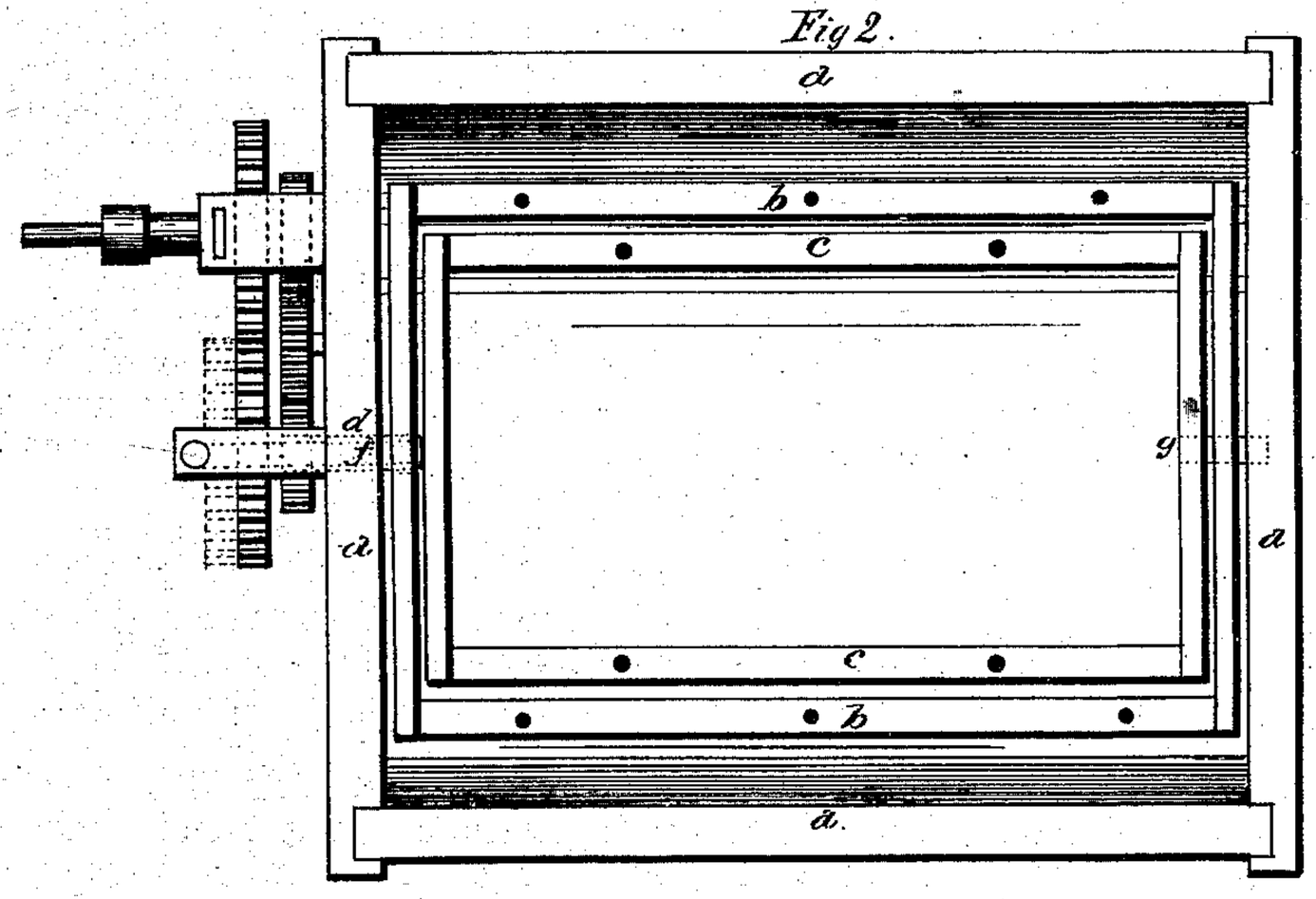


Fig 2.



WITNESSES.

William Turner,

Chas W Lemon.

INVENTOR.

Saml. S. Beekley

per F. A. Lehmann

Atty.

UNITED STATES PATENT OFFICE.

SAMUEL S. BEEKLY, OF LANARK, ILLINOIS.

IMPROVEMENT IN ROTARY CHURNS.

Specification forming part of Letters Patent No. **162,995**, dated May 11, 1875; application filed January 30, 1875.

To all whom it may concern:

Be it known that I, SAMUEL S. BEEKLY, of Lanark, in the county of Carroll 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improved mechanical movement for operating churns; and it consists in the arrangement and combination of parts that will be more fully described hereafter.

The accompanying drawing represents my invention.

a represents a churn, the form of which may be varied, provided a rounding bottom be retained. Within the churn is the dasher, composed of two frames, *b c*, the one within the other, of which the center of the larger, *b*, has a bearing in the front part of the churn, its axis *d* passing through to the outside, and forming the point of attachment for the wheel 3. The lesser frame *c* is journaled within the axis *d*, and, passing entirely through, forms a shaft, *f*, on the outside and in front of the churn, for the wheel 2 to be placed upon. Opposite to the axis *d*, in the middle of the rear end of the frame *b*, is a hole *o*, through which passes the axis *g* of the lesser frame *c*, which has its bearing in the rear part of the churn. Thus the movement of the two frames forming the dasher is rendered entirely independent of each other, and both may move in the same or in an opposite direction. The points of suspension of the dasher are, according to the width of the larger frame, higher or lower, so that in revolving it may nearly touch the bottom of the churn, extending from front to rear.

On the outside of the churn, in front of it, and properly supported, is the gearing for turning the two frames forming the dasher within in opposite directions, and it is composed of the wheels 1 2 3 4 5, of which 1 and 2 are larger than the others. Upon the crank-shaft *s* are the wheels 1 and 4, of which the wheel 1 gears with the wheel 2 upon the shaft of the lesser frame *c*, and wheel 4 with an idle-wheel, 5, which gears with the wheel 3 upon the axis of the larger frame *b*. By this means the frames are made to revolve in opposite directions, which may, however, be readily arranged, so as to make them turn in the same way by throwing the wheel 2 upon the shaft of the frame *c* out of gear.

Having thus described my invention, I claim—

A churn the dashers *b c* of which are operated by the combination of the wheels 1 2 3 4 5, the wheel 2 being adapted to be thrown out of gear, so that the dashers will revolve together, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of January, 1875.

SAMUEL S. BEEKLY.

Witnesses:

HENRY HAY,

JOHN R. HOWLETT.