J. F. MONROE.

EGG-BEATERS.

No. 190,238. Patented May 1, 1877.

Fig. 1.

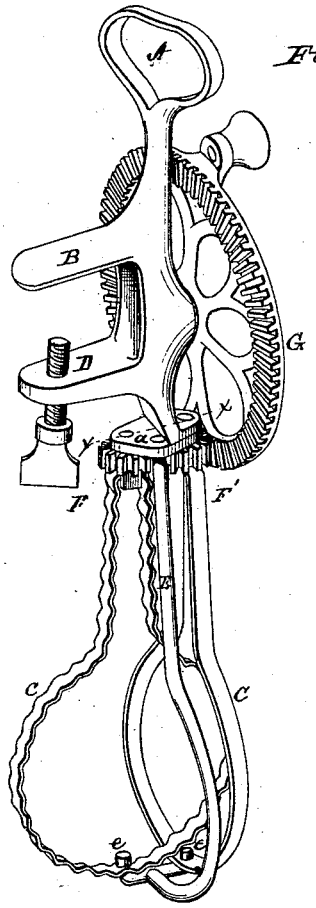
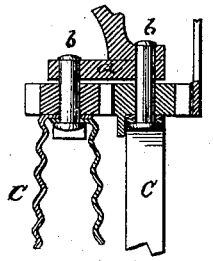


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES F. MONROE, OF FITCHBURG, MASSACHUSETTS.

IMPROVEMENT IN EGG-BEATERS.

Specification forming part of Letters Patent No. **190,238**, dated May 1, 1877; application filed November 13, 1876.

To all whom it may concern:

Be it known that I, JAMES F. MONROE, of Fitchburg, Massachusetts, have invented certain new and useful Improvements in Egg-Beaters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of an egg-beater with my improvements attached. Fig. 2 is a vertical section through the pinions at *x x*.

My invention relates to a machine for beating eggs; and it consists in the combination of devices hereinafter described and claimed.

To enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the drawings, A is the handle of the machine, B the frame, and C C the beaters. The clamp D is for securing the machine to a table or other convenint place while being used in the operation of beating eggs. On the lower part of the frame is cast or secured the horizontal plate *a*, to which is riveted the wire E, which forms the lower supports *e e* for the beaters, as shown in Fig. 1. The pinions F F′ and the beaters C C are held in place by the headed rivets or bolts *b b*, passing through the plate *a*, as shown in Fig. 2.

By thus suspending the pinions and beaters by means of the heads of the bolts *b b*, and not allowing them to bear upon the lower supports *e e*, the danger of the pinions sinking and becoming ungeared is entirely avoided. The pinions gear or mesh together, as shown in Fig. 1, and pinion F′ gears with the cog-wheel G, by which the beaters are operated.

The beaters are made, one longitudinally concavo-convex and one crimped, in order to increase the beating-surface, and secure a wavy or undulating current, conducive to a rapid operation.

Both of the beaters may be crimped without departing from the spirit of my invention; but I have ascertained from actual experiments that good results are secured by having one beater crimped and the other concavo-convex, as shown in Fig. 1.

It is evident that one beater only may be used, either crimped or concavo-convex.

Egg-beaters have had two wire supports placed within the circle traveled by the beaters, and besides being inconvenient to clean, their tendency has been to delay the operation of the beaters by preventing a proper agitation of the eggs. To overcome this objection I place my one support for both beaters outside of the circle traveled by the beaters, where it is more easily cleaned, and where it facilitates the operation of beating by meeting the eggs as they are thrown from the center outward against the wire. The wire support is turned up at *e e*, to form a foot or rest for the beater or beaters when held in the hand, and being on the outside of the beaters, the machine can be used in any position from a vertical to a horizontal one.

I am aware that thin plain beaters with sharp cutting-edges are not new, and I do not claim such to be my invention.

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

In an egg-beater, the frame B, provided with the clamp D, cog-wheel G, pinions F F′, bolts *b b*, beaters C C, and support E, the several parts constructed and arranged to operate substantially as described.

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Witnesses:

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