

E. D. READ.
EGG BEATER.

APPLICATION FILED JULY 5, 1910.

989,418.

Patented Apr. 11, 1911.

2 SHEETS—SHEET 1.

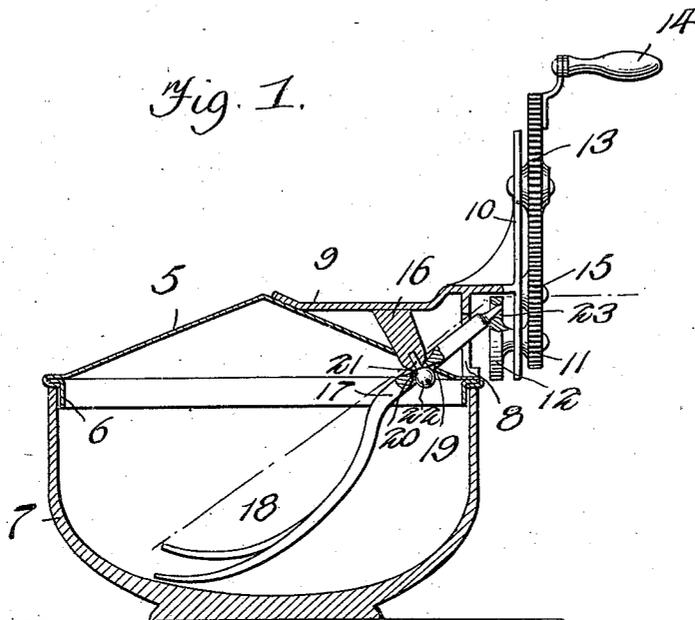
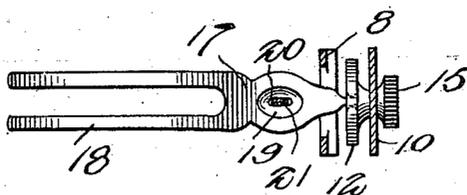


Fig. 2.



Witnesses

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Ellis D. Read

By Victor J. Evans

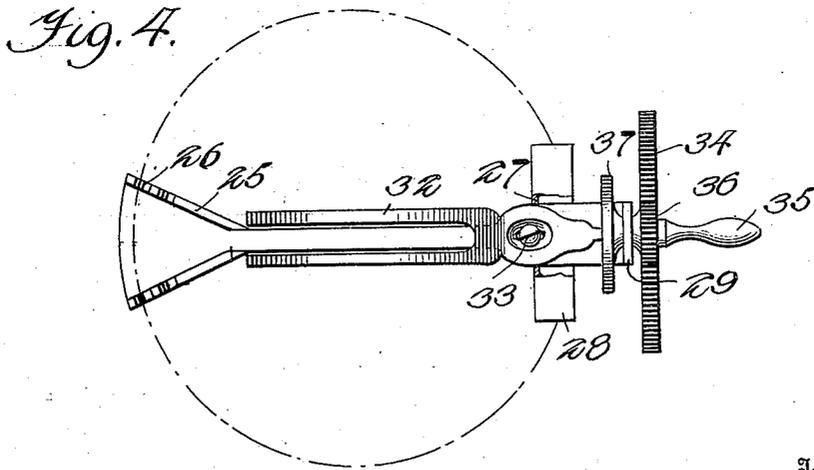
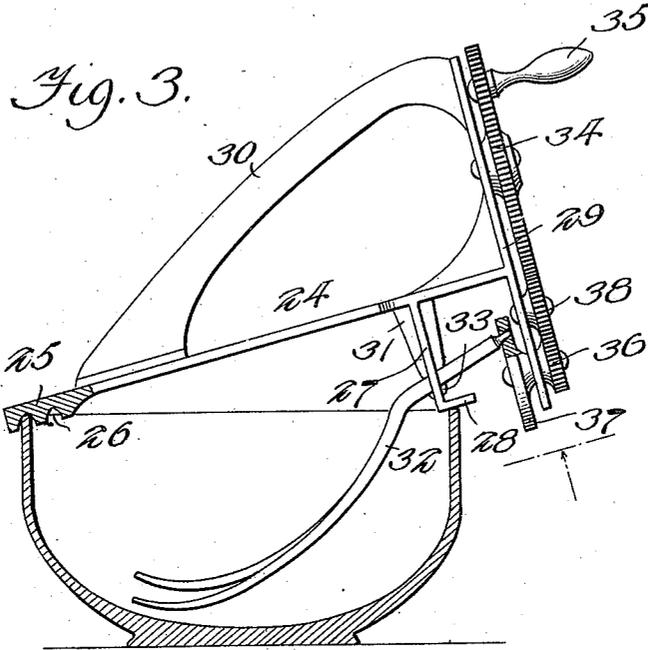
Attorney

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Inventor

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UNITED STATES PATENT OFFICE.

ELLIS D. READ, OF DEER LODGE, MONTANA.

EGG-BEATER.

989,418.

Specification of Letters Patent. Patented Apr. 11, 1911.

Application filed July 5, 1910. Serial No. 570,423.

To all whom it may concern:

Be it known that I, ELLIS D. READ, a citizen of the United States, residing at Deer Lodge, in the county of Powell and State of Montana, have invented new and useful Improvements in Egg-Beaters, of which the following is a specification.

This invention relates to improvements in beaters and more particularly to the type employed for beating eggs, whipping cream and the like.

One object of the invention is the provision of a beater provided with a gyratory agitator adapted to move in a path analogous to that of an ordinary fork when the latter is held in the human hand during the act of beating eggs, whipping cream or the like.

Another object is the provision of a beater provided with an improved means for attaching it to a vessel which contains the matter to be beaten or whipped.

With these and other objects in view, which will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claim; it being understood that various changes in the form, proportion, size, and minor details of the device, may be made, within the scope of the appended claim, without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, forming part of the specification;—Figure 1 is a side elevation of the device partly in section with the cover in section and also showing a bowl in vertical section and the device applied thereto. Fig. 2 is a sectional plan view on the line 2—2 of Fig. 1. Fig. 3 is a detail side elevation of a modified form of the device. Fig. 4 is a plan view of the same.

Similar numerals of reference are employed to designate corresponding parts throughout.

In the form illustrated in Fig. 1, a cover is shown to include a conical-shaped body 5 peripherally provided with a depending flange 6, to bear on the inner surface of a bowl or other suitable receptacle designated by the numeral 7. Secured to the outer face of the body 5 of the cover is an angular-shaped bracket, including a vertical leg 8

which rises from the peripheral portion of the cover and a horizontal leg 9, one end of which is secured to the central portion of the cover and the opposite end of which extends beyond the outer face of the leg 8 and terminates in a vertically disposed arm 10, the lower end of which extends to a point in a plane with the lower end of the leg 8 and the upper end of which extends considerably above the plane of the body 5 of the cover. Journalled in the lower end portion of the arm 10 is a shaft, to the outer end of which is keyed a spur gear 11, and to the inner end of which is keyed a pulley 12, the said pulley being arranged in the space between the leg 8 and lower end portion of the arm 10. Extending outwardly from the outer end portion of the arm 10 is a shaft upon which is journalled a spur gear 13 having a crank handle 14, and arranged between the spur gears 11 and 13 is an idler 15, the teeth of which mesh with the teeth of the spur gears 11 and 13. With this construction it will be manifest when the spur gear 13 is rotated by means of the handle 14 rotary movement will be imparted to the pulley 12. Depending from the medial portion of the horizontal leg 9 is a post 16, which extends through an opening in the body 5 of the cover, the said posts inclining toward the leg 8 of the bracket. What will subsequently be termed an agitator is shown to include a shank portion 17 one end of which terminates in a downwardly and forwardly curved fork 18 and the opposite end of which extends through enlarged openings formed in the vertical leg 8 and body 5 of the cover. The medial portion of the shank 17 is provided with oppositely disposed oval-shaped depressions 19 and further provided at the central portions of these depressions with an oblong opening 20. Connection between the shank 17 and post 16 is established by means of a screw, the threaded shank 21 of which extends through the opening 20 in the agitator and is threaded into the lower end of the post 16, the screw having a spherical head 22 of a greater diameter than the opening 20 and which is seated in the depression on the lower side of the shank 17, the opposite depressions on said shank receiving the lower rounded end of the post 16. The outer end portion of the shank which extends through the vertical leg 8 is loosely seated in an eccentric opening 23 formed in the pulley 12. With this con-

struction it will be manifest when the pulley is rotated as before described that a gyratory movement will be imparted to the free end of the agitator, the said movement simulating the movement of the human hand during the operation of beating eggs and the like. It will be observed that by the provision of the cover 5 that the splashing of the contents of the bowl onto the operator during the operation of beating will be positively prevented.

In the modified form illustrated in Fig. 3 the parts are the same with the exception that the cover is dispensed with and in lieu thereof I have provided a bracket adapted to positively engage with the bowl or other vessel containing the substance to be beaten. The bracket is shown to include a body 24, of greater length than the diameter of the bowl and flared at one end as shown at 25. The lower face of the flared end 25 is provided with a plurality of spaced transverse grooves 26, the said grooves curving to conform to the configuration of the bowl and adapted to independently receive the upper edge thereof. Depending from a point adjacent to the opposite end of the body 24 is a leg 27, the lower end of said leg terminating in an outwardly bent foot or flange 28, to bear on the upper edge of the bowl at a point diametrically opposite to the portion received by the grooves 26. With this construction it will be seen that by the provision of the spaced grooves that the device may be secured to bowls of different diameters. Secured to the end of the body 24 remote from the flared end 25 is an arm 29, the lower end of which extends to a point a trifle below the plane of the foot 28, while the upper end of which extends to a point considerably above the upper ends of the body 24. Cast integral or otherwise secured with the upper end portion of the arm 29 and body 24 is a handle 30 by means of which the device may be held during the operation of beating. The leg 27 is provided with an oblong opening or recess extending from the

body 24 to a point adjacent the foot 28 and depending from the body 24 and located in the said recess is a post 31, the lower end of which extends to a point adjacent the lower end of the recess. The agitator is designated in general by the numeral 32 and is similar to the agitator before described, being connected to the lower end of the post 27 by means of a screw having a spherical head 33 similar to the head 22 of the first described screw. Journaled on a shaft extending outwardly from the upper end portion of the arm 29 is a spur gear 34 having a handle 35 and journaled in the lower end portion of the arm 29 is a shaft to the outer end of which is keyed a spur gear 36 and to the inner end of which is keyed a pulley 37 having an eccentric opening for the upper end portion of the agitator 32. An idler 38 is journaled on the shaft carried by the lower end portion of the arm 29, the teeth of said idler meshing with the spur gears 34 and 36. With this construction it will be manifest when the handle 35 is turned the agitator will be moved in the manner before described.

From the foregoing, it is evident that I have provided a device which is comparatively simple in structure and inexpensive in manufacture, embodying few parts and these so arranged that the danger of derangement will be reduced to a minimum.

I claim:—

In a beater, the combination with a support to bear on the upper edge of a receptacle, a post connected with the support and inclining downwardly and outwardly, a gyratory agitator carried by the post, a pulley connected with the support and having an eccentric opening for one end of the agitator, and means for rotating said pulley.

In testimony whereof I affix my signature in presence of two witnesses.

ELLIS D. READ

Witnesses:

T. F. SHERR,
C. McLEOD.