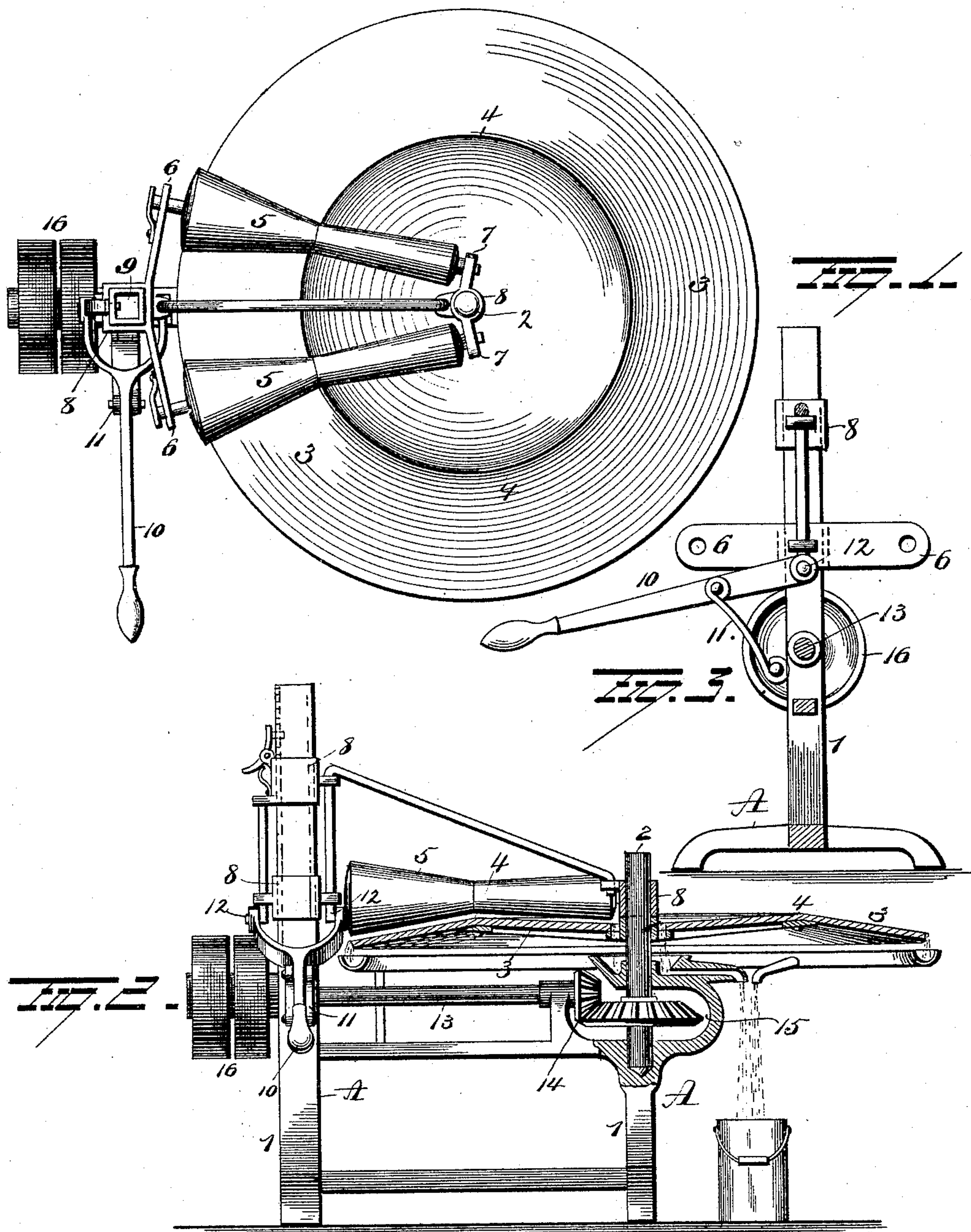


(No Model.)

A. C. KINGSBURY.  
BUTTER WORKER.

No. 436,422.

Patented Sept. 16, 1890.



Witnesses  
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# UNITED STATES PATENT OFFICE.

ALVIN C. KINGSBURY, OF DECORAH, IOWA.

## BUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 436,422, dated September 16, 1890.

Application filed April 17, 1890. Serial No. 348,284. (No model.)

*To all whom it may concern:*

Be it known that I, ALVIN C. KINGSBURY, of Decorah, in the county of Winneshiek and State of Iowa, have invented certain new and useful Improvements in Butter-Workers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in butter-workers.

Hitherto machines of this character have been arranged with a rotary table pitching toward the center for the discharge of the brine and buttermilk at that point as fast as worked from the butter; also, the rollers for operating on the butter have been previously set and could only be changed at the expense of a great deal of time and inconvenience.

The object of my invention is to provide improved means for the support of the table, to provide for the raising and lowering of the rollers instantly while the machine is in motion, and to increase the facilities for drawing the brine and buttermilk from the butter; and with these objects in view my invention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of my improved butter-worker. Fig. 2 is an end elevation, and Fig. 3 is a vertical section.

A represents the frame upon which the various parts of the machine are supported, the same being mounted on suitable legs 1 1. A vertical shaft 2 is journaled in this frame, and this shaft carries a circular table 3, upon which the butter is worked. This table is pitched downward from the circular ridge 4 both toward the center and the outer edge of the table to facilitate the draining of the brine and buttermilk from the butter, which by this means drips from the center and outer edge, thus hastening the process to a very considerable extent.

A pair of cone-shaped rollers 5 5 are arranged to operate on the butter carried by the table. These rollers are dished about midway of their length to conform to the shape of the ridged surface of the table, and they

both extend radially across the table, the smaller ends toward the vertical shaft. The rollers are journaled in the arms 6 6 and 7 7 of the vertically-moving frame 8, and the frame is loosely mounted at its opposite ends on the vertical post or upright 9 off at one side of the frame and on the upper end of the vertical shaft 2, so that vertical movement may be imparted to it at pleasure in order to raise or lower the rollers 5 5.

To operate the movable frame, a hand-lever 10, fulcrumed, preferably, on the hinged or pivoted arm 11, is pivotally connected with the pintles 12 12 of the movable frame and adapted to be swung in either direction, as the case may be. To lock the lever, it is provided with a pawl or similar device for engaging teeth on the upright or frame A. The object of this construction is to admit of prompt action in raising and lowering the rollers without the necessity of stopping the machine.

The table is rotated by means of a horizontal shaft 13, revolubly supported beneath the table, and this shaft is furnished on its inner end with a bevel gear-wheel 14, the teeth of which are meshed with a similar but larger bevel gear-wheel 15 on the vertical shaft, whereby the motion of one shaft is communicated to the other. A loose and fixed pulley 16 is mounted on the outer end of the horizontal shaft, and they are driven by a suitable belt (not shown) for the purpose.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth; but, Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a butter-worker, the combination, with a suitable support, of a rotary table, the latter having a circular ridge on its upper surface and sloped or pitched toward its center and periphery, and rollers made to conform to the shape of this table and adapted to operate thereon, substantially as set forth.

2. The combination, with a support, a rotary shaft, and a table carried by said shaft,

of a roller-frame loosely mounted on the frame  
and on the upper end of the rotary shaft, rollers  
 journaled at their opposite ends in said  
frame, a hand-lever for elevating the frame,  
5 and means for locking it in any desired elevation,  
substantially as set forth.

In testimony whereof I have signed this

specification in the presence of two subscribing witnesses.

ALVIN C. KINGSBURY.

Witnesses:

GEO. Q. GARDNER,  
L. W. BEARD.