J. G. BROTHWELL.

EGG-BEATER.

No. 182,639. Patented Sept. 26, 1876.

Fig. 1.

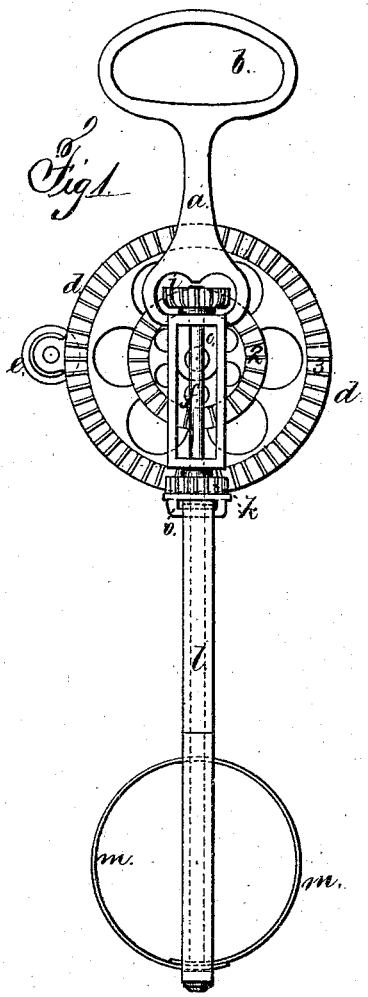
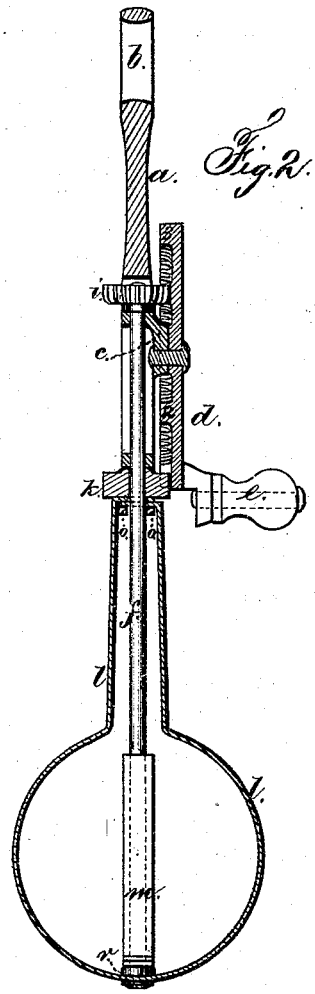


Fig. 2.



Witnesses

Harold Serrell

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UNITED STATES PATENT OFFICE.

JOHN G. BROTHWELL, OF WOLCOTTVILLE, CONN., ASSIGNOR TO THE TURNER AND SEYMOUR MANUFACTURING COMPANY, OF SAME PLACE.

IMPROVEMENT IN EGG-BEATERS.

Specification forming part of Letters Patent No. **182,639**, dated September 26, 1876; application filed July 26, 1876.

To all whom it may concern:

Be it known that I, JOHN G. BROTHWELL, of Wolcottville, in the county of Litchfield and State of Connecticut, have invented an Improvement in Egg-Beaters, of which the following is a specification:

Egg-beaters have been made with two beaters or floats, revolved in opposite directions, and one within the other, and a wheel at the side of the stock has been revolved by a crank-handle and employed to rotate the respective pinions.

My present invention relates to the peculiar construction of one of the pinions, whereby the strip of metal of the beater is firmly secured without soldering or rivets; and I construct the driving-wheel with two circular ranges of teeth, and employ pinions of the same size, so that the driving-wheel is parallel with the stock, and the beaters are revolved in opposite directions, but the outer bow or beater revolves faster than the inner beater.

In the drawing, Figure 1 is an elevation of the beater, and Fig. 2 is a longitudinal section.

The stock *a* is provided with a handle, *b*, at one end, and with a gudgeon or stud, *c*, at one side, upon which is the wheel *d*, that is to be revolved by hand applied to the crank-handle *e*. There are two circular ranges of teeth, 2 and 3, upon the face of the wheel *d*, and this wheel *d* is parallel, or nearly so, with the stock *a*. The beater-shaft *f* passes into the stock *a* from the end thereof, and through the pinion *i* that occupies a mortise or bow provided for it in the stock *a*. The shaft *f* is driven tightly into this pinion after the pinion is put into place in the stock, so that the said pinion prevents the shaft drawing out of the stock.

The pinion *k* is loose upon the shaft or spindle *f* outside the stock, there being, by preference, a washer between the pinion and stock, and upon the outer surface of the pinion *k* there are two loops, *o*, cast, and the ends of the beater *l* are perforated and bent at right angles, so that these ends are slipped into the loops before the spindle is put through the pinion; hence said spindle, passing through the holes in the ends of the beaters *l*, prevents the ends of the beaters drawing out of the loops *o*. By this means the beater *l* is firmly connected with the pinion.

The inner beater *m* is, preferably, of a ring form, the lapping ends of which are held by the spindle passing through them, and there is a washer at *r*, and the end of the spindle is round, so as to freely turn in the hole of the beater *l*, but there is a rivet-head at the end of *f* to hold the parts together.

I claim as my invention—

1. The combination, with the pinion *k* of the egg-beater, of the loops *o* cast upon such pinion, and the sheet-metal strip forming the outer beater *l*, having the ends bent at right angles perforated and connected with the pinion, as specified.

2. In an egg-beater, the combination of one wheel having two circular ranges of teeth, with the two pinions, one in an opening in the stock, and the other at the end thereof, substantially as set forth.

Signed by me this 20th day of July, A. D. 1876.

JOHN G. BROTHWELL.

Witnesses:
J. L. CARSON,
F. M. WHEELER.