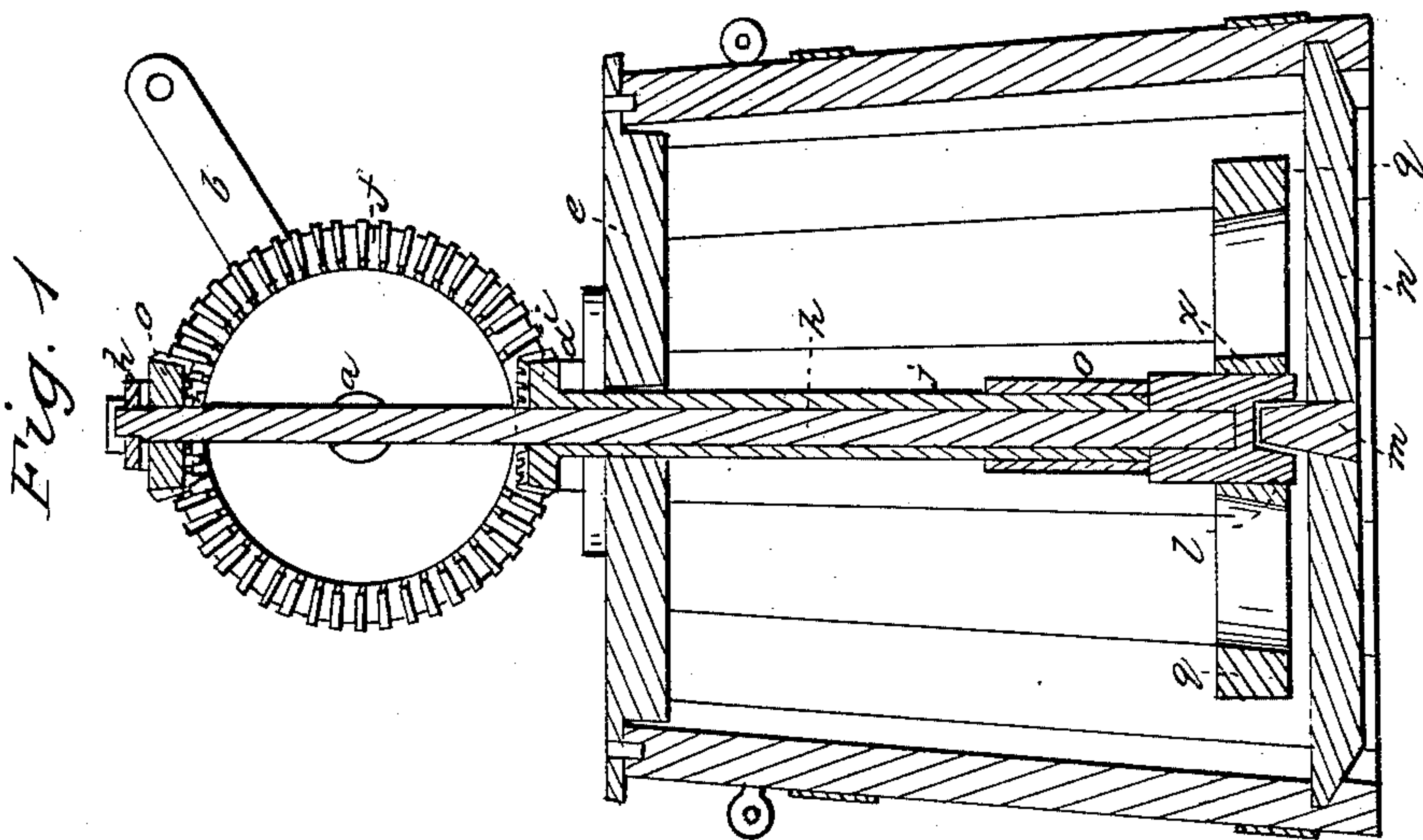
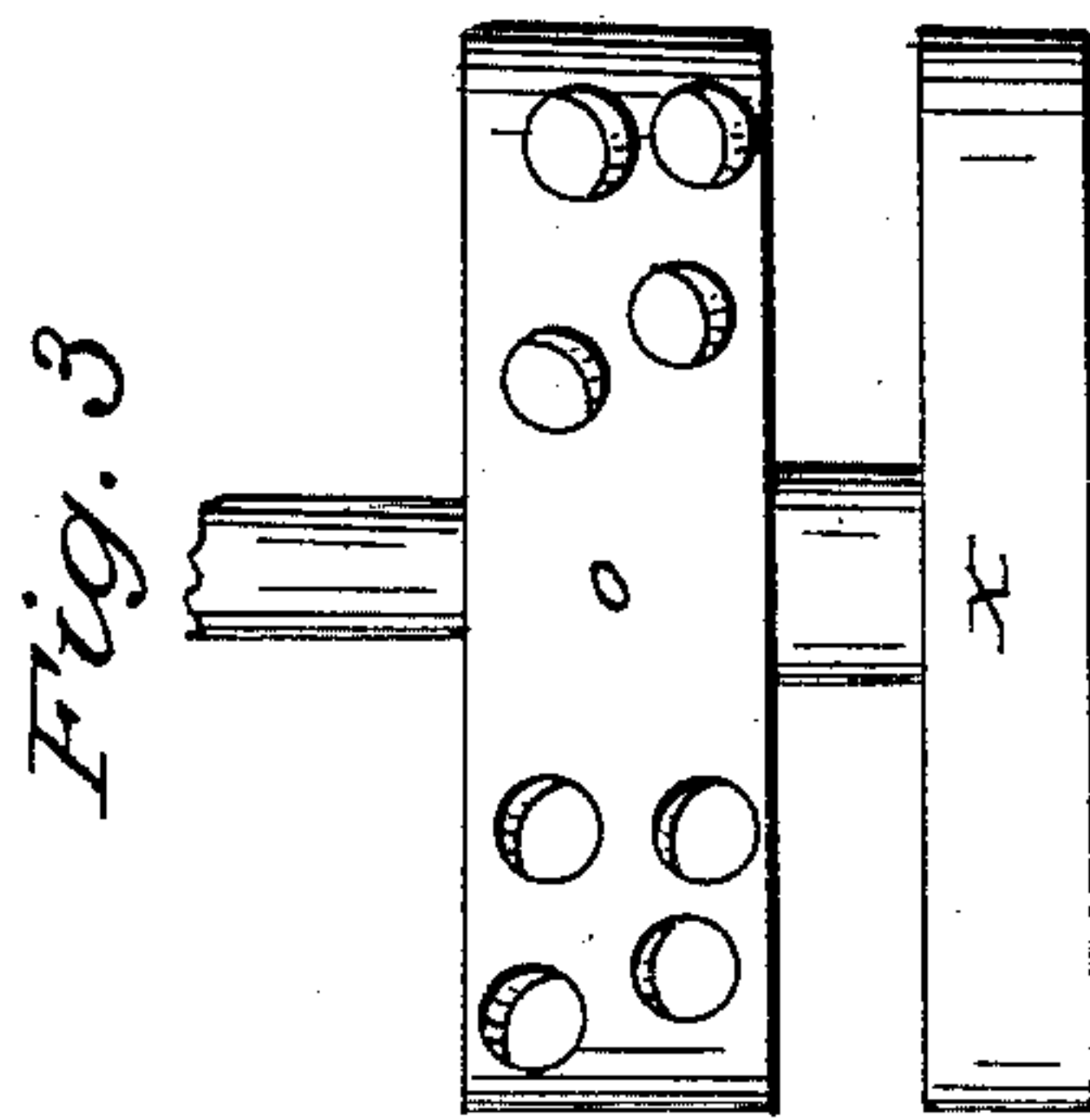
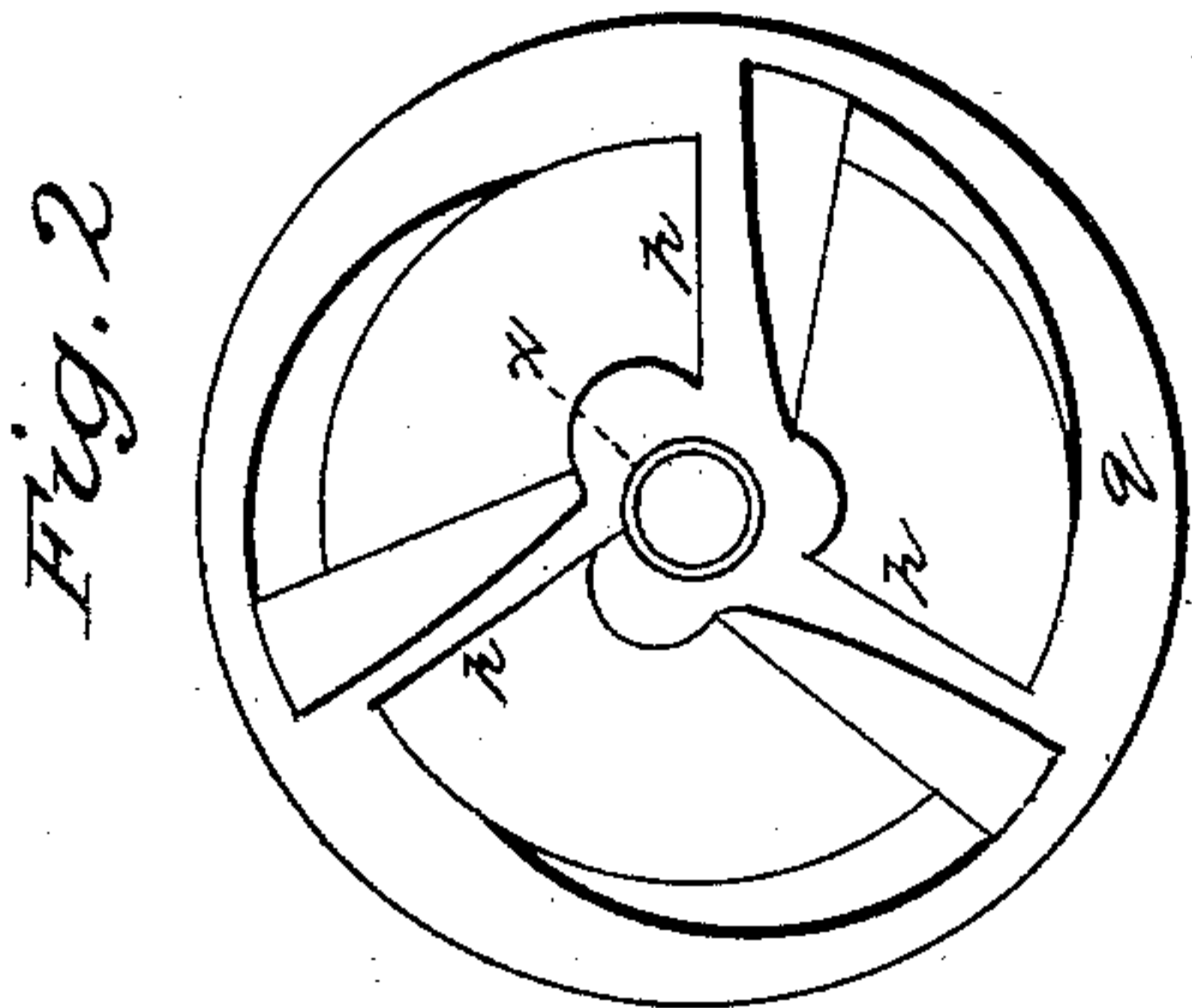
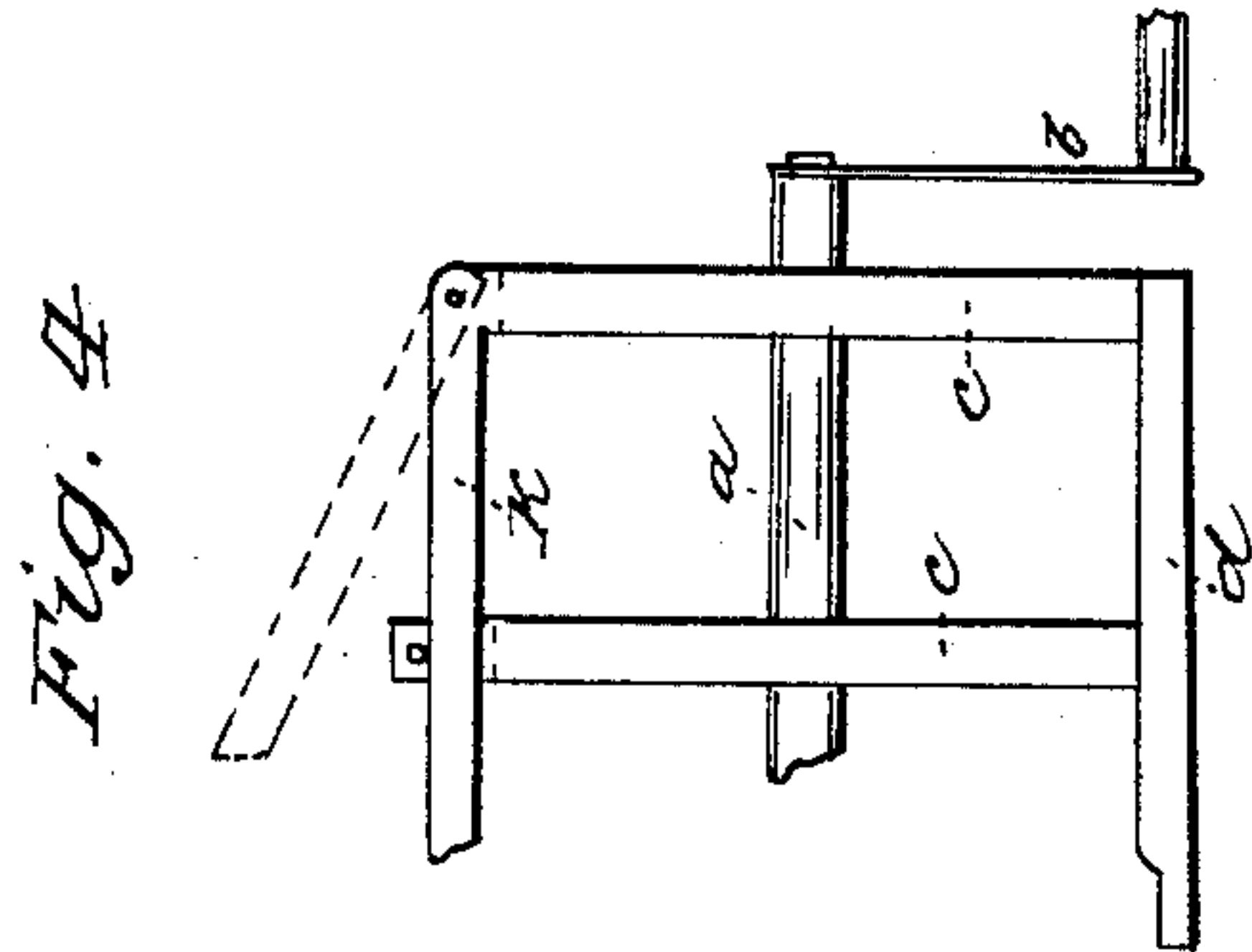


W. R. McCUTCHEON.
Churn.

No. 65,496.

Patented June 4, 1867.



Witnesses:

J. Smith.
L. E. Jones.

Inventor:

W. R. McCutcheon
by Atty. D. P. Everett.

United States Patent Office.

WILLIAM R. McCUTCHEON, OF WASHINGTON, IOWA.

Letters Patent No. 65,496, dated June 4, 1867.

IMPROVEMENT IN CHURNS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM B. McCUTCHEON, of Washington, in the State of Iowa, have invented a certain new and useful Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, and to the letters and marks thereon, which said drawings form part of this specification, and represent, by—

Figure 1, a view, by vertical section, a churn constructed under my improvement.

Figure 2 is a top view of the wheel-dasher of the churn.

Figure 3, a view of the wheel-dasher and perforated dasher with a part of the shaft attached thereto; and

Figure 4 is a view of the frame supporting the power or hand-crank shaft of the churn.

In each of these figures where like parts are shown like marks and letters are used to indicate the parts.

To a certain extent the present invention is of the character of an additional improvement to the churn upon which Letters Patent were granted to me on the 11th day of September, 1866. The mechanism for operating the dashers consists of a power-shaft, *a*, with a crank, *b*, the shaft rotating in uprights *c* of a frame, *d*, which frame is secured to one side of the cover *e* of the churn. A bevel-toothed wheel, *f*, is affixed to the shaft *a*, gearing into pinion *g* of the inner dasher-shaft *h*, and also into pinion *i* of the outer dasher-shaft *j*, which is tubular and surrounds the shaft *h*. A hinged bar, *k*, holds the upper end of the shaft *h*, the lower end of which has its bearing *l* on a pin or pivot at *m* in the bottom *n* of the churn. The upper and lower bearing and support of the tubular shaft *j* is shown in fig. 1 to be into a plate in the cover and on a collar of the shaft *h*. From this brief recital of the parts it will readily be seen that the one dasher-shaft is rotated in the one direction, and the other dasher-shaft in the opposite direction, carrying with them their respective dashers. It will also be seen that by elevating the hinged bar *k*, the shaft may be liberated from the motive mechanical means or devices, and by the taking off of one-half of the cover that the dasher-shafts and dashers may be removed from the churn. The wheel-dasher *x* is attached to the shaft *h*, and the perforated dasher to the shaft *j*. The perforated dasher *o* has its faces curved in opposite directions, so that in rotation the faces of this dasher will act to force the cream down against the inclined faces *p* of the wheel-dasher, while these faces *p* of the wheel-dasher will so act upon the cream as to force it under the rim *q* of the wheel, and out against the sides of the churn and thence upward to be acted upon again by the perforated dasher, and this united and continuous action of these dashers will rapidly produce butter, and separating it will, during the action of the dashers, keep it at the lower part of the churn.

What I claim as my invention, and desire to secure by Letters Patent in churns where there are two shafts rotated in opposite directions, is—

The wheel-dasher having the inclined faces on the one shaft, and below the perforated dasher having its inclined faces on the other shaft, the two being operated as and for the purposes herein set forth.

This specification signed this 31st day of January, 1867.

WM. R. McCUTCHEON.

Witnesses:

A. H. PATTERSON,

W. A. VAN DOREN.