(No Model.)

L. ROSENKRANZ.

EGG BEATER AND MIXER COMBINED.

No. 374,706. Patented Dec. 13, 1887.

Fig. 2.

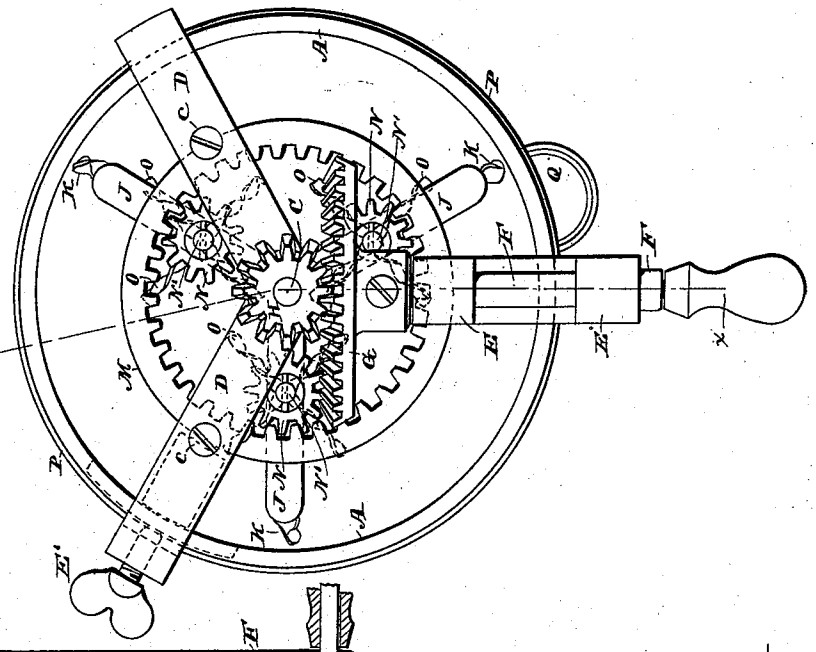
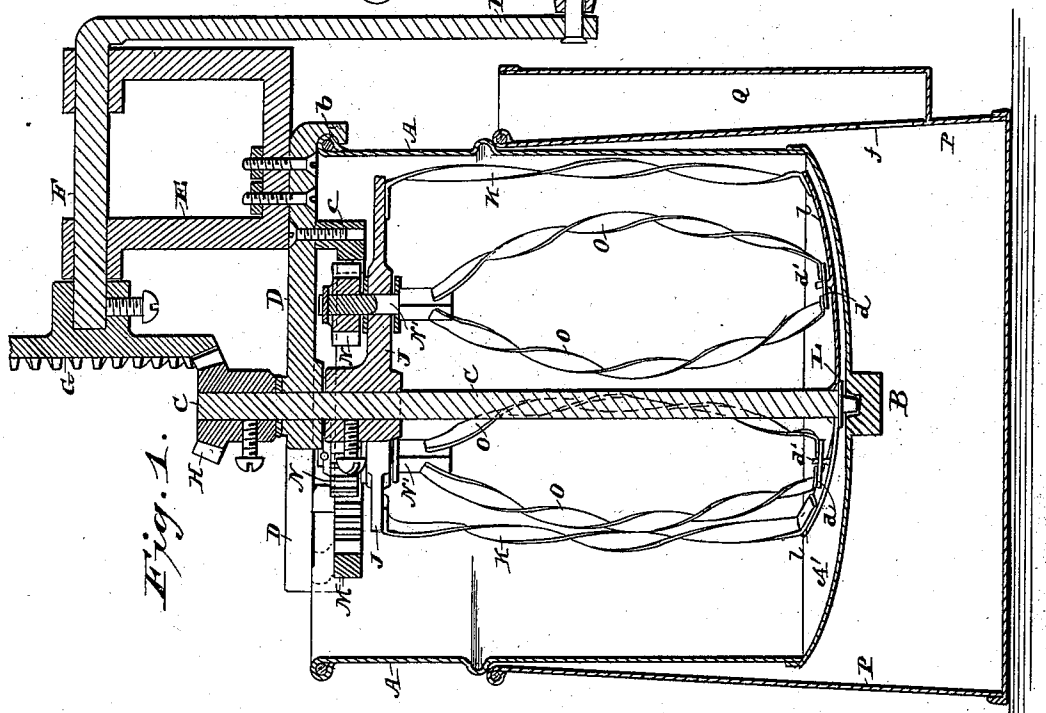


Fig. 1.



WITNESSES:

George Binkenburg

C. Sedgwick

INVENTOR:

L. Rosenkranz

BY Munn & Co.

ATTORNEYS.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

LOUIS ROSENKRANZ, OF RHINEBECK, NEW YORK.

EGG BEATER AND MIXER COMBINED.

SPECIFICATION forming part of Letters Patent No. 374,706, dated December 13, 1887.

Application filed March 9, 1887. Serial No. 230,235. (No model.)

To all whom it may concern:

Be it known that I, LOUIS ROSENKRANZ, of Rhinebeck, in the county of Dutchess and State of New York, have invented a new and Improved Egg Beater and Mixer Combined, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional elevation of my new and improved egg-beater and sponge-mixer, taken on the line *x x* of Fig. 2; and Fig. 2 is a plan view of the same.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

A represents the body of the beater and mixer, made, preferably, of heavy tin and of any suitable size. The bottom A′ of the body A is made concaved, and in its center is formed the step B for the lower end of the vertical shaft C, the upper end of which is journaled in the center of a spider-casting, D, placed upon the body A and held by the set-screw E′, fitted in one of the arms of the spider-casting, the other two arms of the spider-casting being formed each with a claw, *b*, to engage with the edge of the body A, as shown clearly in Fig. 1.

Upon one of the arms of the spider-casting D is bolted the frame E, in which is journaled the horizontal crank-shaft F, which is connected to the vertical shaft C by the two beveled gear-wheels G H, secured, respectively, upon the shafts F C, so that by turning the crank-shaft F by hand or otherwise the shaft C will be rapidly revolved in the body A.

To the vertical shaft C, just below the permanent spider-casting D, is secured the spider-casting J, which revolves with the shaft C and carries with it at the outer ends of its arms the spiral beaters K, secured at their upper ends to the arms of the spider J, and at their lower ends to the curved arms *l* of a frame, L, secured to the lower end of the vertical shaft C, to run in close proximity to the concaved bottom of the body A.

To the under surface of the spider-casting D is secured, by the bolts *c*, the circular rack or internally-toothed gear-wheel M, in contact with which the small pinions N N run as the spider J is revolved. These pinions N are secured to the short beater-shafts N′, journaled in the arms of the spider-casting J, so that these shafts are turned rapidly upon their own axis, while being at the same time carried around the shaft C. To the lower ends of the shafts N′ are secured the curved and twisted beaters O O. These are connected together at their lower ends by the short plates *d*, each of which has a central orifice to receive a stud or peg, *d′*, rising from each of the arms *l* of the frame L, so that these pegs serve as journal-points for the beaters O.

The body A is by preference placed in the outside receptacle, P, which is to receive hot water for warming the contents of the body A, and for convenience in introducing the water I form the receptacle with the opening *f* and provide the receptacle upon the outside with the spout Q, covering the opening *f*, and open at the top and closed just below the opening *f*, so that water introduced at the upper end of the spout Q will flow into the receptacle through the opening *f*, as will be clearly understood from Fig. 1.

In operation, the crank-shaft F being revolved, the beaters K will be carried rapidly around the shaft C, cutting and agitating the material in the body A. The beaters O will also be rapidly carried around the shaft C and around with the shafts N′, and the beaters K and O, being spiral in form, tend to elevate the material from the bottom of the body A toward the top, and the bottom A′, being concaved, tends to flow the material to the center of the body A, from which it is again deflected by the frame L, so that altogether the action of the apparatus is such that it not only beats the material, but thoroughly mixes it at the same time.

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

1. The spider J on the central shaft, C, carrying the outer beaters, K, and also the inner beaters, O, pivoted in the arms of the said spider, in combination with the circular

rack M, revolving the shaft C and spider J, substantially as described.

2. The body A and spider-casting D, placed thereon and provided with the circular rack M, frame E, and crank-shaft F, in combination with the cog-wheels G H, central shaft, C, spider J, pinions N, shafts N′, rotary beaters O, and outer beaters, K, all arranged to operate substantially as described.

LOUIS ROSENKRANZ.

Witnesses:
THEODORE S. BARNES,
JAS. H. THORN.