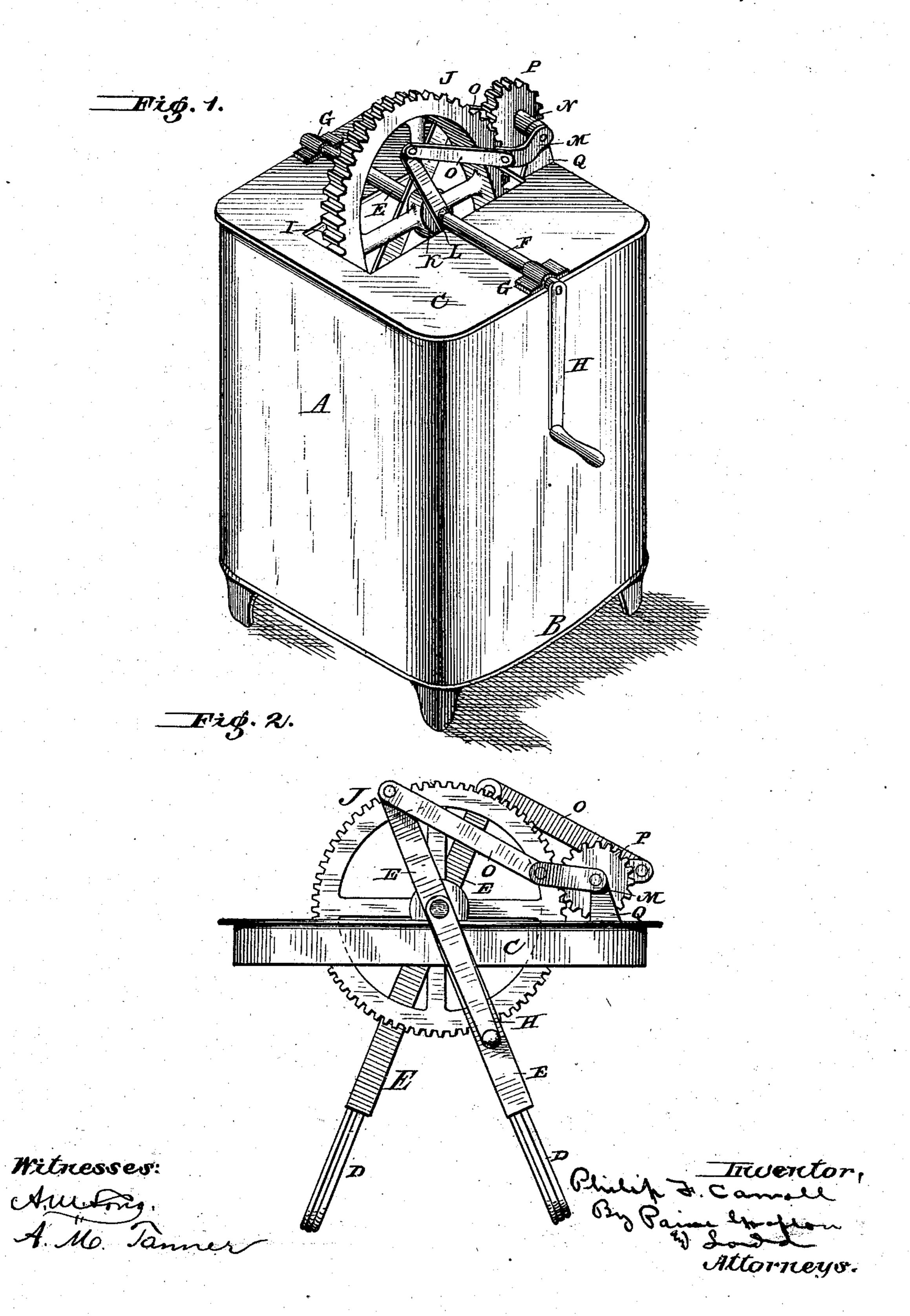
(No Model.)

P. F. CARROLL. Egg Beater.

No. 235,620.

Patented Dec. 21, 1880.



United States Patent Office.

PHILIP F. CARROLL, OF DUBUQUE, IOWA.

EGG-BEATER.

SPECIFICATION forming part of Letters Patent No. 235,620, dated December 21, 1880.

Application filed November 8, 1880. (No model.)

To all whom it may concern:

Beit known that I, PHILIP F. CARROLL, a citizen of the United States, residing at Dubuque, in the county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Egg-Beaters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The present invention relates to that class of egg-beaters in which are employed vibrating beater-blades or dashers operated through the medium of cranks and gearing; and its object is to greatly simplify the construction of devices of the character mentioned, and to render the operation thereof more effective than heretofore.

The invention consists in the construction and arrangement of parts, which will be hereinafter more fully described, and specifically pointed out in the claim.

In the drawings, Figure 1 is a perspective view of an egg-beater constructed according to my invention. Fig. 2 is a side elevation, showing the cover, driving mechanism, and 30 beaters detached from the box or casing.

The letter A designates a casing or receptacle, made of metal, earthenware, or other suitable material, and constructed with a rounded or convex bottom, B.

The cover C is applied to the top of the casing, and carries the entire driving mechanism, together with the beaters or dashers, so that all these parts can be readily and quickly removed from the casing by simply taking off the cover.

The beater-blades or dashers D—two in number—are preferably constructed of wire-work or rods, and are so shaped and located that they will describe an arc-shaped path during their movement and sweep over the entire bottom of the casing. The beater-blades are secured to vertical shanks or lever-arms E, which are journaled or fulcrumed on the horizontal driving-shaft F. This shaft has its bearings in keepers or boxes G on the top surface of

the cover, and its end projects beyond said cover and carries a crank-arm and handle, H.

The central portion of the cover is apertured or provided with an opening, I, for the reception of a large spur-wheel, J, secured to the 55 driving shaft F. This spur-wheel is constructed with a hub, K, projecting from both sides thereof, and the aforesaid arms E, carrying the beaters, are arranged between the ends of said hubs and collars or enlargements L, 60 fitted on or formed on the driving-shaft.

It will be obvious that the openings in the beater-arms through which the driving-shaft passes must be sufficiently large to permit said arms to oscillate or rock freely on said 65 shaft without interfering with the rotation of the same.

The beater arms or levers are extended above the driving-shaft, and are connected with the oppositely-extending crank-arms M 70 of a pinion-shaft, N, by means of pitmen or connecting - rods O. These pitmen are attached to the lever and crank arms by means of bolts and nuts or other equivalent devices. The shaft N carries the pinion P, which engages with the spur-wheel, and it is journaled in brackets Q rising from the cover.

It will readily be apparent that when the driving-shaft is rotated the gearing connected therewith will serve to vibrate or oscillate the 80 beaters, causing the same to pass through the egg mass in the chamber or receptacle and effectually agitate or beat the same in a very short period of time. The oppositely-extending crank-arms of the pinion will cause the 85 beaters to vibrate in opposite directions—that is, when one beater is moving to the right the other is making its sweep to the left of the casing. This will insure a thorough and effective agitation of the egg mass.

I may observe that my apparatus is capable of beating other materials than eggs, as will readily be understood, and it is manifest that it can be constructed with but one beater, connecting-rod, and crank-arm, in which case, 95 however, the machine is not nearly as effective as it is with the two beaters sweeping in opposite directions through the centers of the casing.

Having thus described my invention, what 100

I claim as new, and desire to secure by Letters Patent, is—

The egg-beater herein described, comprising the casing A, apertured cover C, horizontal 5 driving-shaft F, large spur-wheel J, one or more vertical lever-arms, E, fulcrumed on said driving-shaft and carrying beaters or dashers D, connecting-rods O, and pinion P, having a crank - arm, M, or two oppositely - extending

cranks, all constructed and relatively arranged 13 as herein set forth, for the purpose specified. In testimony whereof I affix my signature in

presence of two witnesses.

PHILIP F. CARROLL.

Witnesses:

WM. F. Powers, J. M. WERNER.