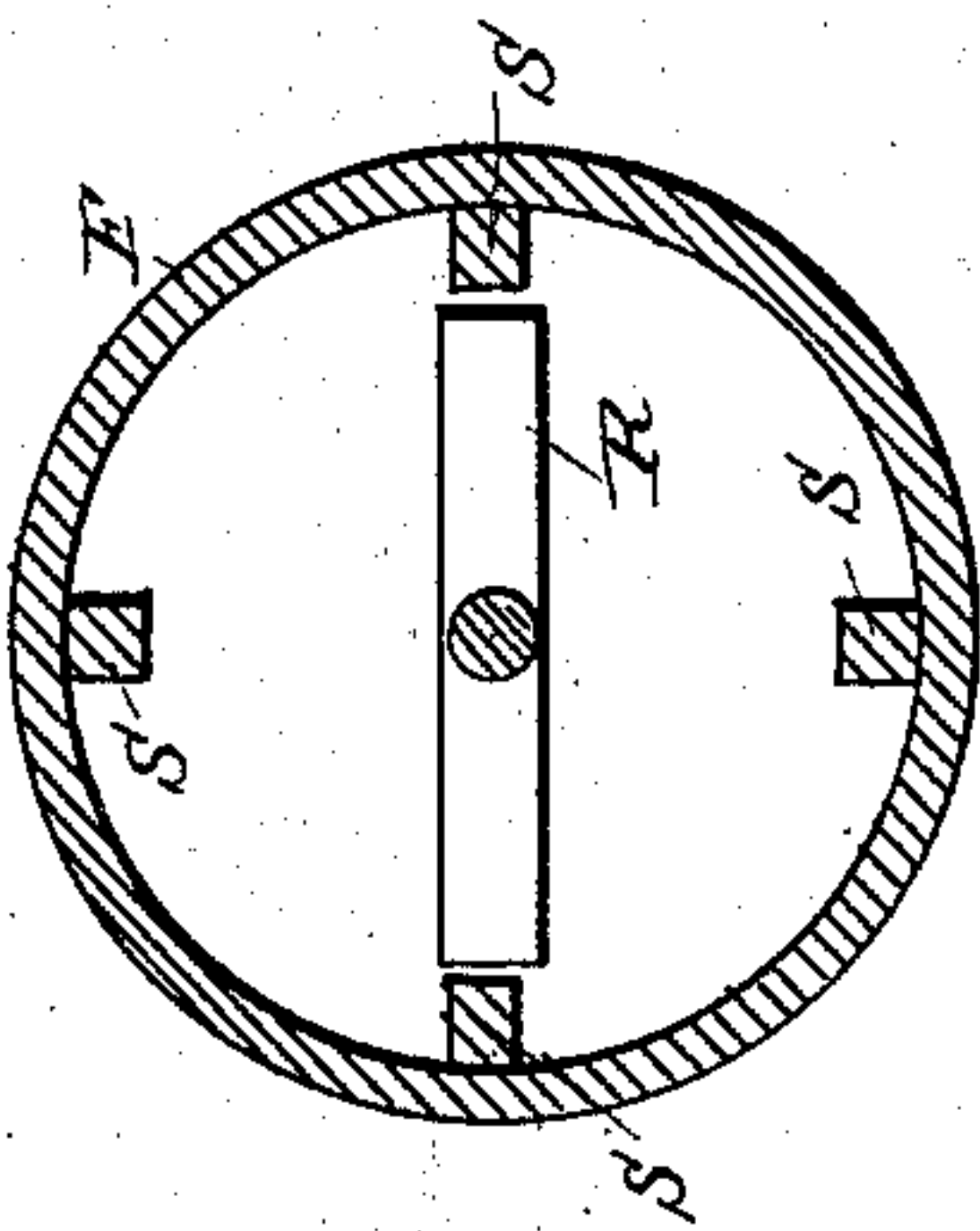
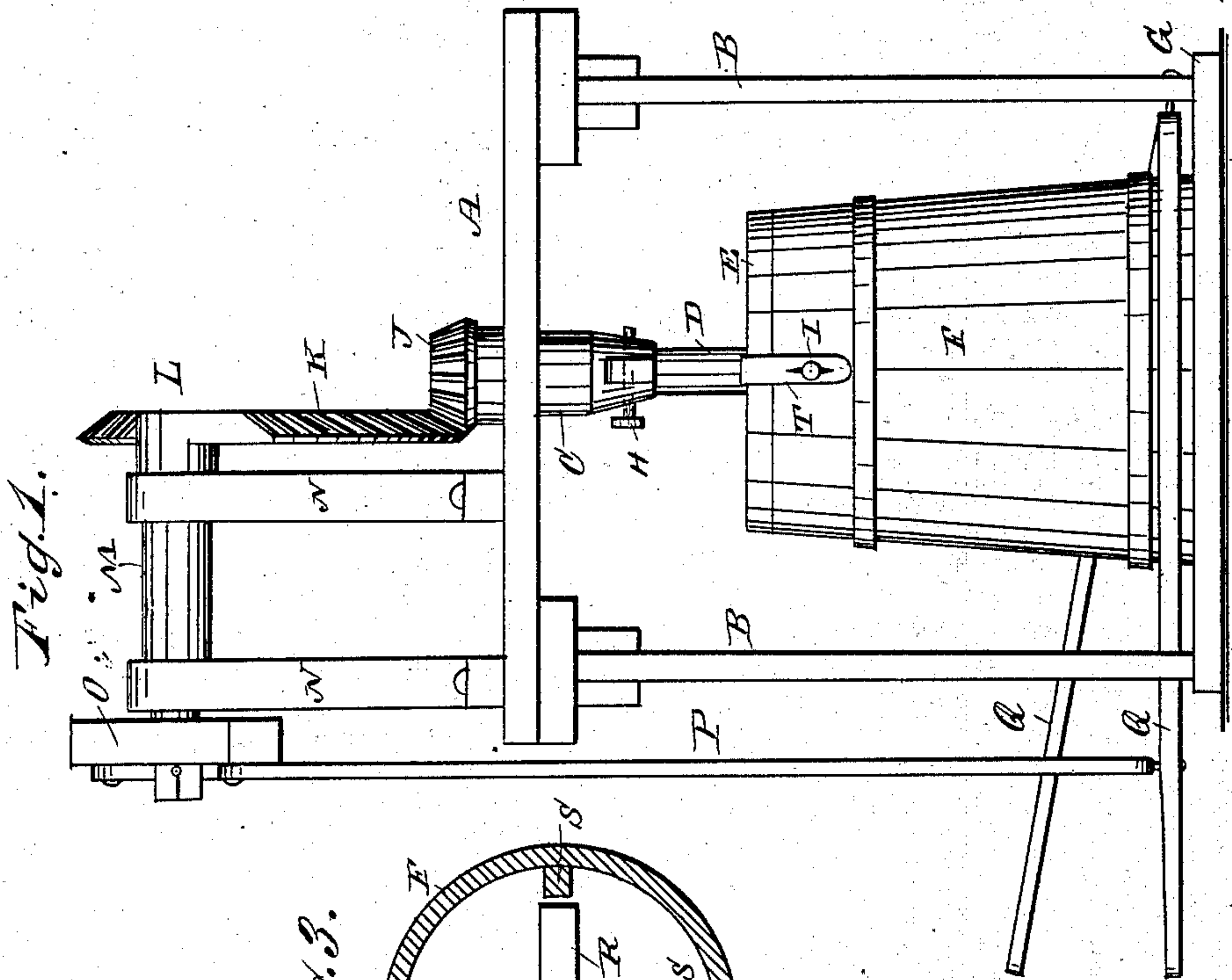
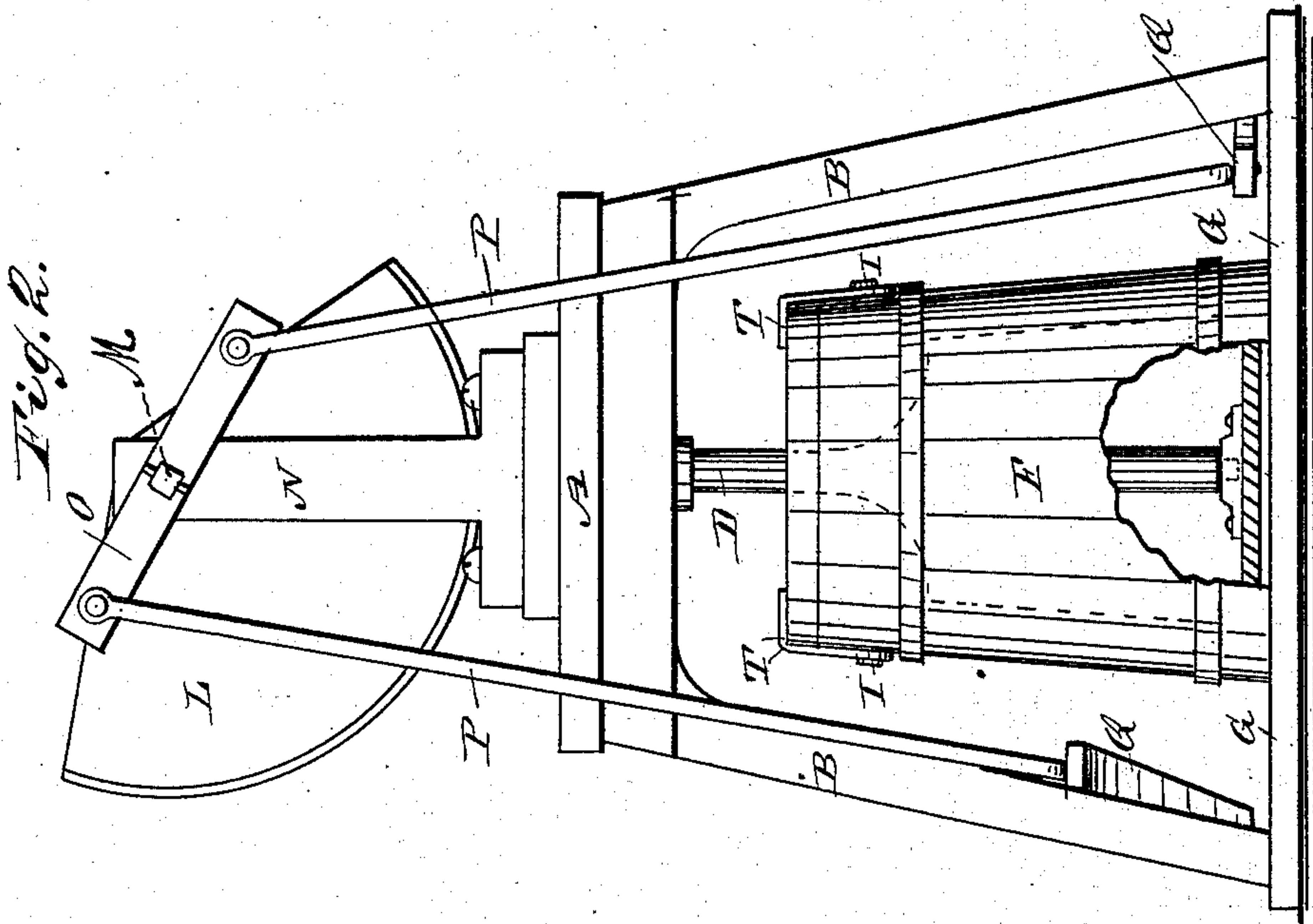


(No Model.)

E. H. WOOD.
CHURN.

No. 325,894.

Patented Sept. 8, 1885.



WITNESSES:

Theo. G. Hoston
C. Sedgwick

INVENTOR:

E. H. Wood

BY

Mum

ATTORNEYS,

UNITED STATES PATENT OFFICE.

ELI H. WOOD, OF CHERRY VALLEY, MISSOURI.

CHURN.

SPECIFICATION forming part of Letters Patent No. 325,894, dated September 8, 1885.

Application filed August 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, ELI H. WOOD, of Cherry Valley, in the county of Crawford and State of Missouri, have invented a new and Improved Churn, of which the following is a full, clear, and exact description.

The invention consists in the combination, with a cream box or tub and a frame on which it is held, of a rocking shaft having a segmental rack on one end and a cross-piece on the other, the ends of the cross-piece being connected by connecting-rods with foot-levers pivoted on the frame, and the segmental rack engaging with a bevel pinion formed on the upper end of a shaft journaled in the top plate of the frame, and having its lower end forked to receive the upper end of the dasher-shaft.

The invention also consists in parts and details and combinations of the same, as will be fully set forth hereinafter.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improved churn. Fig. 2 is a rear elevation of the same with the lower part of the tub broken out. Fig. 3 is a sectional plan view of the tub.

In a top plate, A, supported by legs B, a short vertical shaft, C, is journaled, which has its lower end forked to receive the tongued upper end of a vertical shaft, D, journaled in the cover E of the cream tub or box F, resting on the base G of the churn-frame.

The shafts C and D are coupled by a pin, H, and the cover E is provided with slitted straps T, for fastening the cover by means of headed studs I, projecting laterally from the side of the tub near the top.

On the upper end of the shaft C a bevel-pinion, J, is rigidly mounted, which engages with a bevel segmental rack, K, formed on the edge of a sector-shaped plate, L, mounted rigidly on one end of a horizontal rock-shaft, M, journaled in standards N on the top plate, A.

A cross-piece, O, is secured on that end of the shaft M opposite the one on which the plate L is mounted, and the ends of the said cross-piece O are connected by connecting-

rods P with two foot levers or treadles, Q, pivoted to the legs of the frame and projecting from the front end of the frame, the said treadles being so arranged that one is lowered when the other is raised.

The lower end of the dasher-shaft D is preferably journaled in the bottom of the tub, and on the dasher-shaft the vertical wings R are secured.

Four vertical ribs, S, arranged about equidistant, project from the inner surface of the tub F, for the purpose of interrupting the circular or vortex movement of the cream.

To operate the churn, the operator stands on the two foot-levers Q and depresses them alternately, whereby the shaft M will be revolved alternately in opposite directions. The plate L swings in opposite directions and, by means of the bevel-pinion J, revolves the dasher alternately in opposite directions.

To remove the tub F, the pin H is removed, and the shaft D is uncoupled from the shaft C, thus permitting of sliding the tub F laterally and from under the shaft C.

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

1. In a churn, the combination, with the plate A, the legs B, and the cream box or tub F, of the shaft M, the cross-piece O, the foot-levers Q, the connecting-rods P, the segmental rack K, the pinion J, and the shaft C, journaled in the plate A and connected with the dasher, substantially as herein shown and described.

2. In a churn, the combination, with the plate A, the legs B, and the cream box or tub F, of the shaft M, the cross-piece O, the foot-levers Q, the connecting-rods P, the segmental rack K, the shaft C, journaled in the plate A and having its lower end forked, the bevel-pinion J on the shaft C, and the dasher having its shaft connected with the forked end of the shaft C, substantially as herein shown and described.

ELI H. WOOD.

Witnesses:

L. H. SCOTT,
A. W. JOHNSON.