I. SATHER.

SLICING MACHINE.

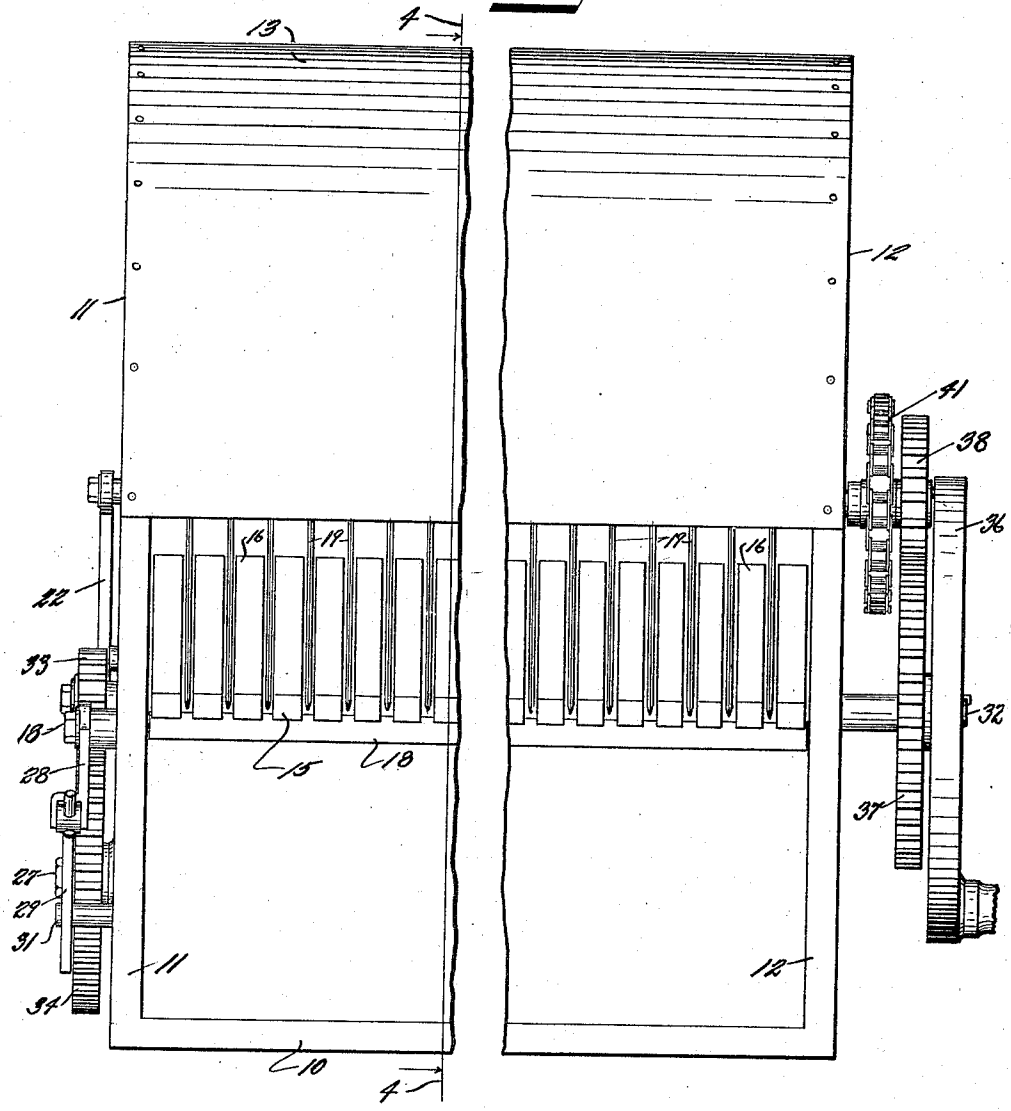
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1,192,350.

Patented July 25, 1916.

4 SHEETS—SHEET 1.

Fig. 1



WITNESSES

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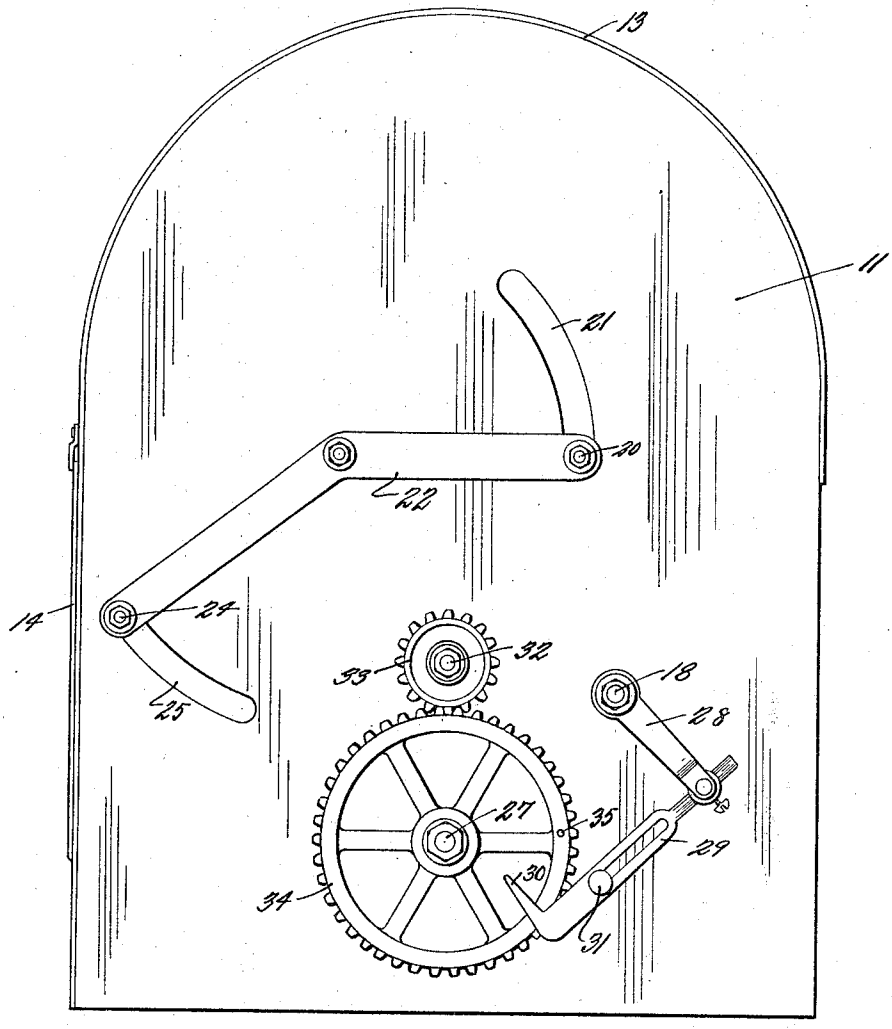
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4 SHEETS—SHEET 2.

Fig. 2



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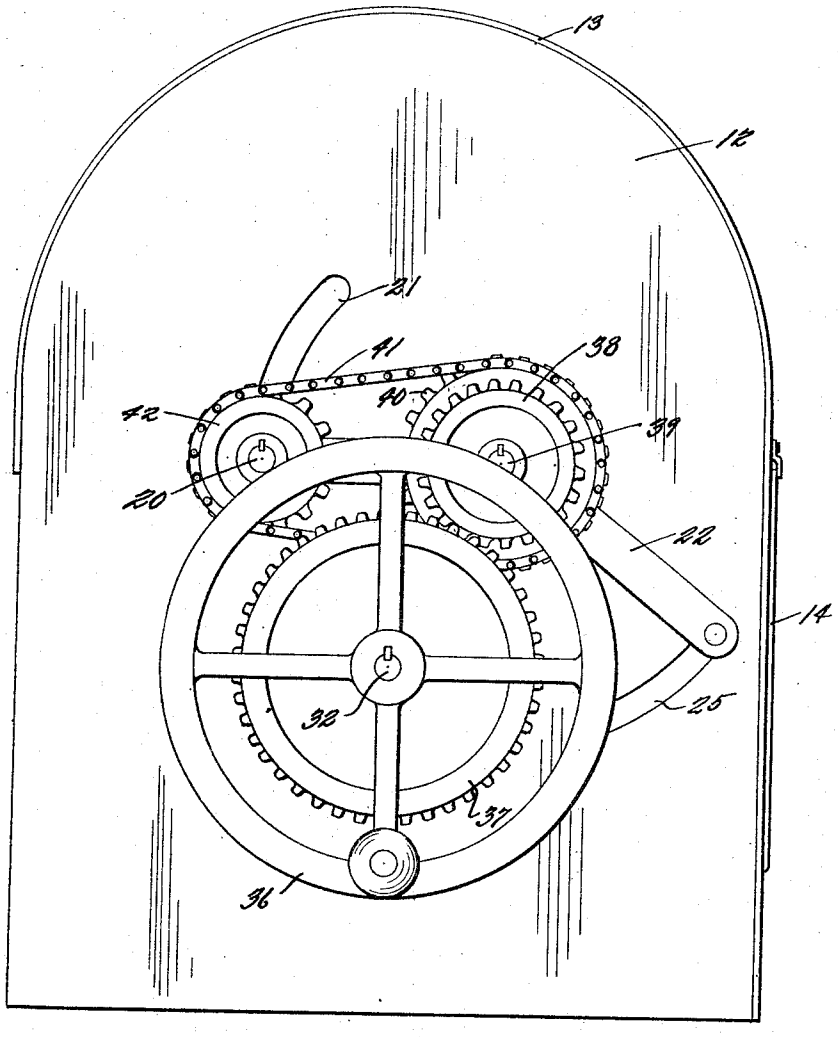
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4 SHEETS—SHEET 3.

Fig. 3



WITNESSES

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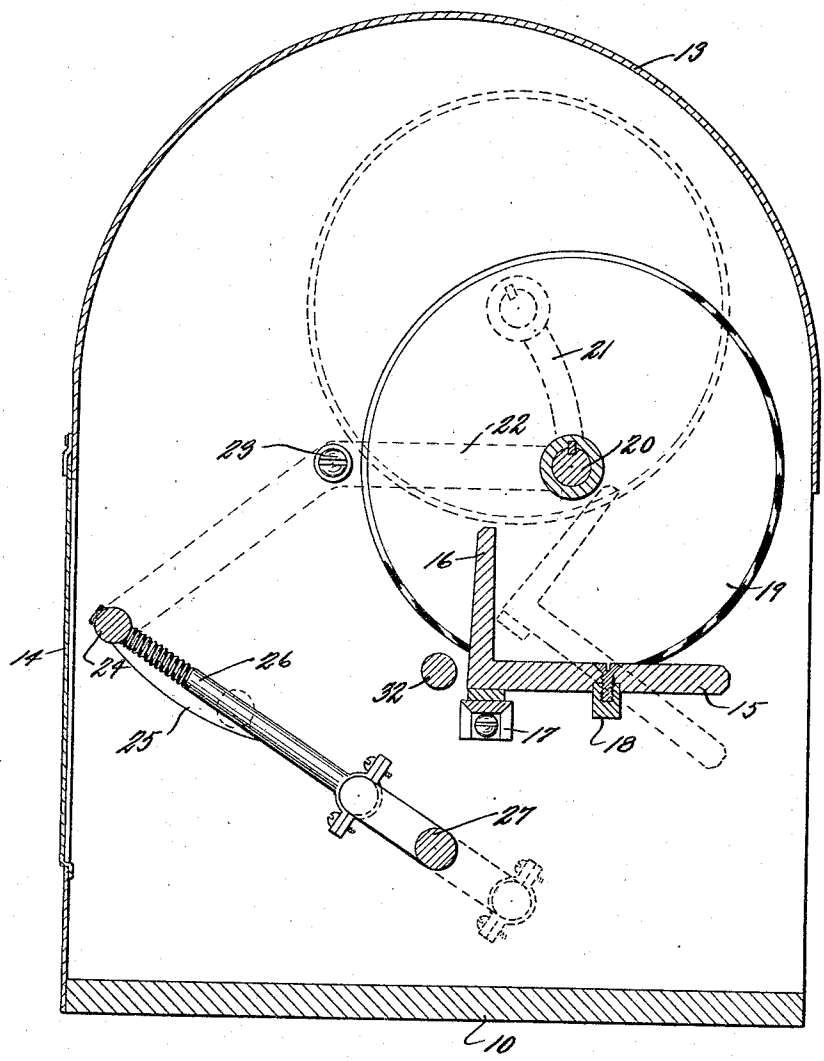
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4 SHEETS—SHEET 4.

Fig. 4



WITNESSES

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UNITED STATES PATENT OFFICE.

INGEBRIGT SATHER, OF MADISON, MINNESOTA.

SLICING-MACHINE.

1,192,350. Specification of Letters Patent. Patented July 25, 1916.

Application filed November 4, 1915. Serial No. 59,591.

To all whom it may concern:

Be it known that I, INGEBRIGT SATHER, a citizen of Norway, residing at Madison, in the county of Lac qui Parle, in the State of Minnesota, have invented certain new and useful Improvements in Slicing-Machines, of which the following is a specification.

My present invention relates to machines for slicing bread, meats, vegetables, etc., having for its object the provision of a simple and compact machine having a plurality of revolving knives designed to be simultaneously brought into engagement with the article to be sliced.

Another object of my invention is to provide a table or support for the article undergoing the slicing, which table will automatically discharge the sliced product, the same being synchronized with the movement of the knives.

Having these and other objects of general design and utility in view, I have illustrated a preferred operative embodiment of my invention with accompanying drawings, in which—

Figure 1 is a fragmental top plan of my slicing machine; Fig. 2 is a left side elevation thereof; Fig. 3 is a right side elevation thereof; and Fig. 4 is a vertical section therethrough on line 4—4 of Fig. 1.

Similar reference characters refer respectively to similar parts throughout the several views.

Referring to the drawings, the reference character 10 designates the base of the housing for my cutter, having the ends 11 and 12, and a top 13; the front being left open and the rear wall provided with a door 14.

A table 15, supporting the article that is to be sliced, extends intermediate the end walls, and has a back 16, extending upwardly at right angles thereto; its rear edge rests upon a stop 17 on the end walls. A rod 18 secured to the underside of the table mediate its ends, is journaled in the walls 11 and 12 and extends beyond its bearings therein.

A plurality of spaced circular knives 19, keyed to a shaft 20, substantially vertically and reciprocably mounted in the ends 11 and 12, in slots or guides 21 therein, are adapted to approach and pass through suitable recesses in the table. Journaled to the ends of the shaft 20 which extend beyond their bearings 21 in the walls, is one end of a bell-crank lever 22, pivoted at 23 to the wall, its other end being journaled to a bearing 24, which travels in a slot 25 in the walls, and has journaled thereto a connecting-rod 26, journaled at its opposite end to a crank-shaft 27, journaled at its ends in the walls 11 and 12, and extending beyond its bearings.

An arm 28, keyed to the outer extending end of the rod 18 beyond the walls 11, has adjustably secured thereto a slotted link 29, terminating in a catch 30. A pin 31 extends from the wall 11 and enters the slot in said link 29.

As a means for imparting movement to the foregoing, I journal a drive-shaft 32 in the walls 11 and 12, which shaft extends beyond its bearings, and has keyed to it at one end (adjacent the wall 11) a gear 33, adapted to mesh with a gear 34 keyed to the shaft 27, said last mentioned gear having a pin 35 protruding therefrom adapted to engage the hook 30 on the slotted link 29. At the opposite end of the shaft 32 (adjacent the wall 12) I key a drive wheel 36 and gear 37, adapted to mesh with a gear 38, keyed to a stud shaft 39, which is keyed to a sprocket wheel 40, over which passes a chain 41, which passes over a sprocket wheel 42, keyed to the shaft 20.

From the above it will be apparent that as the wheel 36 is rotated, thus rotating the shaft 32, the knives 19 are revolved on their shaft 20, by means of the chain of gears 37—42. As the shaft 32 still rotates, the gear 32, driving the gear 34, will not only rotate the crank-shaft 27, thus pivoting the bell-crank and causing the knives to approach the table, but also will cause the pin 35 to engage the hook 30, pulling down the link 29, thus rocking the rod 18 and tilting the table (dotted lines Fig. 4) and thus ejecting the sliced article. The respective movements are so synchronized as to impart the highest degree of efficiency and accuracy to my machine.

What I claim is:—

1. A slicing machine comprising in combination with a plurality of rotatable knives, a tiltable table, means for rotating said knives, said means comprising a bell-crank lever, to one end of which the shaft carrying said knives is journaled, a sprocket wheel keyed to said shaft, a chain passing over said sprocket wheel to a second wheel, a gear integral therewith, a gear meshing with said last mentioned gear, and a drive

wheel integral with said gear, means for causing said knives to approach said table and means for tilting said table.

2. A slicing machine comprising in combination with a plurality of rotatable knives, a tiltable table, means for rotating said knives, means for causing said knives to approach said table, said last mentioned means comprising a bell-crank lever to one end of which the shaft carrying said knives is journaled, a connecting rod journaled thereto at its opposite end, a crank-shaft to which said connecting-rod is journaled, means for rotating said shaft, and means for tilting said table.

3. A slicing machine comprising in combination with a plurality of rotatable knives, a tiltable table, means for rotating said knives, means for causing said knives to aproach said table, and means for tilting said table, said last mentioned means comprising a rock-shaft to which said table is secured, a slotted link adjustably secured to said shaft having a hook at the end thereof, a gear carrying a pin adapted to engage said hook, and means for rotating said gear.

4. A slicing machine comprising in combination with a plurality of rotatable knives, a tiltable table, means for rotating said knives, said means comprising a bell-crank lever, to one end of which the shaft carrying said knives is journaled, a sprocket wheel keyed to said shaft, a chain passing over said sprocket wheel to a second wheel, a gear integral therewith, a gear meshing with said last mentioned gear, and a drive wheel integral with said gear, means for causing said knives to approach said table, said last mentioned means comprising a connecting rod journaled at its opposite end to said bell-crank, a crank-shaft to which said connecting-rod is journaled, means for rotating said shaft, and means for tilting said table.

5. A slicing machine comprising in combination with a plurality of rotatable knives, a tiltable table, means for rotating said knives, said means comprising a bell-crank lever, to one end of which the shaft carrying said knives is journaled, a sprocket wheel keyed to said shaft, a chain passing over said sprocket wheel to a second wheel, a gear integral therewith, a gear meshing with said last mentioned gear, and a drive wheel integral with said gear, means for causing said knives to approach said table, and means for tilting said table, said last mentioned means comprising a rock-shaft to which said table is secured, a slotted link adjustably secured to said shaft, having a hook at the end thereof, a gear carrying a pin adapted to engage said hook, and means for rotating said gear.

6. A slicing machine comprising in combination with a plurality of rotatable knives, a tiltable table, means for rotating said knives, said means comprising a bell-crank lever, to one end of which the shaft carrying said knives is journaled, a sprocket wheel keyed to said shaft, a chain passing over said sprocket wheel to a second wheel, a gear integral therewith, a gear meshing with said last mentioned gear, and a drive wheel integral with said gear, means for causing said knives to approach said table, said last mentioned means comprising a connecting rod journaled at its end to said bell-crank, a crank-shaft to which said connecting-rod is journaled, and means for rotating said shaft, and means for tilting said table, said last mentioned means comprising a rock-shaft to which said table is secured, a slotted link adjustably secured to said shaft, having a hook at the end thereof, a gear carrying a pin adapted to engage said hook, and means for rotating said gear.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two subscribing witnesses.

INGEBRIGT SATHER.

Witnesses:
ANDREW J. SOLEM,
TOM. GROVE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."