

(No Model.)

2 Sheets—Sheet 1.

J. L. KOLBE.
DEVICE FOR CUTTING BREAD.

No. 579,486.

Patented Mar. 23, 1897.

Fig. 1.

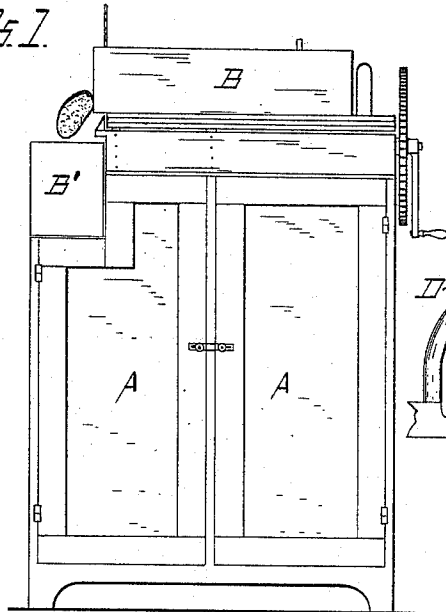


Fig. 2.

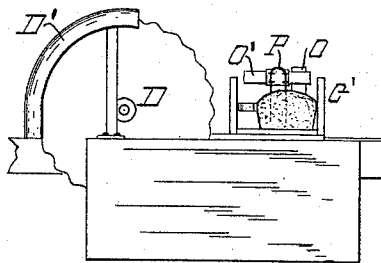
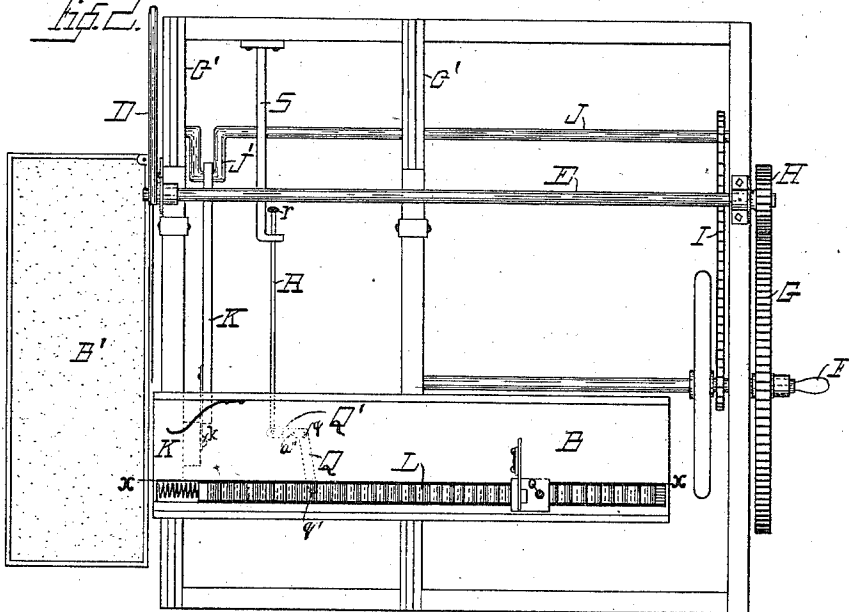


Fig. 3.



Witnesses:

Fred. A. Otto

E. J. Patterson

Inventor

John L. Kolbe

By Erwin Wheeler & Wheeler
Attorneys.

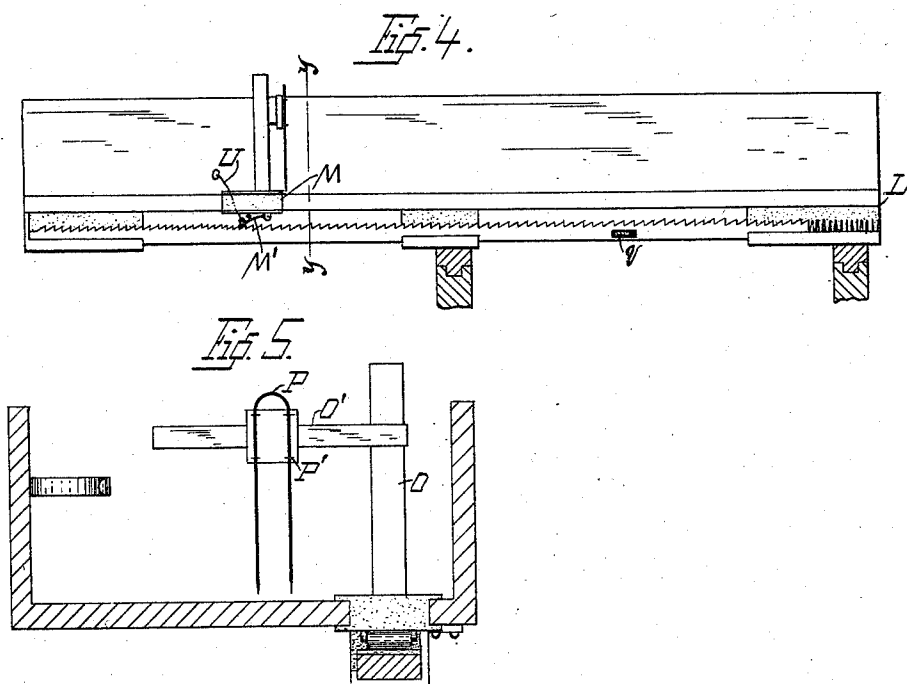
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UNITED STATES PATENT OFFICE.

JOHN L. KOLBE, OF CHILTON, WISCONSIN.

DEVICE FOR CUTTING BREAD.

SPECIFICATION forming part of Letters Patent No. 579,486, dated March 23, 1897.

Application filed February 10, 1896. Serial No. 578,690. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. KOLBE, a citizen of the United States, residing at Chilton, in the county of Calumet and State of Wisconsin, have invented new and useful Improvements in Devices for Cutting Bread, of which the following is a specification.

My invention relates to improvements in devices for cutting bread, and is designed for use principally in restaurants, hotels, and other places where large quantities of bread are used.

The object of my invention is to provide means for automatically feeding the loaf and for cutting the same in slices of the desired thickness without mutilating the slice or crushing the uncut portion of the loaf.

In the following description reference is had to the accompanying drawings, in which—

Figure I is a front elevation of my invention. Fig. II is a top view of the same. Fig. III is a partial end view. Fig. IV is a view of the sliding loaf-supporting box, drawn on the section-line X X of Fig. II. Fig. V is a cross-section view of the loaf-supporting box, drawn on the line Y Y of Fig. IV.

Like parts are identified by the same reference-letters throughout the several views.

A is a cabinet upon which the machinery is located, the interior of which may be provided with flour-chambers, bread-chambers, and the like.

B is a sliding loaf-supporting box located upon guide-blocks C C, which are adapted to slide reciprocally upon the tracks C' C'.

D is a revolving disk-shaped cutter provided with an irregular periphery or cutting edge and partially covered by a guard D', as shown in Fig. III.

The cutter is located upon a shaft E and is adapted to cut off the projecting portion of the loaf as the box B is moved toward it, the cut slices dropping into the stationary box B'.

b is an S-shaped spring attached to one side of the box B and adapted to hold the loaf against the opposite side of the box to steady it laterally.

Motion is communicated to the cutter D from the crank F, gear-wheels G and H, and shaft E, and the motion of the box B upon the tracks C' and C' is communicated to it from the crank F through the gear-wheel G, sprocket-

gearing I, shaft J, crank J', and connecting-rod K, pivoted to the block K' at k.

G' is a fly-wheel adapted to assist in maintaining a uniform rate of speed.

For feeding the loaf intermittently forward in the box B, I have provided the feed-rack L, located in a channel L' in the bottom of the box, and a block M, adapted to slide in the channel L' above the rack, is provided with a spring-actuated downward-projecting catch M', adapted to engage in the upward-projecting teeth of the rack. This block M is provided with an upward-projecting standard O, having a cross-bar O', which supports a fork P in the staples P'. The fork P being inserted in the rear end of the loaf and the block M intermittently moved to the left, as hereinafter described, the loaf is pushed forward by the fork and projects beyond the end of the box in the plane of the cutter D, so that the projecting portion will be sliced by the latter during the rearward movement of the box upon the track.

Q is an elbow-crank pivotally supported at q and with one arm loosely connected with the feed-rack at q'. The other arm Q' of the elbow-crank is connected with the sliding stay-rod R, and the opposite end of the rod R is slidably supported by the bracket S and provided with the head r, adapted to engage with the bracket S to limit the forward movement of the rod. It will be observed that the head r will engage with the bracket S before the forward movement of the box B is completed, and the rod R will therefore hold the outer end of the arm O', and the box in completing its forward movement will actuate the elbow-crank Q to force the feed-rack L to the left in the channel L', drawing with it the block M and its connections. The loaf is thus automatically fed into the path of the cutter D. As soon as the strain upon the rod R is released by the return movement of the box B the feed-rack L will be pushed back to its normal position by the resiliency of the spring T, the cogs sliding freely underneath the one-way catch M' and permitting the block M to remain in the position to which it has been moved. By providing the arm Q' of the elbow-crank Q with several pivot-holes q'', in which the rod R may be connected, I am able to regulate the

feed movement of the loaf by the length of stroke of the elbow and consequent movement of the feed-rack.

When the block M has been moved to the
5 extreme left end of the feed-rack and the loaf completely sliced, I release the catch M' from the feed-rack by means of the wire U and draw the block back to its original position, thus making the device ready for the
10 insertion of another loaf.

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

15 A bread-cutting device, consisting in the combination of the cabinet provided with a rotary cutter, a sliding loaf-supporting box arranged to carry the loaf into the path of said cutter, a longitudinally-movable feed-rack L located in the bottom of said box, an

elbow-crank supported by said box and having one arm connected with the feed-rack, a sliding stay-rod R connected with the other arm of said elbow-crank and adapted to actuate the latter with the movement of the box, a spring for retracting said feed-rack after
25 the same has been moved by said elbow-crank, a sliding block connected by a one-way catch with the feed-rack, and provided with a fork for engaging the loaf whereby the latter is automatically fed into the path
30 of the cutter, substantially as described.

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

JOHN L. KOLBE.

Witnesses:

LEVERETT H. C. WHEELER,
JAS. B. ERWIN,
SAM R. LEE.