June 20, 1933. W. C. ECK 1,915,017

EGG BEATER

Filed Feb. 26, 1932

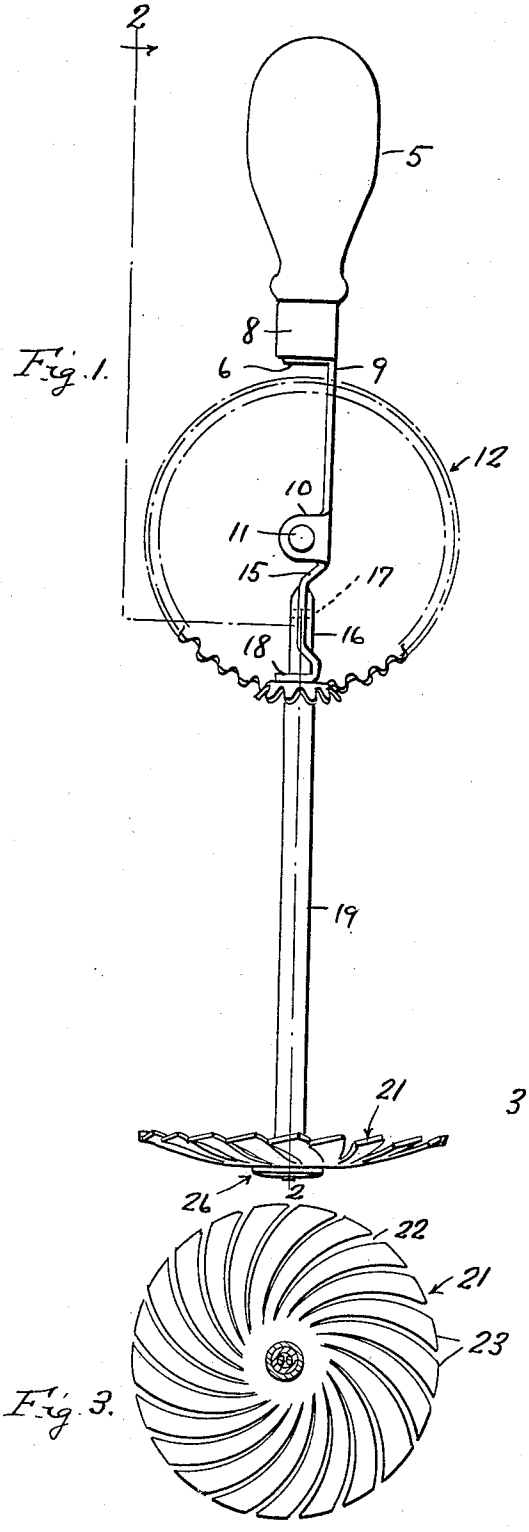


Fig. 1.

Fig. 3.

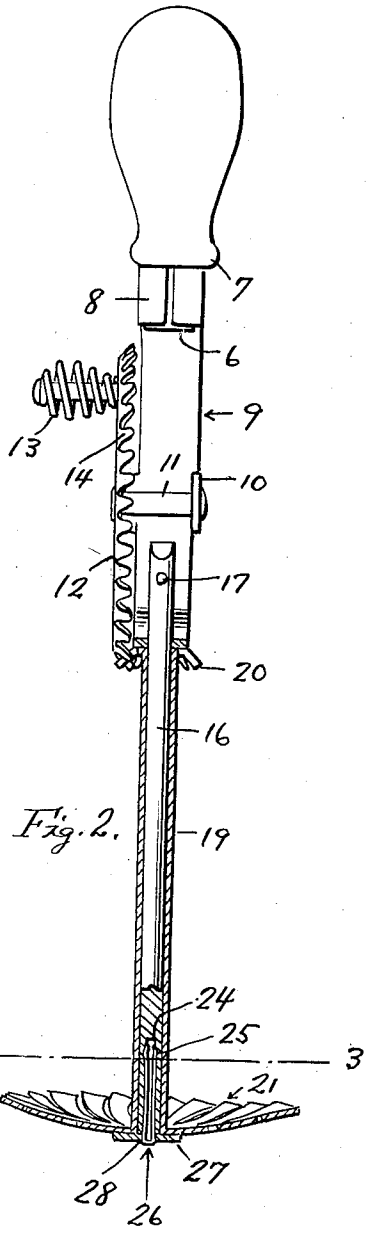


Fig. 2.

Inventor

Warren C. Eck

By Clarence A. O'Brien

Attorney

Patented June 20, 1933 1,915,017

UNITED STATES PATENT OFFICE

WARREN C. ECK, OF TOPTON, PENNSYLVANIA

EGG BEATER

Application filed February 26, 1932. Serial No. 595,398.

My invention relates to culinary beaters.

It is an important object of my invention to provide a culinary beater which is extraordinarily simple in construction, being capable of being disassembled quickly and easily whereby to provide for complete and quick cleaning thereof, in order to promote sanitary use thereof.

It is also an important object of my invention to provide a device of this kind having a new arrangement and relationship of parts, whereby manufacture thereof is facilitated and rendered possible at low cost, without sacrifice of efficiency.

Other objects and advantages of my invention will be apparent from a reading of the following description of the drawing wherein for purposes of illustration I have shown a preferred embodiment thereof.

In the drawing:—

Figure 1 is a side elevational view of the device of the invention.

Figure 2 is an elevational view taken at right angles to Figure 1.

Figure 3 is a plan view of the rotary beater element.

Referring in detail to the drawing, wherein like numerals refer to like parts throughout the same, the numeral 5 designates a suitable handle, preferably of nonmetallic character from one end of which extends a reduced cylindrical formation 6 defining a shoulder 7. To this cylindrical portion 6 are connected by wrapping or pressing thereabout the arms 8, which then form a split ring gripping the cylindrical portion 6. The arms 8 are formed as a crosshead on the upper end of an elongated bar which constitutes the standard 9. The standard 9 has lugs 10 laterally bent at right angles, and the lugs 10 carry a riveted rotatable axle 11 on which is mounted the toothed wheel 12 carrying the eccentric handle 13. The teeth 14 on the wheel 12 are directed out of the plane of the wheel at an angle and they are slightly rounded as seen. The lower end of the standard 9 is deflected as 15 into the plane of the axis of the handle 5 where it is received in a slot in the upper end of a rod 16. A rivet 17 passes through the rod and the standard for uniting them. This portion of the rod 16 extends thru an opening in a right angular portion 18 on the lower end of the standard whereby the axially extended rod 16 and the standard 9 are connected in alinement in a cheap and securely assembled manner.

The rotatable member or beater element comprises a tube 19 one end of which is formed with downwardly and angularly directed teeth 20 for engagement by the teeth 14 of the wheel 12 at an opposite angle as seen in Figure 2. The lower end of the tube 18 is formed with the concave-convex beater element 21 which consists of a dished plate formation provided with radial spiral cuts 22 resulting in curvate blades which are wider at their radially outward end than at their radially inward end as seen in Figure 3. These blades may be slightly turned with respect to each other to provide a propeller action upon the medium to be beaten.

The lower end of the rod 19 is provided with an axial slot 24 having an expanded portion 25 whereby to receive and hold a spring lock 26 which comprises a plate 27 having mounted therein the U-shaped spring 28 having laterally directed portions near its terminal for seating in the expanded portion 25 of the slot whereby to lock the spring in the slot 24 and engage the plate 27 against the lower face of the rotatable member for retaining the same rotatably upon the rod 16.

It will be observed that in disassembling the device all that it is necessary to do is to pull out the spring lock 26 and the rotatable member including the tube 19 and the beater element 21 may then be easily slid from the rod 16 for cleaning and other purposes. It will be observed that it is a simple matter to provide a plurality of different types of beater elements 21 adapted to be used interchangeably with the device.

It will be observed that the standard 9 may be cheaply formed of a stamping in one operation as well as the rotatable member including the tube 19 and the beater element 21, and that the parts making up the

device may be assembled at low cost in a rugged and efficient construction having the advantages described.

Though I have shown and described herein a preferred embodiment of the invention, it is to be definitely understood that I do not desire to limit the application of the invention thereto, but any change or changes may be made in material and structure and arrangement of parts consistent with the spirit of the invention and the scope of the subjoined claims.

What is claimed is:—

1. In a beater of the type described, a body member, a toothed wheel rotatably mounted on the body member, a shaft anchored to the body member, a tubular beater member rotatably mounted on the shaft, an annular series of teeth on the tubular member in operative engagement with the toothed wheel, a bladed agitator on the tubular member, and quickly detachable means engageable with the outward end of the shaft for retaining the tubular member assembled on the shaft, said body member comprising a flat bar having at an intermediate point a pair of flanges directed on one side of the bar, a stub axle supported by the flanges, a pair of curved flanges on the upper end of the bar, a handle having a portion embraced by the curved flanges so as to be supported in axial alinement with the shaft, a laterally bent portion on the opposite end of the body member, through an opening in which the shaft passes, said shaft having a slot in its end receiving a portion of the body member so as to anchor the shaft on the body member in longitudinal extension thereof.

2. A beater comprising a body portion, a handle thereon, a laterally mounted rotatable toothed wheel, an axially related shaft extending from the body, an elongated tube rotatable on the shaft, a toothed annulus on one end of the tube cooperating with the toothed wheel, a beater element on the other end of the tube, an axial opening in the outward end of the tube having a portion of greater interior diameter, an expansible removable retainer member connectible to the outward end of the shaft for removably retaining the tube on the shaft, said retainer being adapted to be inserted in the axial opening and expand in the portion of larger diameter so as to be removably held.

In testimony whereof I affix my signature.

WARREN C. ECK.