

Marsh & Berney,

Egg Beater.

No. 106,182.

Patented Aug. 9, 1870.

Fig. 1.

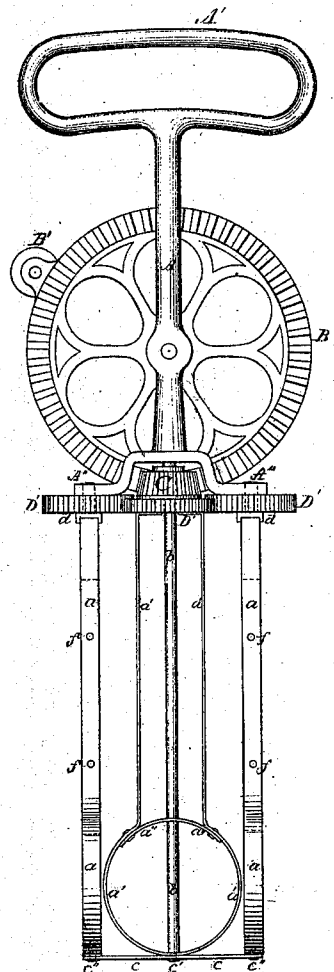
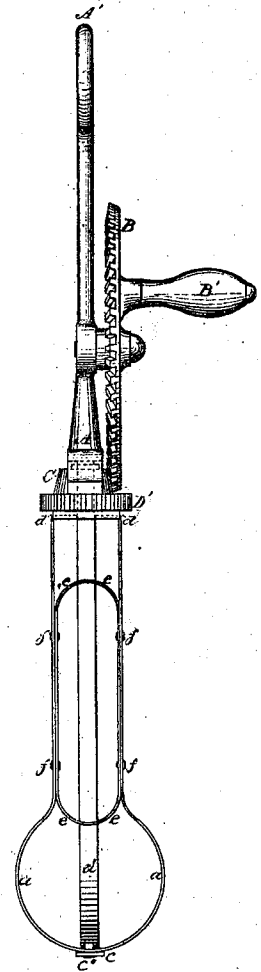


Fig. 2.



Witnesses:
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THOMAS MARSH AND JAMES BERNEY, OF PAWTUCKET, RHODE ISLAND.

Letters Patent No. 106,182, dated August 9, 1870.

IMPROVED EGG-BEATER.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that we, THOMAS MARSH and JAMES BERNEY, of Pawtucket, in the county of Providence, in the State of Rhode Island, have invented certain Improvements in Egg-Beaters, of which the following is a specification.

The object of this invention is to construct an egg-beater with three revolving beaters, and in such manner that the substance of the egg subject to their action can be completely broken and beat up in a shorter time and in a more complete manner than has heretofore been done; and

It consists in the employment of three revolving beaters, two of which are removable, and the arrangement of the gear-wheels that operate them.

In the drawings—

Figure 1 is a side elevation of the beater, and Figure 2 is a transverse elevation of the same.

Egg-beaters as generally constructed have their revolving beaters or cutters made fast in the machine, which, when there are more than one, makes it difficult to clean them thoroughly, as all the parts cannot be accessible for such operation, but by having the two outside revolving beaters removable, makes the operation of cleaning them easier, and can be better performed on all the beaters.

The removing the beaters is accomplished by having the foot-rest a spring, with the pivot-pins that the feet of the two outside beaters revolve around fast therein, and extending but a short distance above the upper side of the bottom of said side beaters.

A is the principal metal supporting frame, and having the loop-handle top A', by which the beater is held in position while in use, and terminates in two feet, A", at the bottom, which receive and support the axis of the upper ends of the two outside removable beaters, as seen in fig. 1.

B is the main driving gear-wheel, and has the crank-handle B' on its side and near its periphery, by which wheel B is revolved.

There is centrally inserted in the bottom of frame A, and made fast therein, and between feet A", a guide-shaft, b, which is made the axis of small center-gear wheel C and spur-gear wheel D, which is cast with or firmly attached to wheel C and revolves therewith.

This shaft extends down in the center of the middle beater to and through the spring foot-rest c, where it is made fast at c', and passes through the brace a' that supports middle beater a'.

Center spur-gear wheel D gears on opposite sides into and turns wheels D' D'.

To the under side of gear-wheels D' D' D' is a yoke or plate, d, to which the upper ends of each beater is firmly attached, so that the beaters will revolve with the wheels to which they are attached.

a a are the two outside removable beaters, constructed from thin, strong sheet-metal strips, and made fast to the under sides of wheels D' D', and re-

volve upon a pivot-pin at their bottom ends, which is firmly secured in spring foot-rest c at c'.

To remove either of these beaters a, only requires the springing down of the foot-rest c, so that the pivot-pin will be drawn out of the hole in the bottom of beaters a a, when they, with the wheels D' D', are removed from the upper pivot in feet A", by simply slipping them downward, when they are free from the machine.

Beaters a are strengthened by inserting, about midway of their length, the bent brace e, which is riveted fast to their sides at f f.

The middle beater a' is also strengthened by the brace a", and riveted to the sides of the beater, as seen in fig. 1, and the guide-shaft b passes through said brace e, which tends to hold the middle beater firmly in its place.

The spring foot-rest c is made fast to the bottom of shaft b at its center c', and is of such metal as will be elastic and spring, and yet be firm enough when in its position to resist any strain brought upon it while the beater is in operation, and has the pivot-pins at c" made fast to itself, so that, as the foot is sprung downward at either end, the outside beaters can be removed.

The operation is easily understood, and is as follows:

Turn gear-wheel B by crank-handle B', which gives motion to wheels C and D, and, by gearing wheel D into wheels D' D', they are revolved, and the beaters, being attached to the under sides of the gear-wheels D' D' D', revolve with them, and in the same direction; that is, the beaters a a revolve in the same direction, while middle beater a' revolves in the opposite direction, which causes the sides of the removable beaters a a, as they approach each other in their revolutions to be traveling in contrary directions, and the middle beater is revolved in such direction intermediate, that its sides go in the opposite direction from the sides of beaters a a as they approach each other in their revolutions, and by which motion of the three beaters the substance of the egg is brought in contact with the acting parts of the beaters to be thoroughly broken and beaten to the desired consistency in the shortest possible space of time.

Having thus described our invention,

What we claim, and desire to secure by Letters Patent, is—

1. The combination of wheels B, C, D, D', and D', with the beaters a a and a', when constructed and arranged to operate in the manner and for the purpose herein described.

2. The spring foot c, attached to center guide-shaft b, and having pivot-pins at c', in combination with the removable beaters a a, in the manner described.

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Witnesses:

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