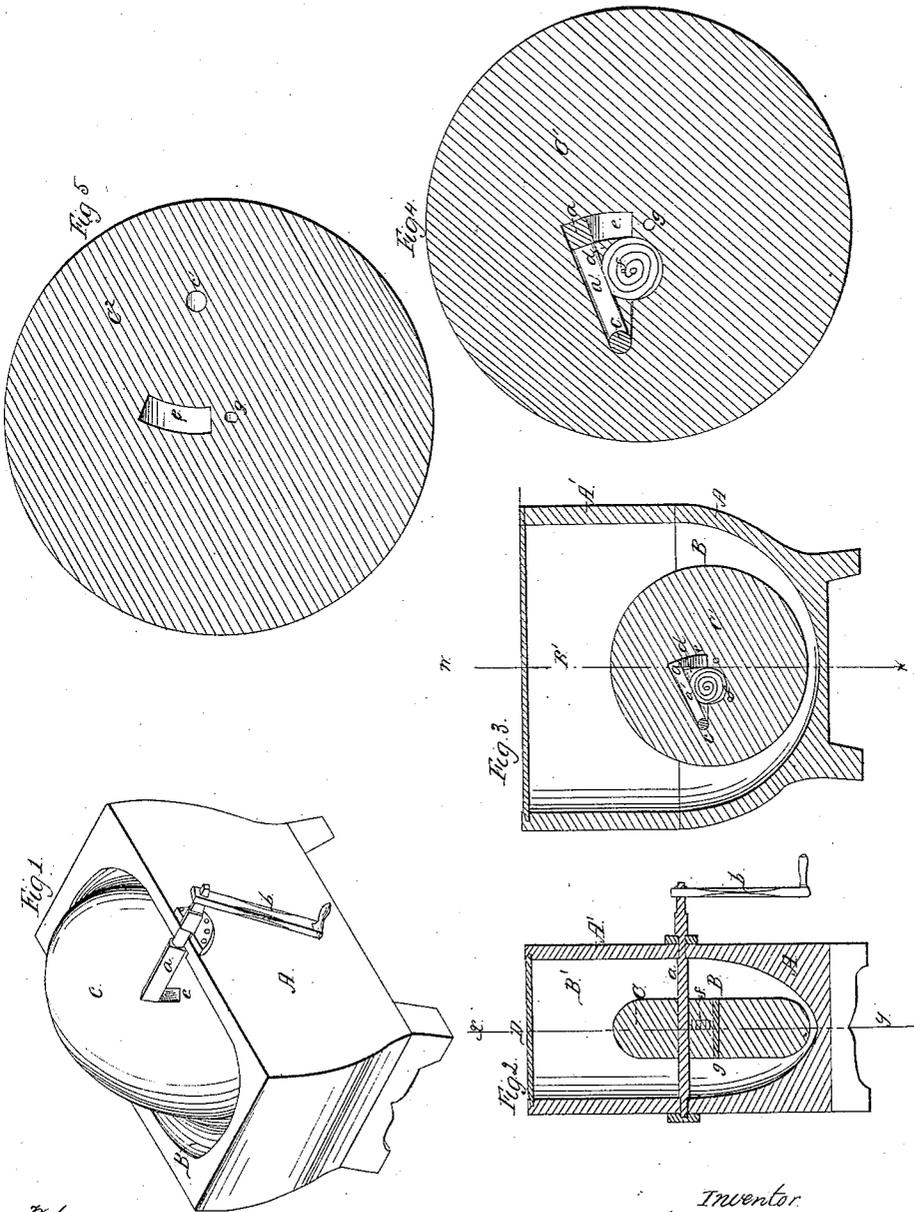


G. R. Baker,

Bread Machine,

N<sup>o</sup>. 50,322.

Patented Oct. 10, 1865.



Witnesses:  
John Coomb  
H. M. Stude

Inventor:  
George R. Baker  
By J. S. Coomb  
his atty

# UNITED STATES PATENT OFFICE.

GEORGE R. BAKER, OF BROOKLYN, NEW YORK.

## MACHINE FOR KNEADING DOUGH.

Specification forming part of Letters Patent No. 50,322, dated October 10, 1865.

*To all whom it may concern:*

Be it known that I, GEORGE R. BAKER, of Brooklyn, in the county of Kings, in the State of New York, have invented a new and useful machine for kneading dough; 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 annexed drawings, making a part of this specification.

The essential features of my invention consist in an inclosed chamber to contain the dough, in which a wheel is rotated upon an eccentric but yielding and variable axis of rotation, by the action of which wheel upon the dough the latter is subjected to a rolling pressure, rapidly repeated, producing an effect upon it similar to that produced by ordinary hand-kneading, but in much less time and with much less labor.

To enable others to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, Figure 1 is an elevation of my machine in perspective, with the upper section of the box or chamber removed. Fig. 2 is a cross-section drawn through the line *w x* of Fig. 3. Fig. 3 is a longitudinal vertical section through line *x y*, Fig. 2. Figs. 4 and 5 are the two parts or sections of the wheel, detached from each other, drawn on an enlarged scale.

Each part of the machine is indicated by the same letter in all the figures.

A is the lower section of the box or vessel containing the chamber for the dough, and A' is the upper section of the same.

B is the lower portion of the chamber or cavity for the dough, and B' is the upper portion of the same.

C is the eccentrically-revolving wheel. C' is the inner face of one section of said wheel, and C<sup>2</sup> the inner face of the other section.

The two sections of the box A and A' are detachable from each other, and may be secured together by dowel-pins and hasps, or any other suitable means. The interior of the lower part of the box or vessel is a concavity, B, semi-circular in the plane of its greatest diameter, and semi-elliptical, or nearly so, in the plane of its greatest transverse diameter. The interior of the upper part, B', is formed by merely extending the section shown of the lower by a vertical wall to the top of the box, where it is closed by a sliding cover, D. Within the

concavity or chamber so formed a wheel, C, of less diameter and thickness than the chamber, revolves upon an eccentric axis produced by passing through it, outside of its center, a compound shaft, *a*, to which motion is given by a crank, *b*, outside of the box. The shaft *a* has an arm, *a'*, projecting from it at right angles in the interior of the wheel C, which at its outer end terminates in a cross-pivot, *c*, fitting into suitable holes in the two sections of the wheel, (one of which is shown at *c'* in Fig. 5.) Said arm *a'* has room to play back and forth in a V-shaped recess, *d*, cut in the inner face of the section C' of the wheel, and the main shaft *a* has a corresponding play in the slot *e*, passing clear through both sections of the wheel.

A rubber spring, *f*, (but which may be of metal,) is fitted into a suitable recess in the inner face of the section C' of the wheel, which will keep the shaft *a* and its projecting arm *a'* in the position shown in the drawings, except when the dough, from its stiffness, offers considerable resistance to the rotation of the wheel; but when such resistance occurs the spring will yield, allowing the shaft to change its position in the slot *e*, varying the eccentricity of the axis of rotation and shortening the radius of motion of the wheel, and thus permitting the dough to pass under.

The two sections of the wheel are fastened together by one or more rivets or bolts, as shown at *g*.

A suitable quantity of dough is put into the kneading-chamber B B', the two sections of the box firmly fastened together, and the chamber closed by the lid D. The operation of kneading is then performed by simply turning the crank.

The box may be provided with suitable means for attaching it to a table, if desired.

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

1. The machine for kneading dough, constructed and operating substantially as herein described.

2. The combination of the shaft *a*, with its pivoted arm *a'*, the slot *e*, and spring *f*, arranged and operating substantially as and for the purpose herein described.

GEO. R. BAKER.

Witnesses:

JACOB WILLCOX,  
JAS. W. HALE.