(No Model.)

E. J. & J. R. EYNON.

MIXER FOR EGGS, BATTER, CREAM, &c.

No. 553,027. Patented Jan. 14, 1896.

Fig. 1.

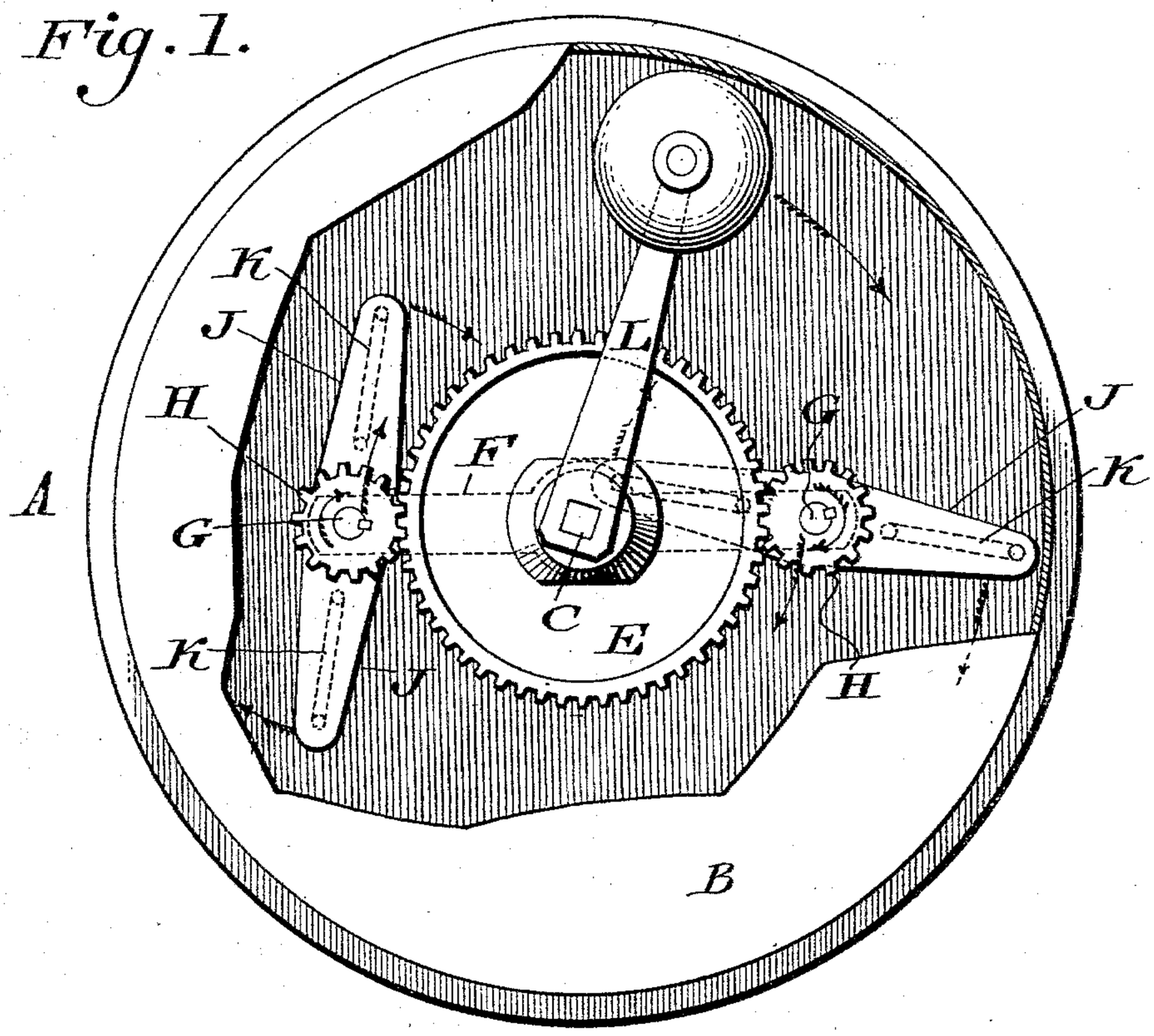


Fig. 2.

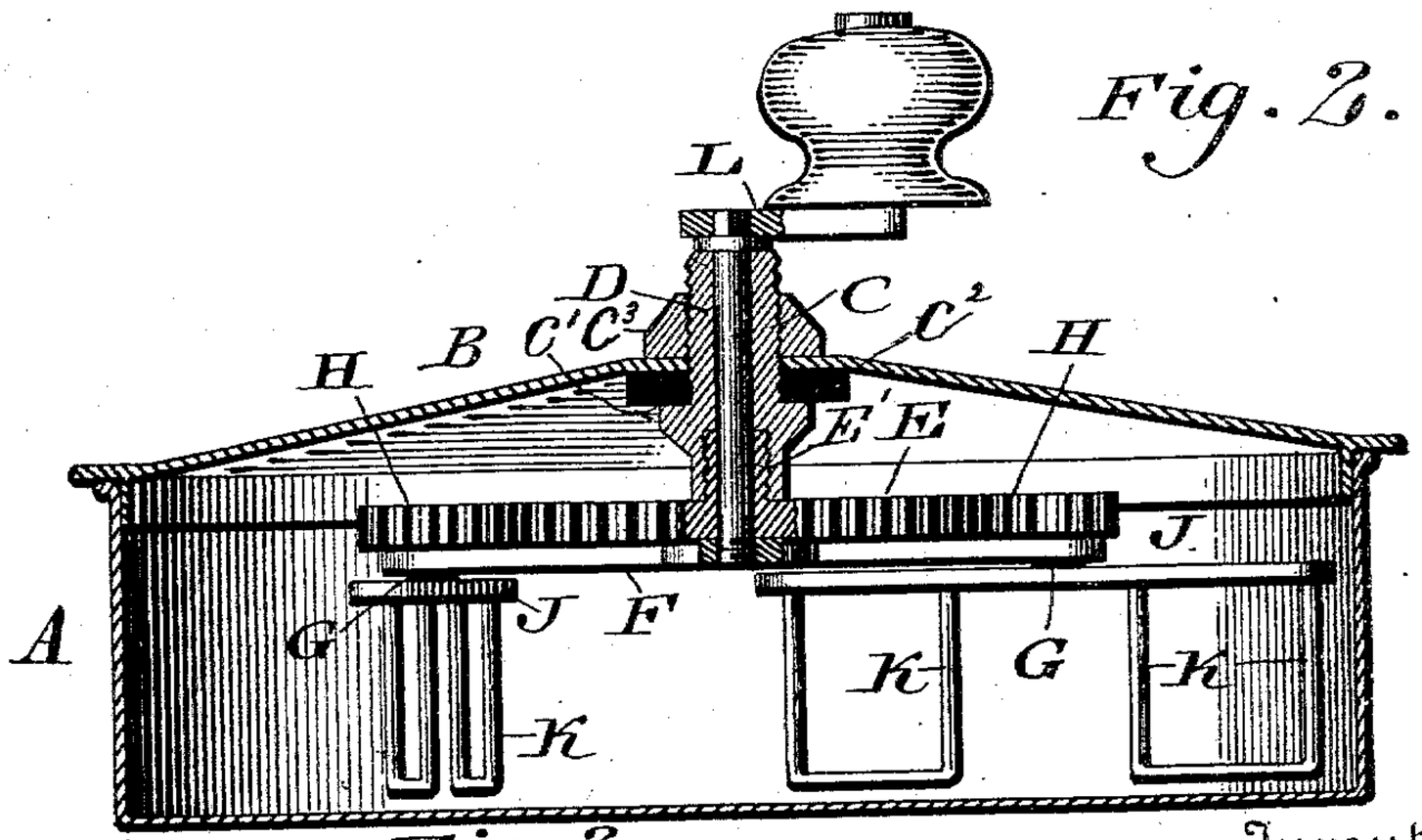
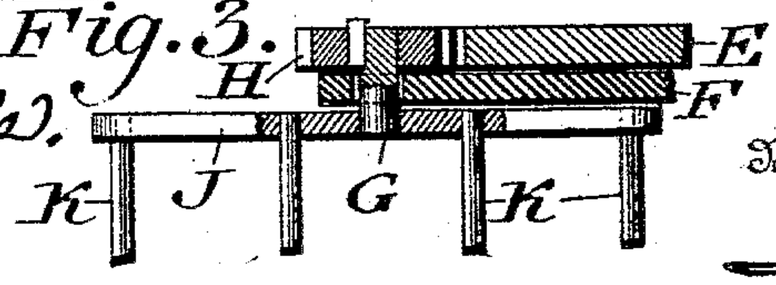


Fig. 3.



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UNITED STATES PATENT OFFICE.

ELIZABETH J. EYNON AND JOHN R. EYNON, OF PHILADELPHIA, PENNSYLVANIA.

MIXER FOR EGGS, BATTER, CREAM, &c.

SPECIFICATION forming part of Letters Patent No. 553,027, dated January 14, 1896.

Application filed November 10, 1894. Serial No. 528,377. (No model.)

To all whom it may concern:

Be it known that we, ELIZABETH J. EYNON and JOHN R. EYNON, citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Mixers for Eggs, Batter, Cream, &c., which improvement is fully set forth in the following specification and accompanying drawings.

Our invention consists of a mixer for eggs, batter, cream, &c., composed of the combination and arrangement of parts as hereinafter set forth and claimed.

Figure 1 represents a top or plan view of a mixer embodying our invention. Fig. 2 represents a vertical section thereof. Fig. 3 represents a sectional view of a portion thereof detached.

Similar letters of reference indicate corresponding parts in all the figures.

Referring to the drawings, A designates a pan or other suitable vessel, and B designates the lid thereof, the latter entirely closing the top of said vessel and preventing splashing therethrough.

C designates a driving-shaft which is journaled vertically in the sleeve D, the latter being secured to the lid B at the center thereof and having connected with its lower end, which is below the lid, the stationary gear or spur-wheel E.

Attached to the lower end of the shaft C is the revolving arm F, in whose ends are journaled the secondary shafts G, whose upper ends have firmly secured to them the pinions H, and whose lower ends have firmly secured to them the supplemental revolving arms J, from which depend the beaters K, it being noticed that the pinions H mesh with the stationary gear-wheel E, forming an epicylic train, while they are sustained in position on the periphery of said wheel by the arm F on which they are mounted.

The shaft C is provided with a crank or other suitable handle L, but when it is desired to operate the device by power a pulley or band-wheel may be employed in lieu of said handle.

The hub E′ of the gear-wheel E is secured to the sleeve C, and the latter is passed upwardly through the lid, limited by the shoulder C′, between which and the under side of the top of the lid is the washer C^2. Above the lid is the nut C^3, which is screwed to the threaded portion of the sleeve C and tightened against the lid, thus firmly connecting the sleeve with the lid, the sleeve, as is evident, carrying the stationary gear-wheel E, which depends from said sleeve, and also forming the bearing of the shaft D which, as will be seen, passes through the sleeve, the hub E, of the gear-wheel and the arm F, to which latter said shaft is firmly secured.

The shaft C projects upwardly through the upper portion of the sleeve and has the handle L secured to it, the shaft thus having a long bearing in the sleeve so that it runs true therein, while the sleeve forms a rigid connection with the lid and supports the stationary gear-wheel in a firm and steady manner. When the crank-handle is removed and the nut unscrewed, all of the other parts are disconnected from the lid and may be readily restored and secured as is evident.

The operation is as follows: When the shaft C is rotated, the arm F is rotated with the same, whereby it carries the pinions H around said wheel E, thus imparting rotation to said pinions. Now as the arms J are rigidly connected with said pinions rotation is imparted to said arms, and consequently to the beaters, it being evident that said beaters rotate on their axes on the arm F while they are carried around the pan by said arm, it being seen that the material in the pan or vessel will be effectively mixed or beaten. It will also be seen that the sleeve D not only forms the means for carrying the stationary gear-wheel E, but also provides the bearings for the shaft D, so that all of the operative parts depend from the lid B and are sustained by the same without the necessity of a step or bearings in the bottom of the pan or vessel for the said shaft D.

When the lid is removed all of the operative parts follow the same, leaving the interior of the pan or vessel entirely free of mechanism.

When the device requires to be cleansed,

the handle is displaced and the nut unscrewed, whereby the sleeve D may be withdrawn through the lid and the connected parts thereof removed as one, the several members then being accessible.

The device is of a simple, compact and inexpensive nature.

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

1. The vessel A, and the closed lid B thereof, in combination with the stationary sleeve D, the stationary gear wheel E depending from said sleeve, the driving shaft C passing freely through said sleeve and wheel, the main revolving arm F connected with said shaft, the pinion H carried by said arm, the shaft G passing freely through said arm and secured to said pinion, the supplemental revolving arm J connected with said shaft, and the beater K attached to said arm J, said sleeve passing through the lid partly above and partly below the same and secured thereto, substantially as described.

2. The vessel A, the stationary gear wheel E, the driving shaft C, the main revolving arm carried by said shaft, the pinion H meshing with said gear wheel, the supplemental arm J, the shaft G connecting said pinion and arm J, and the beater K attached to said arm J, in combination with the closed lid B, and the stationary sleeve D, the latter having the stationary gear wheel E depending therefrom, and forming the bearing of the shaft C, said sleeve passing through the lid and provided with a shoulder and nut on opposite sides of the lid and packing interposed between said shoulder and lid, all substantially as described.

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