

(No Model.)

W. J. JOHNSON.
EGG BEATER.

No. 588,112.

Patented Aug. 10, 1897.

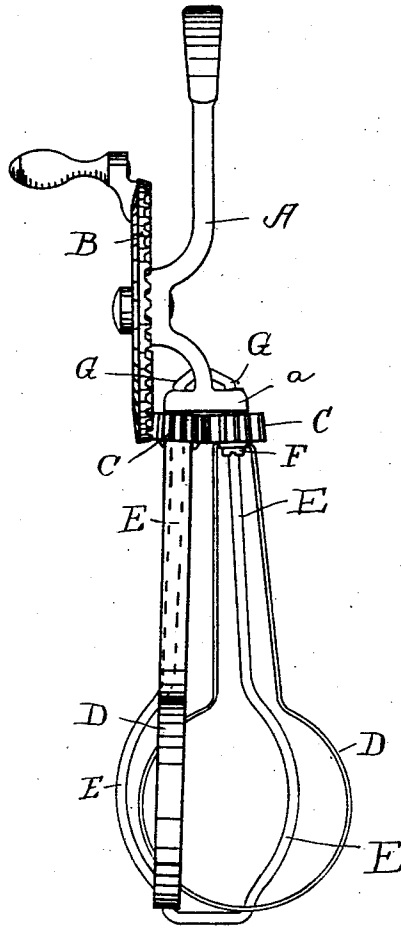


Fig. 1.

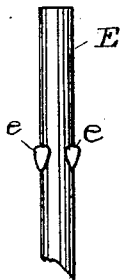


Fig. 3.

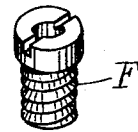


Fig. 4.

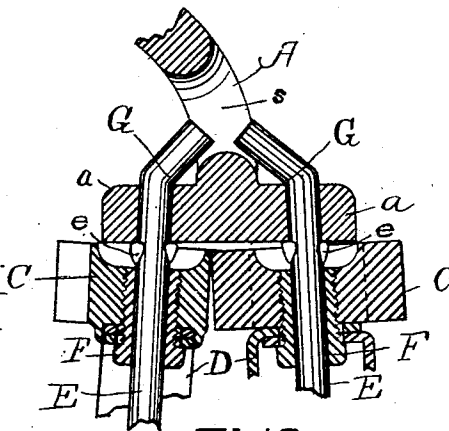


Fig. 2.

WITNESSES.

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ATTY.

UNITED STATES PATENT OFFICE.

WILLIAM J. JOHNSON, OF NEWTON, MASSACHUSETTS, ASSIGNOR TO
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EGG-BEATER.

SPECIFICATION forming part of Letters Patent No. 588,112, dated August 10, 1897.

Application filed June 24, 1896. Serial No. 596,733. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. JOHNSON, of Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Egg-Beaters, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to provide an improved egg-beater of the so-called "Dover" type. The two revolving beater-blades are secured to their intermeshing pinions by short hollow screws through which the prongs of the supporting-yoke pass. These prongs have shoulders formed on them to accurately locate them with reference to the cast-iron body or cross-head to which they are secured, the ends of these prongs being offset or so bent as to draw and hold such shoulders firmly against the body or head.

In the drawings, Figure 1 is a side view of my improved beater. Fig. 2 is an enlarged view of the parts to which my invention more particularly relates, a portion thereof being in section. Figs. 3 and 4 are details of the yoke end and of the hollow screw.

A represents the body of the beater, having at one end a handle, at the opposite end a transverse head *a*, and at an intermediate point a lateral bend on which is mounted the driving gear-wheel B. This wheel engages one of the intermeshing pinions C C, as heretofore, and thereby actuates the beater-blades D D, respectively secured to said pinions. These blades intermesh at their looped lower portions with each other and the wire yoke E, around which each revolves, in a manner well known.

Under my improvement the ends of the beater-blades D are secured firmly against the lower outer ends of the pinions C by means of short hollow screws F, threaded into said pinions and holding the inward-turned perforated ends of each blade between slight lateral lugs on the pinion and firmly pressed to prevent loosening. The yoke ends pass through the axial perforations of the screws and form journals for the revolving pinions, the hollow screws forming bushings therefor.

It is of great importance that the yoke E shall be held in the exact position required

and with the utmost firmness. I therefore drill through the cross-head *a* two holes which the prongs of the yoke will fit closely into, and after slipping the blade D and pinion C upon each prong I swage out at the exact point required some of the metal of the wire yoke, thus forming a shoulder *e* thereon, which constitutes a stop, limiting the extent to which the wires may enter the head, thus holding the yoke at the precise distance required. In order to hold said shoulders firmly against the under surface of the head *a*, I bend the upper ends of the yoke E inwardly and toward each other, as at G G, close to the upper surface of the head *a*, and carry said ends into a transverse perforation or slot *s*, formed in the vertical portion of the body A, pressing said ends firmly down against the bottom of said slot. This construction secures the yoke E firmly and immovably in the head, its longitudinal movement upward being prevented by the shoulders *e e*, its longitudinal movement downward by the bends G G, and its twisting or torsional movement by the contact of the offset ends of the yoke with the sides of the slot *s*, said slot being made just wide enough to admit the wires.

I am aware of the patent to Monroe, No. 190,238, dated May 1, 1877, and of the later patent to Hadley, No. 380,564, dated April 3, 1888, in both of which patents the upper end of the supporting wire or yoke is riveted over the upper surface of the head, and is also made to partially abut against a slight recess or inclined shoulder in the head. Neither of said constructions is effectual to prevent either upward longitudinal movement or torsional movement of the yoke, and I do not claim or employ either of them.

I claim as my invention—

1. In an egg-beater, the body A having a cross-head *a*, the wire yoke E fixed on said head, and the pinions C revolving about the prongs of the yoke, in combination with the beater-blades D held in place against the face of said pinions, and each, at foot, pivoted upon one member of the yoke, and with the hollow screws F passing through the inward-turned ends of said blades and threaded into said pinions, to secure the blades firmly there-

to, the prongs of the yoke forming journals and said screws forming hollow bushings for said pinions, substantially as set forth.

2. In an egg-beater, the shank or body A provided at its lower end with a cross-head *a* perforated vertically to receive the prongs of a beater-supporting yoke, and formed with a transverse slot through its stem, immediately over the cross-head, in combination with the wire yoke E passing through said vertical perforations and provided with shoulders or stops *e, e*, to abut against the under surface of the

cross-head, and having its upper ends bent inwardly toward each other, over the cross-head and into said transverse slot, substantially as set forth. 15

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 4th day of June, A. D. 1896.

WILLIAM J. JOHNSON.

Witnesses:

A. H. SPENCER,
N. K. BAKER.