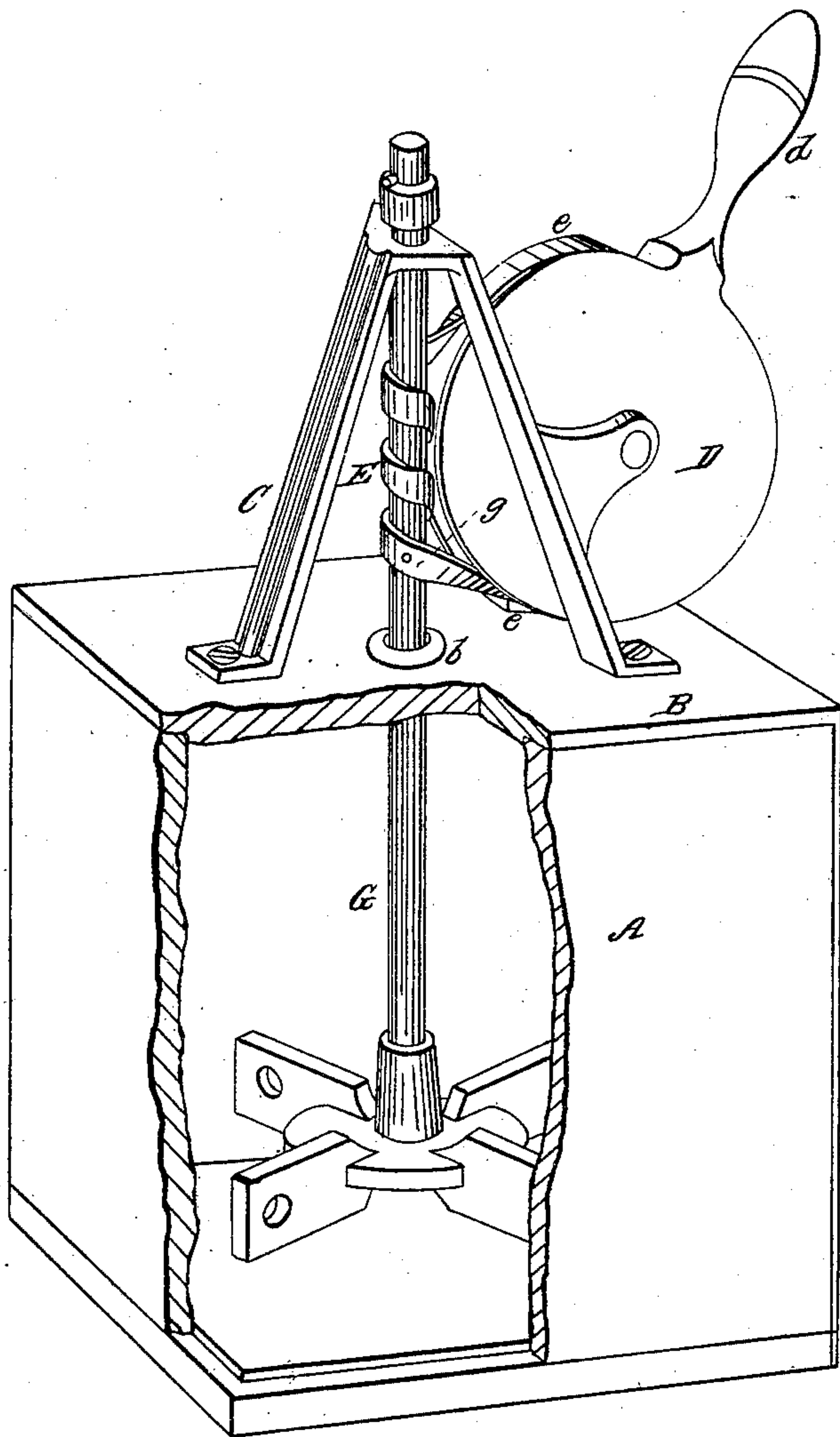


W. BRANT.  
Mechanical Movement.

No. 56,354.

Patented July 17, 1866.



Witnesses:

Frank Hillward  
James H. Layman.

Inventor:

William Brant  
By Knight Bros  
atys.

# UNITED STATES PATENT OFFICE.

WILLIAM BRANT, OF PARIS, ILLINOIS.

## IMPROVEMENT IN MECHANICAL MOVEMENTS.

Specification forming part of Letters Patent No. **56,354**, dated July 17, 1866.

*To all whom it may concern:*

Be it known that I, WILLIAM BRANT, of Paris, Edgar county, Illinois, have invented a certain new and useful Mechanical Movement; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to a certain arrangement of mechanical devices whereby an alternate semi-rotary movement of a handle attached to a segment wheel or pulley is caused to impart a simultaneous reciprocating and alternate rotary motion to a shaft, said shaft being placed at right angles to the journal of the wheel or pulley, in order that they may both operate in the same plane.

The accompanying drawing is a perspective view of my mechanical movement applied to a churn.

A represents a box or chest provided with a detachable lid, B, and said lid has secured to its upper side a tripod frame, C, which supports the working parts.

Journalled in the frame C is a wheel or pulley, D, having a handle, *d*, and the periphery of said wheel is provided with a groove for retaining in a proper position the rope or thong E, whose ends are secured to the wheel at *e e'*.

G is a vertical shaft adapted to move freely within the upper part of the frame C, and also in the bearing *b* of the lid, and said shaft is located so as to be near the pulley D, without coming in actual contact with the latter.

The thong E, being attached at one end, *e*, to the pulley D, is then wound three or four times around the shaft G, and the thong being drawn tight, and its other end, *e'*, secured to the pulley, the machine is ready for operation.

It will be perceived that as the handle *d* is alternately elevated and depressed the friction of the thong E on the shaft G will cause the latter to ascend, and also to revolve in one direction, and then to descend and revolve in the opposite direction. If it is found that the friction of the thong E on the shaft G is not sufficient to communicate a positive motion to the latter, and there is any slipping of the thong on the shaft, the two may be connected together by a pin, *g*.

I have described my invention as applied to a churn; but it is evident that the movement may be adapted to numerous devices—as, for example, the drilling of rocks, rifling of ordnance, beating eggs, tempering clay, &c.

I claim herein as new and of my invention—

The mode of imparting a reciprocating and alternate rotary movement to the shaft G by means of pulley D and thong E, or devices substantially equivalent, all arranged to operate in the manner and for the purpose set forth.

In testimony of which invention I hereunto set my hand.

WILLIAM BRANT.

Witnesses:

GEO. H. KNIGHT,  
JAMES H. LAYMAN.