

H. OLSON.
MECHANICAL MOVEMENT.

No. 178,187.

Patented May 30, 1876.

Fig. 1.

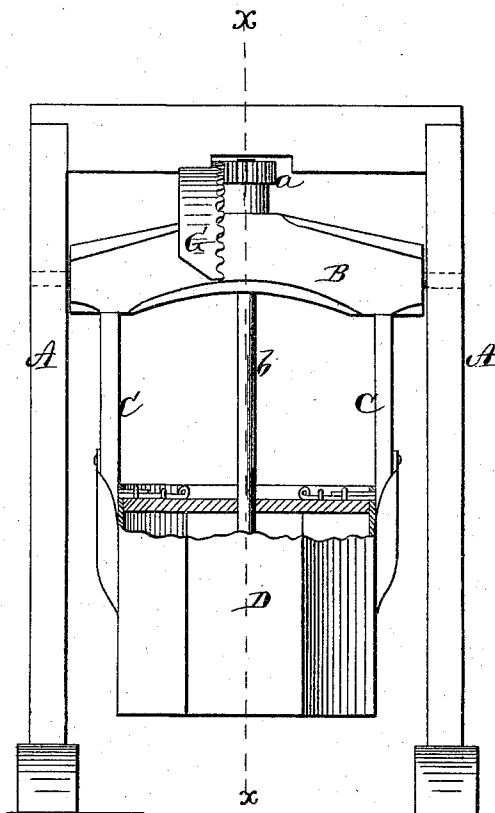
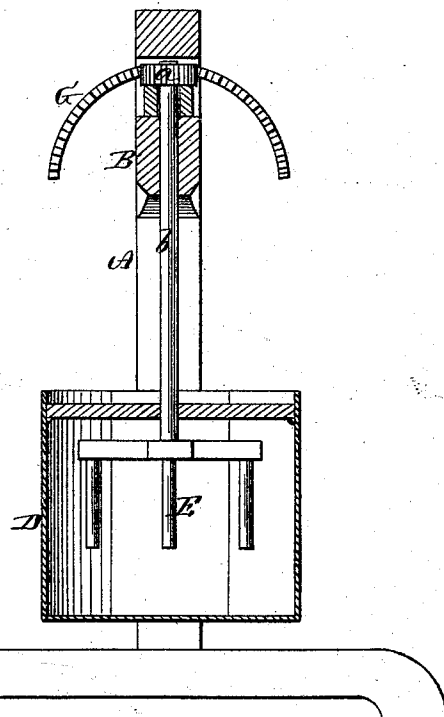


Fig. 2.



WITNESSES

Henry N. Miller
C. L. Ewert.

BH

INVENTOR

Hobcom Olson.
Alexander D. Tuxson,
Attorney.

UNITED STATES PATENT OFFICE.

HOLCOM OLSON, OF MOUNT PLEASANT, IOWA.

IMPROVEMENT IN MECHANICAL MOVEMENTS.

Specification forming part of Letters Patent No. **178,187**, dated May 30, 1876; application filed February 28, 1876.

To all whom it may concern :

Be it known that I, H. OLSON, of Mount Pleasant, in the county of Henry and in the State of Iowa, have invented certain new and useful Improvements in Mechanical Movement; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in a mechanical movement applicable to churns, washing-machines, and other light machinery, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation, showing my invention applied to a churn. Fig. 2 is a section of the same, through the line *x x*, Fig. 1.

A represents a suitable frame-work, in which is a cross-head, B, pivoted at its ends, so as to be capable of rocking back and forth. From the cross-head B depend arms C C, to which the churn D is attached. Through the center of the cross-head B passes a vertical shaft, *b*, carrying on its lower end the churn-

dasher E, and having a pinion, *a*, secured on its upper end. This pinion meshes with a cogged segment or semicircle, G, permanently attached to the top cross-bar of the frame A.

By swinging the churn back and forth, so as to rock the cross-head on its pivots, the pinion *a* describes the arc of a circle, the same as the segment G, and as it meshes with said segment, it and the shaft *b* obtain a rotating motion. This rotary motion is reversed every time the swinging motion is reversed, and thus the shaft *b* obtains a reciprocating rotating as well as swinging motion.

This movement may be applied to churns, washing-machines, or other machinery where the same may be of advantage.

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

The combination of the stationary cogged segment G, swinging cross-head B, shaft *b*, and pinion *a*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 14th day of January, 1876.

HOLCOM OLSON.

Witnesses:

H. C. SAUNDERS,
J. WHITNEY.