E. MORSE & L. BURNHAM.

Egg-Beater.

No. 227,378. **Patented May 11, 1880.**

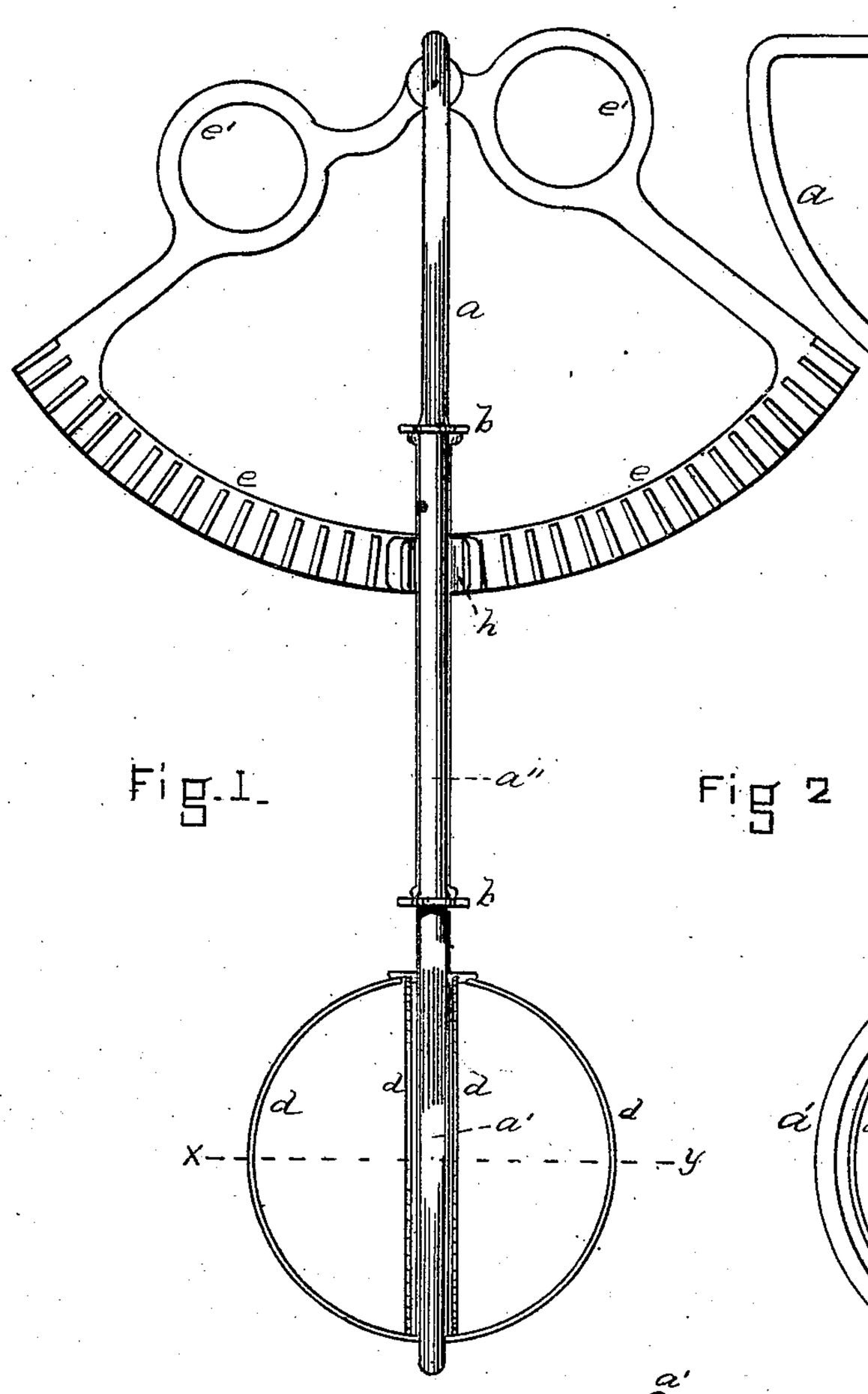

Fig. 1.

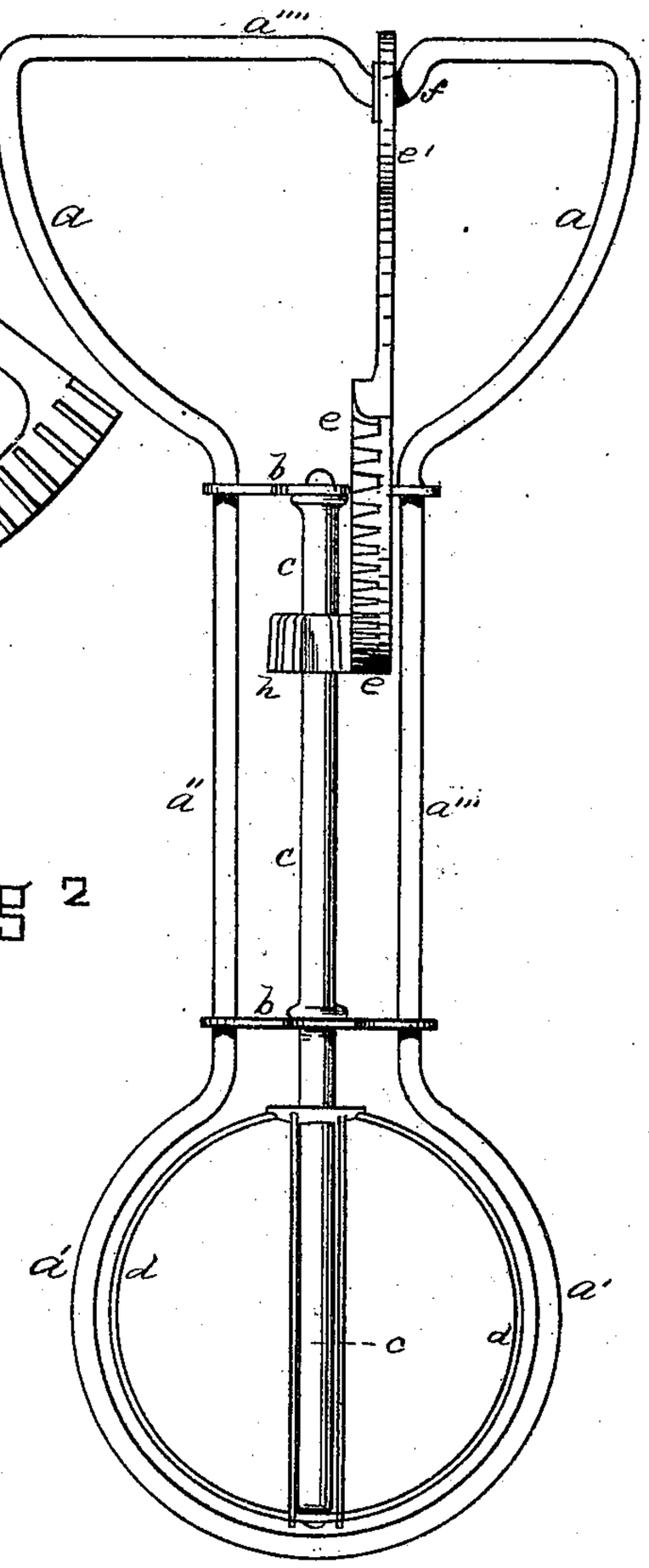

Fig 2

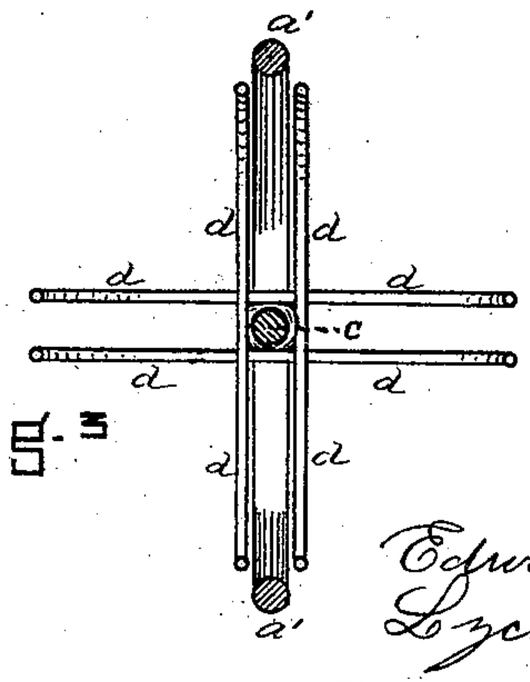

Fig. 3

WITNESSES

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EDWARD MORSE, OF BOSTON, AND LYCURGUS BURNHAM, OF WOBURN, MASSACHUSETTS.

EGG-BEATER.

SPECIFICATION forming part of Letters Patent No. 227,378, dated May 11, 1880.

Application filed January 20, 1880.

To all whom it may concern:

Be it known that we, EDWARD MORSE, of Boston, in the county of Suffolk and State of Massachusetts, and LYCURGUS BURNHAM, of Woburn, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Egg-Beaters, of which the following is a specification.

The objects of our improvements are to provide a more conveniently-manipulated egg-beater, and to provide one in which the beater proper shall more thoroughly and quickly accomplish the task for which it is designed. We attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the device. Fig. 2 is a side elevation of the same. Fig. 3 is a horizontal section on line *x y*, Fig. 1.

Similar letters refer to similar parts throughout the several views.

a is the frame, and it consists of a piece of wire bent into flaring shape at *a*, into circular shape at *a'*, so as to guard and surround the beating-wires, into parallel lines at *a'' a'''*, and horizontally at *a''''*, as shown

The portions *a'' a'''* of the frame are held into position by cross-bars *b b*, such cross-bars being made of sufficient breadth to allow of the passage of the rotating vertical shaft *c*, carrying the beating-wires *d d*. These beating-wires, which are fixed to the shaft *c*, are arranged in clusters of two, or pairs. This is done because it is found by experiment that a given number of wires arranged in pairs accomplish a better result and complete the work of beating the egg in a perceptibly shorter time than the same number of wires arranged singly—*i. e.*, at equal distances apart.

e is a sector-wheel, geared upon its face, and suspended from the depressed portion *f* of the horizontal bar *a''''*. This wheel *e* hangs a little one side of the center of the frame, so that its geared portion lies between the shaft *c* and guard-rod *a'''*. This guard-rod *a'''* forces the wheel to engage the pinion *h*, fixed to said shaft, and effectually prevents it ever becoming disengaged therefrom.

e' e' are finger-holes. By placing the thumb and finger in these two holes and pressing alternately with them reciprocating rotary motion is imparted to the sector-wheel *e* by means of the pinion *h*, and shaft *c* imparts similar motion to the beaters *d d*, accomplishing, as above stated, the best results.

Of course, the sector-wheel may be hung either side the central shaft. Care must be taken in the construction of the device to place the guard-rod *a'''* near enough to the wheel *e* to keep it in engagement with the pinion without, however, interfering with its freedom of action.

The hole usually occupied by the forefinger is commonly placed a trifle farther from the center than the one used by the thumb, although this is not absolutely necessary.

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

1. In an egg-beater, the combination, with the geared shaft which actuates the beating-wires, of a sector-wheel swinging from the frame and provided with one or more finger or thumb holes for imparting motion to such wheel, for the purpose specified.

2. The combination of the sector-wheel *e e'*, frame *a a''''*, having depression *f*, shaft *c*, provided with pinion *h*, and guard-rod *a'''*, substantially as and for the purpose set forth.

EDWARD MORSE.
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Witnesses:
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