

R. WILLIAMS.

Improvement in Churns.

No. 132,037.

Patented Oct. 8, 1872.

Fig. 1.

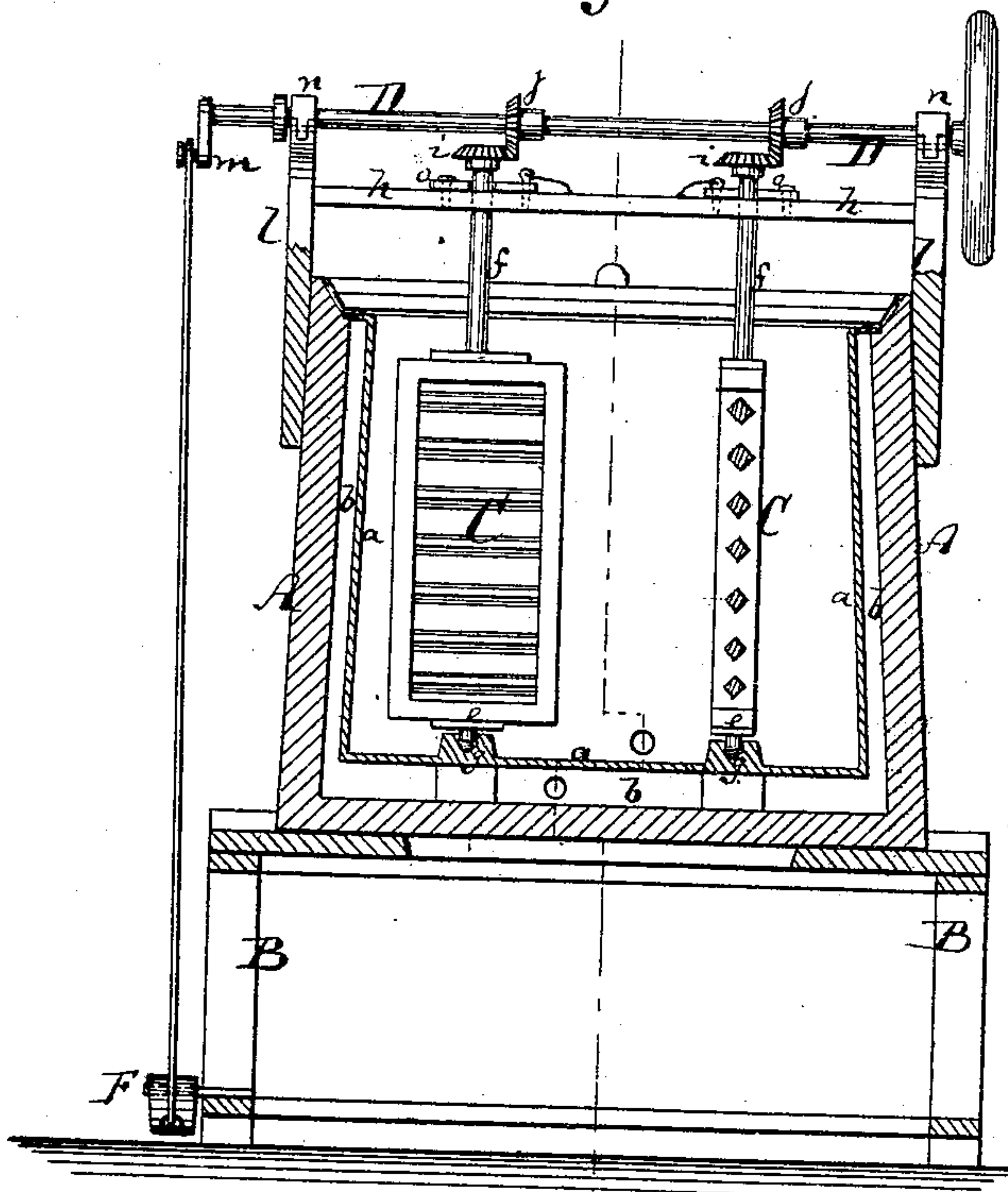


Fig. 2.

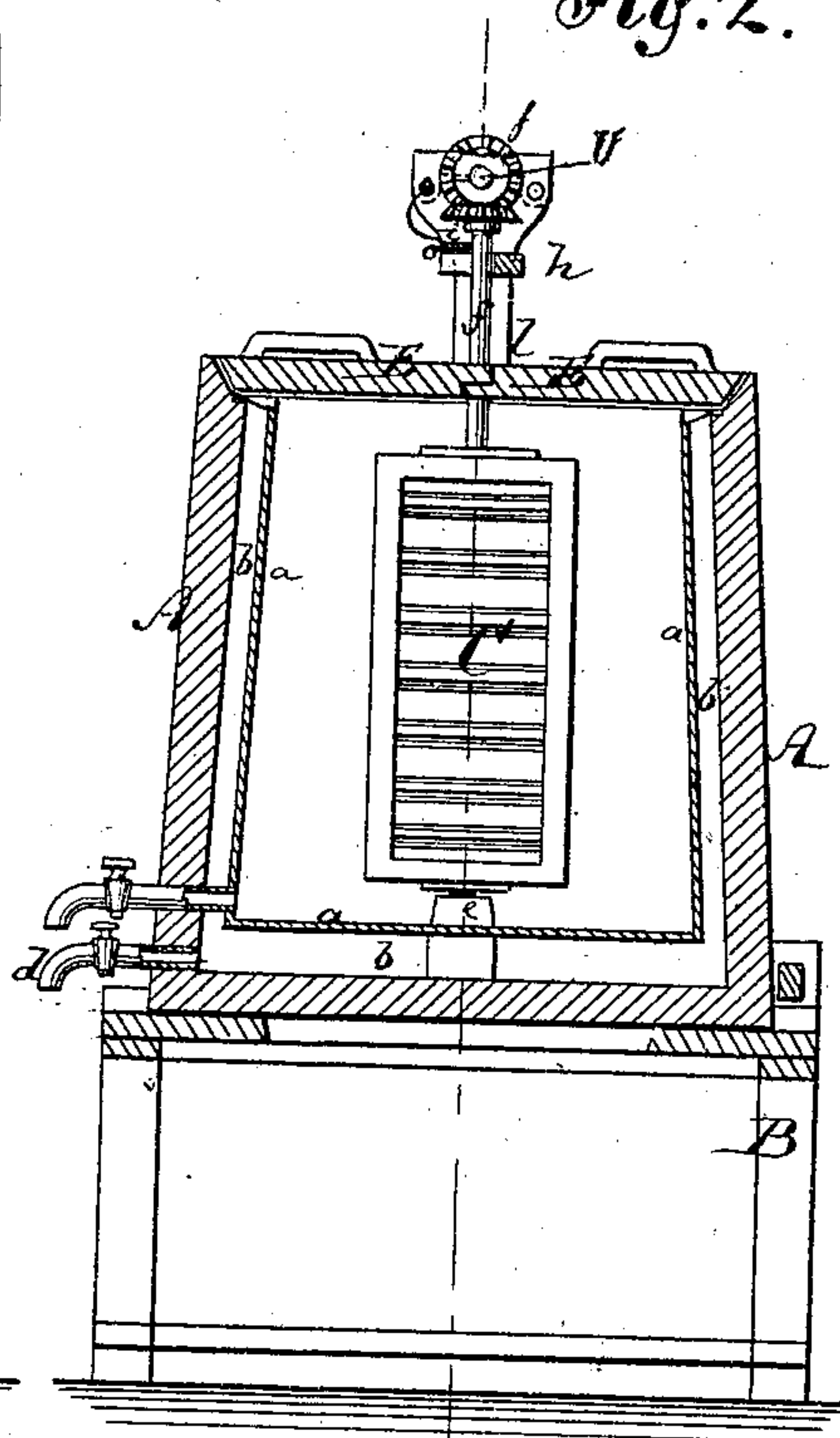
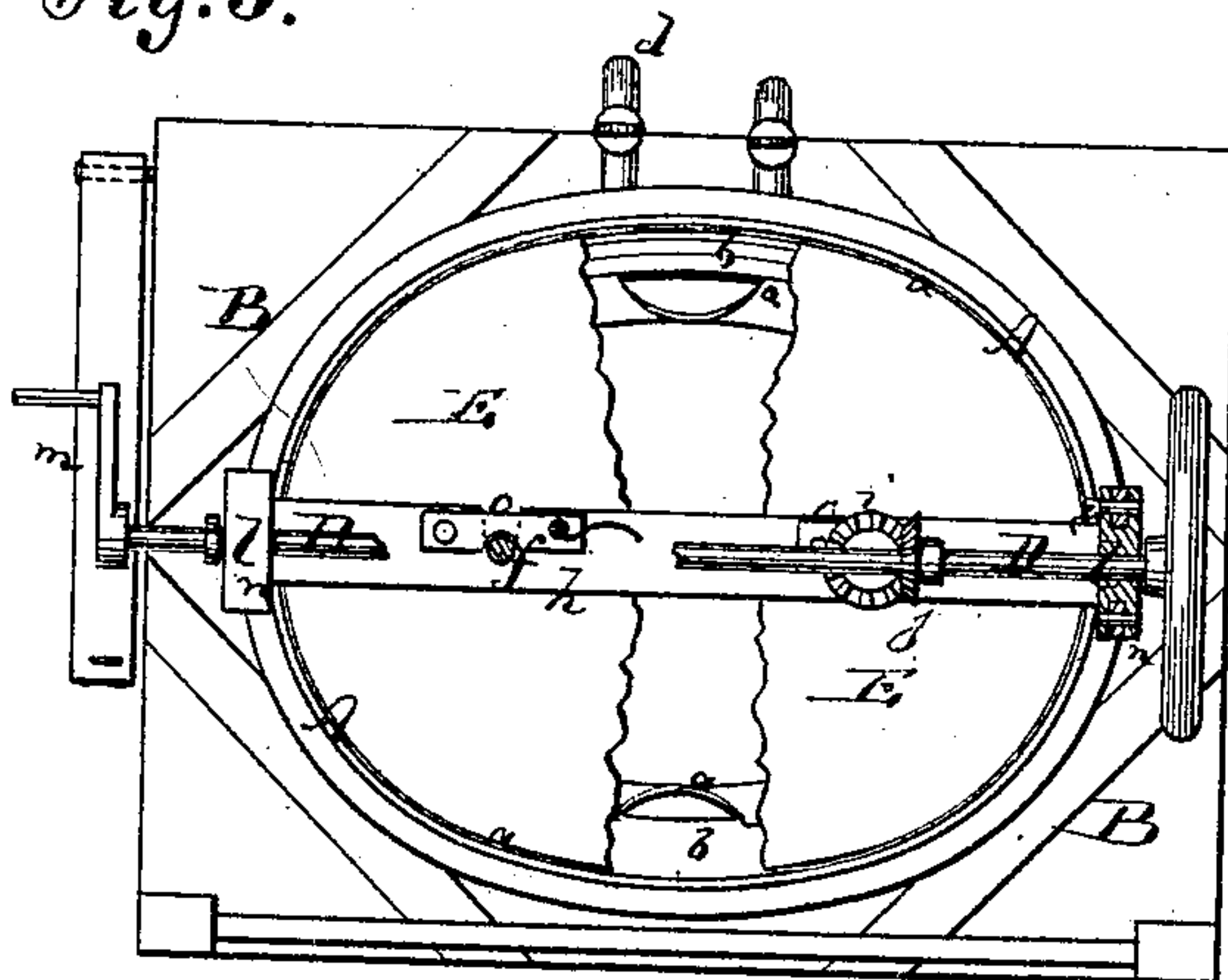


Fig. 3.



Witnesses:

A Bennekerdorf.
H. A. Graham.

Inventor:

R. Williams.

PER

Mumf
Attorneys.

UNITED STATES PATENT OFFICE.

ROGER WILLIAMS, OF YONKERS, NEW YORK.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **132,037**, dated October 8, 1872.

To all whom it may concern:

Be it known that I, ROGER WILLIAMS, of Yonkers, in the county of Westchester and State of New York, have invented a new and Improved Churn, of which the following is a specification:

Figure 1 represents a vertical longitudinal section of my improved churn. Fig. 2 is a vertical transverse section of the same. Fig. 3 is a top view of the same.

The invention consists in operating two open-frame dashers in the same direction in an oval churn, as hereinafter fully described.

A in the drawing represents the body of the churn, of oval form and slightly contracted toward the top. It is or may be supported on a frame, B, of proper size and strength, or placed directly on the floor. Within the churn is arranged a sheet-metal lining, *a*, which leaves a hollow space, *b*, along the sides and bottom, surrounding and under the cream in the churn. Through an opening in top hot or cold water can be poured into the space *b*, and withdrawn therefrom through a faucet, *d*. C C are two churn-dashers to be used within the churn. Each is a rectangular frame containing parallel slots of diamond-shaped cross-section, as shown in Figs. 1 and 2, and having upper and lower stems or shafts *e f*. The lower end of the lower shaft rests in a socket at the bottom of the churn upon a ball, *g*, placed therein and can easily revolve on said ball. The upper part of each upper shaft *f* has a support in a horizontal bar, *h*, above the vessel A, and carries a bevel-gear wheel, *i*, on

top, which meshes into a similar wheel, *j*, on a shaft, D. This shaft D has its bearings in uprights *l l*, which project from the ends of the vessel A, and can be turned by means of a crank-handle, *m*, or other device. When the churn is to be cleaned the shaft D is readily lifted out of its supports by opening the catches *n* which hold it in place. The catches *o* holding the shafts *f* in the bar *h*, can then be swung aside to detach the shafts from said bar, and allow its removal from between the posts *l* where it rested on projecting lugs. The sectional cover E of the churn is next taken off, when the dashers can be withdrawn without difficulty. The shaft D may be connected with a treadle, F, if desired.

The two dashers C C stand with their faces at right angles and always remain so during operation, as they revolve in the same direction with equal velocity. They thereby prevent a continuous current of the cream along the walls of the churn. A faucet for the discharge of milk is applied to the lower part of the churn, as shown.

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

The combination with oval case A, of two open-frame dashers C C revolving in the same direction, as and for the purpose described.

ROGER WILLIAMS.

Witnesses:

JOHN BRENNAN,
PATRICK CONNELL.