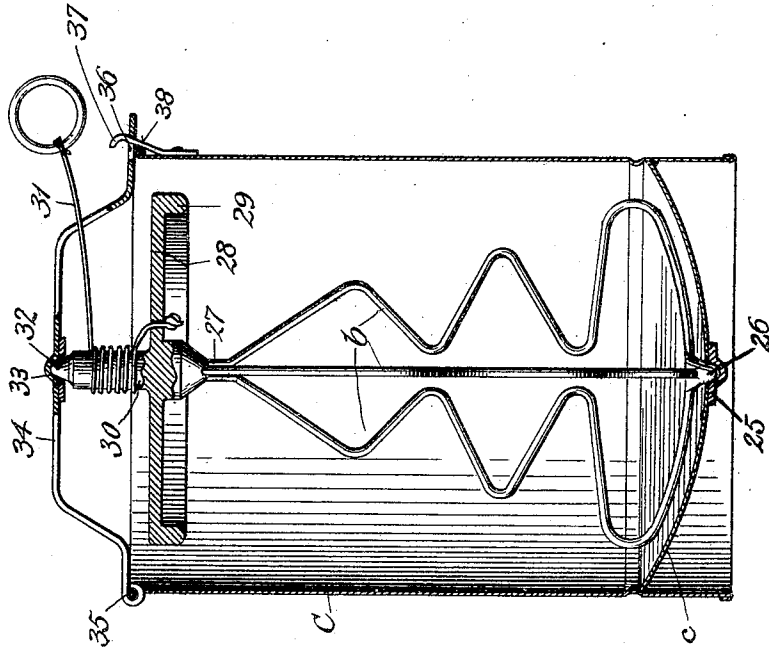


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EGG BEATER.

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935,088.

Patented Sept. 28, 1909.



WITNESSES:

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EGG-BEATER.

935,088.

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To all whom it may concern:

Be it known that I, FREDERICK P. BURR, a citizen of the United States, and resident of Middletown, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Egg-Beaters, of which the following is a full, clear, and exact specification.

This invention relates to egg-beaters and has for one of its objects the provision of a device of this character in which the beater-blades are rotated a number of times in one direction, and in which this motion is then reversed so that the beater-blades will be operated to oscillate, it being understood, however, that a number of revolutions will take place in each direction before the reversal thereof.

My invention has, furthermore, for its object the combination with the beater-blades of a balance, or as it may be termed "fly-wheel" to impart to the beater-blades the momentum which is necessary to revolve the same a sufficient number of times and also to impart thereto the desired steadiness of motion.

Briefly stated, my improved egg-beater comprises a plurality of blades mounted for revolution around a common axis and carrying a fly-wheel provided with a quill around which the actuating medium is wound, this actuating medium consisting of a cord, or string, which, when pulled, will rotate the fly-wheel and with it the beater-blades at a speed sufficiently high as to have the momentum of the fly-wheel cause a number of revolutions which is sufficient to rewind the cord in a reverse direction on the quill. In other words, the first outward pull of the cord will result in revolving the blades and the fly-wheel rapidly in one direction until the cord has been pulled to its limit, whereupon the momentum acquired by the fly-wheel will revolve the beater-blades farther in the same direction and thus rewind the cord on the quill in a direction different from that before.

The invention has been clearly illustrated in the accompanying drawing in which similar characters denote similar parts, and which illustrates my improved egg-beater applied to a can adapted to hold the material to be beaten.

In the drawing I have illustrated the supporting means for the beater-blades and

the fly-wheel carried thereby, the supporting means being in this instance incorporated in a can or similar vessel C, the bottom *c* of which has a step-bearing 25 adapted to receive a trunnion 26 carried at the lower end of the beaters *b* which in the present instance are formed of wires united at their lower ends at that point. The upper ends of the wires *b* are brought together at 27 and secured to the web 28 of a fly-wheel 29 which is provided with a hub 30 constituting the medium upon which the cord 31 is wound in a manner similar to that before described. The upper end 32 of the hub 30 serves as a journal member for the beater device as a whole, and is adapted to enter a suitably shaped recess 33 provided in a bridge-plate 34, one of which is jointed, or pivoted as at 35 to the top of the can C while its opposite end is provided with a slot 36 adapted to pass over a clip 37 attached to the can C. The clip 37 has in the present instance an inclined face 38 which is adapted to hold the strap 34 in its closed position as shown in Fig. 2, the resiliency of the upper and open top of the can being taken advantage of for this purpose.

From the foregoing, it will be seen that as soon as the strap 34 has been thrown back, the egg-beater can be readily removed from the can.

In regard to the efficiency of the egg-beater attention is called to the following: From the above description, it will be understood that the beater-blades are to be revolved at a comparatively high speed, this speed, however, diminishing as the cord is wound on the drum, or quill, until the device comes to a full stop preparatory to the reversal of the movement. Hence it will be seen, that the material to be beaten will have an opportunity of flowing toward the center at each stopping period, so that the present egg-beater differs in that respect very materially from those in use at the present time in which the revolution of the beater-blades is really continuously in one direction so that the best results as to churning the material have thus far not been accomplished unless the movement of the egg-beaters in use at the present time is periodically interrupted by hand to permit the material to find its level and what may be termed come together in the center during such interruption. In connection with this feature, it will

be understood that in my improved device the in and out movement of the ring is constantly reciprocatory, and that, furthermore, the speed which is required to impart with
5 the fly-wheel the necessary momentum can very readily be regulated and controlled by the operator.

Many changes may be made in the construction and general organization of my
10 improved device, as well as in the particular form or shape of the beater-blades, without in any way departing from the spirit of the invention.

I claim:

15 The combination with an egg-beater com-

prising a plurality of beater-blades, a winding-drum, a fly-wheel, and a flexible cord co-operative with said drum and for imparting to said egg-beater a series of rotations in opposite directions successively, of a recep- 20
tacle having a step-bearing for supporting the lower end of said egg-beater, and a bridge-member movably secured to the upper portion of said receptacle, and having a step-
bearing for supporting the upper end of said 25
egg-beater.

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Witnesses:

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