

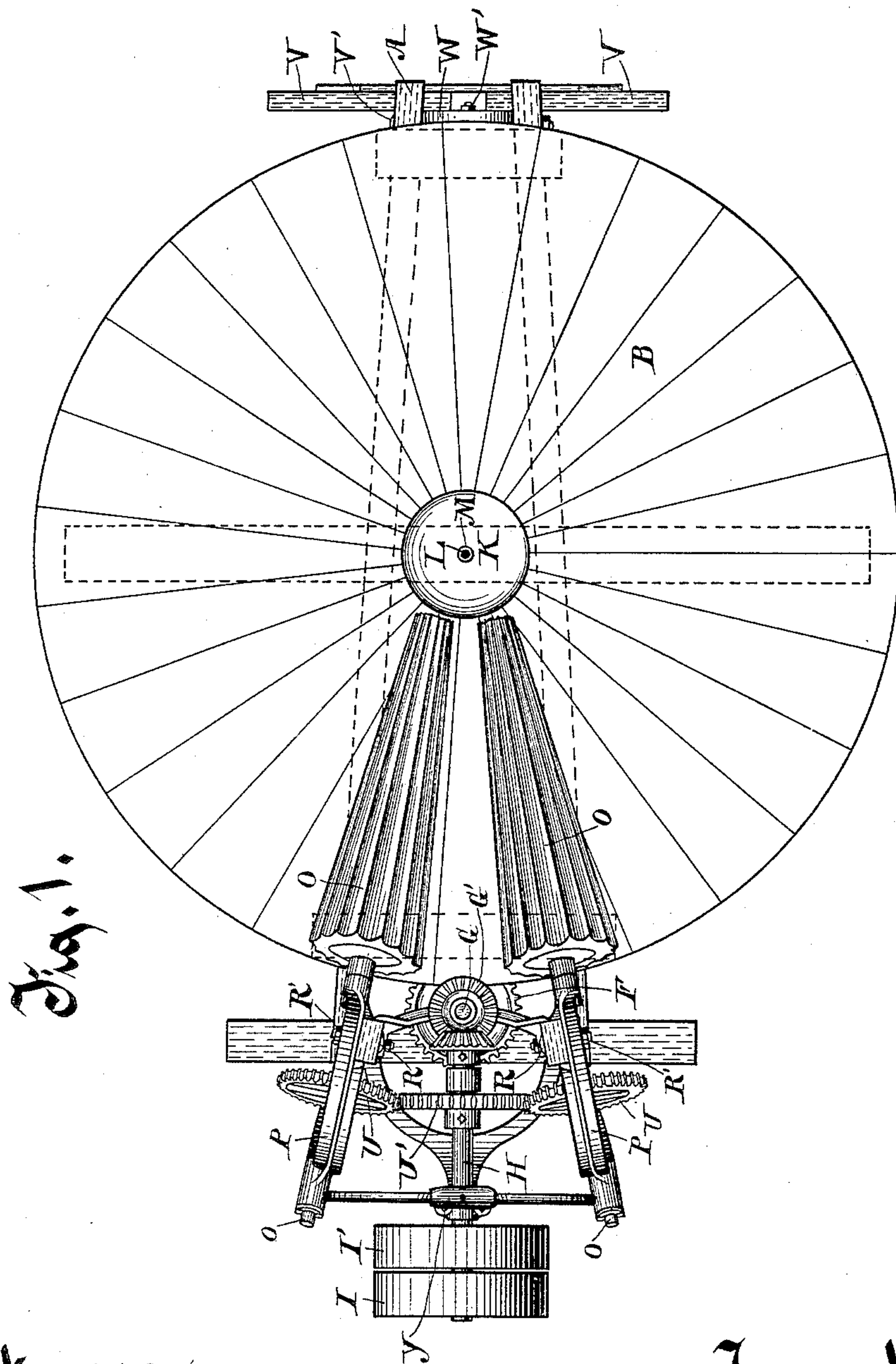
(No Model.)

2 Sheets—Sheet 1.

G. H. POUNDER.
BUTTER WORKER.

No. 442,201.

Patented Dec. 9, 1890.



Witnesses.

W. Keeney.

Anna Faust.

Inventor.

George H. Ponder

Emil Bendick
Attorneys.

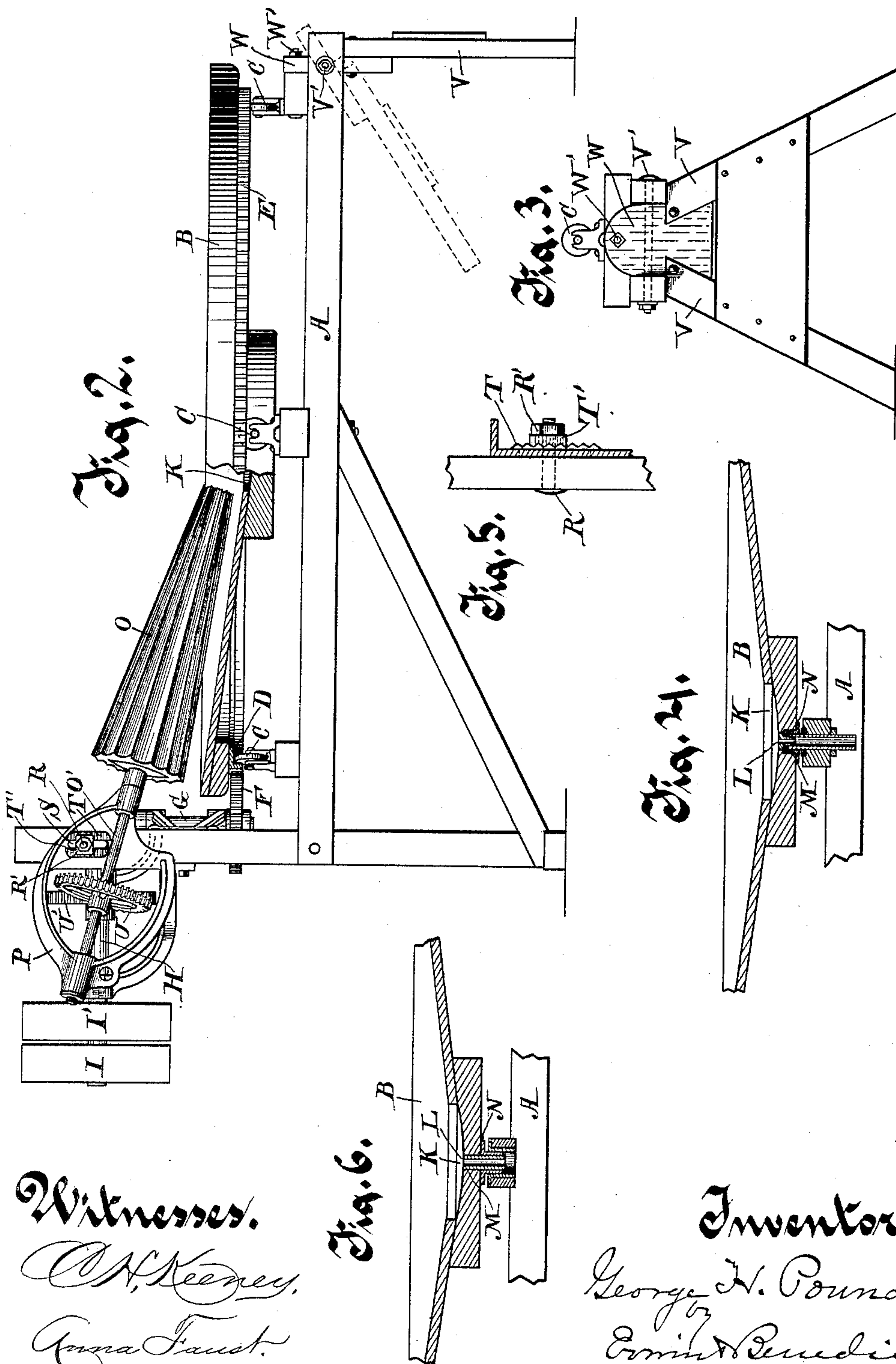
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Ernest Benedict
Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE H. POUNDER, OF FORT ATKINSON, WISCONSIN.

BUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 442,201, dated December 9, 1890.

Application filed January 27, 1890. Serial No. 338,235. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. POUNDER, of Fort Atkinson, in the county of Jefferson and State of Wisconsin, have invented new and useful Improvements in Butter-Workers; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

In the drawings, Figure 1 is a top plan view of my complete device. Fig. 2 is a side elevation of the same device, parts being broken away to show the construction more fully. Fig. 3 is an end view of the frame. Fig. 4 is a central vertical section of a central portion of the rotating table and devices connected therewith. Fig. 5 is a side elevation in detail of the device for raising and lowering the corrugated rollers. Fig. 6 is a modified form of the same portion of the device shown in Fig. 4.

A is the frame supporting the operative parts of the butter-worker. A circular table B, which is depressed or dished centrally, is supported and rotates horizontally on bearing-wheels C C, journaled in blocks on the frame. These wheels C C bear against a circular track D, secured to the under side of the table B, the periphery of which track D forms a crown-toothed wheel or rack E, which meshes with the toothed wheel F on shaft G, by the rotation of which the table B is revolved. The shaft G has its bearings in the frame, and is provided with a beveled pinion G', which meshes with a beveled pinion on the driving-shaft H, which is provided with fast and loose pulleys I and I', for carrying the power-transmitting belt.

The top surface of the table B inclines downwardly inwardly from the periphery toward the center, and at the center the table is provided with a shallow cup-like depression K, from the bottom of which at the center of the table a vertically downwardly-leading duct L is provided, through which buttermilk is discharged from the surface of the table. This duct L is preferably constructed in or lined by a wooden tube M, which is surrounded and reinforced by a metal bushing N, and the duct

is continued downwardly through the frame A in the manner shown in Fig. 6, or in an equivalent manner, as shown in Fig. 4.

Above the table B and at one side thereof 55 are two frusto-conical corrugated rollers O O, which are located at a distance from each other and at a little distance above, but so that their under surfaces, respectively, are parallel with the adjacent surface of the table 60 B. These rollers extend from the periphery of the table B to or near to the edge of the depression K. These rollers O O are each fixed on a spindle O', which has its bearings in an independent frame P, supported adjust- 65 ably on the frame A, entirely at one side of the table B. The frames P P are each provided with a face which fits against an upright part of the frame A, and is secured thereto adjustably vertically by means of a 70 bolt R, inserted in the frame A and passing through a slot S therefor in the frame P. The frame P alongside the slot S is provided with a toothed rack T, and a block T' on the bolt R, underneath the nut R' thereon, is pro- 75 vided with corresponding teeth which engage the rack T, whereby the frame P may be securely held on the frame A at the point to which it is adjusted vertically. The spindles O' O' are each provided with a fixed cog- 80 wheel U, which mesh with the cog-wheel U', fast on the driving-shaft H. The faces of the teeth on the cog-wheels U U are slightly curved laterally to provide for gearing properly with the wheel U' while located at an an- 85 gle thereto.

The end legs V V of the frame A are secured rigidly together and are secured rigidly to the head-block W, which head-block is pivoted to the frame A by means of the 90 bolt V', and is further secured to the frame by the bolt W'. These legs when thus secured to the frame A by the bolts V' and W', are rigid thereon in an upright position, but the bolt W' being removed, the legs are then 95 secured to the frame A only by the pivotal bolt V', on which they may be swung underneath the horizontal portion of the frame in the manner indicated in dotted lines in Fig. 2, whereby the frame is put in convenient 100 condition for moving it about, or, when desired, for packing it for transportation.

It will be understood that by reason of the construction hereinbefore described the frusto-conical rollers O O have no direct connection with the table B, nor is there any part of the frame that supports the rollers that passes through the table; but in some cases where great strain is put on the machine by heavy work it is better to connect the frames P P at their rear ends by a removable extension-rod *y*. This rod *y* is very conveniently formed in two parts, the outer ends of the rods being turned by screw-thread into the frames P P, the inner adjoining ends of the two parts being connected together by a coupling-nut having right and left handed screw-threads for receiving the ends of the two parts of the rod therein, the nut being thus adapted for drawing the two parts together or forcing them apart, as desired.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a butter-worker having a horizontally-revolving table, the combination, with two frusto-conical rollers fixed on revolving spindles diverging outwardly above and at one side of the table, and independent vertically-adjustable frames in which the spindles have elongated bearings, the spindles being provided with cog-wheels which mesh at an obtuse angle with an interposed cog-wheel on a

driving-shaft, of an extension-rod connecting the outer ends of the spindle-supporting frames, said rod being formed in two parts, joined by an adjusting coupling-nut having right and left hand screw-threads, substantially as described.

2. In a butter-worker having a revolving table and frusto-conical rollers located and rotating parallel with and at an adjustable distance above the table, the combination, with the frame of the machine, of spindle-supporting frames in which the spindles of the corrugated rollers have elongated bearings, which spindle-supporting frames are provided with vertical slots through parts fitted movably on the frame of the machine, toothed racks on the spindle-supporting frames alongside the vertical slots, and bolts passing through the frame and through the vertical slots, which bolts are provided with nuts turning thereon and with toothed blocks adapted to engage the racks on the adjustable frames, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE H. POUNDER.

Witnesses:

GEO. C. SMITH,
JESSIE A. SMITH.