

(No Model.)

2 Sheets—Sheet 1.

R. MORTON.

APPARATUS FOR WHIPPING AND CHURNING LIQUIDS.

No. 343,834.

Patented June 15, 1886.

Fig. 1.

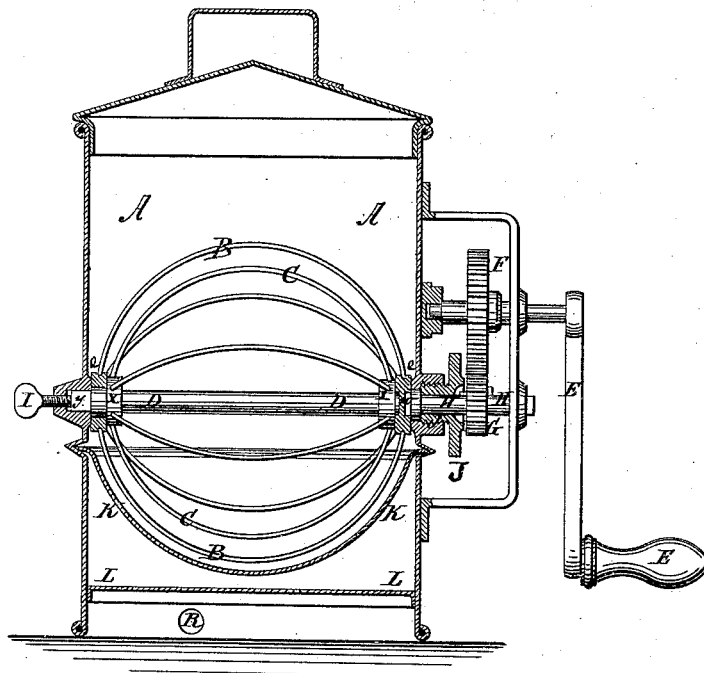
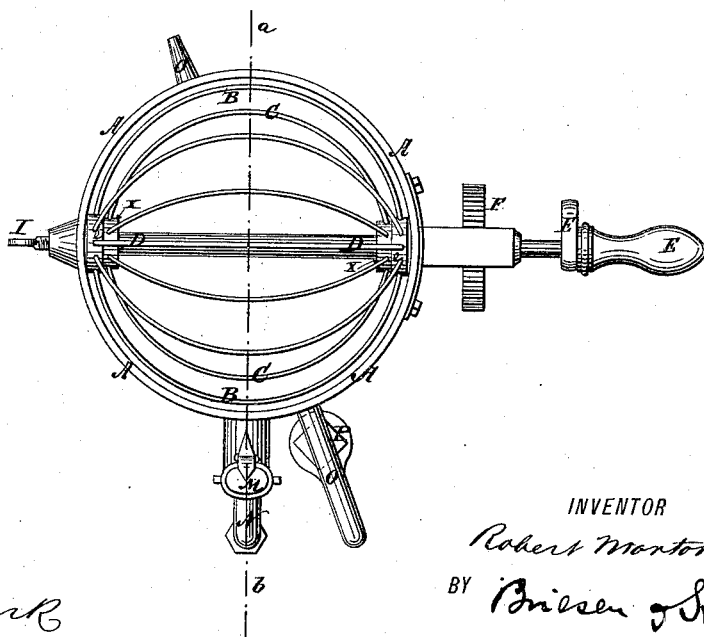


Fig. 2.



WITNESSES:

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Robert Morton

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Fig. 3.

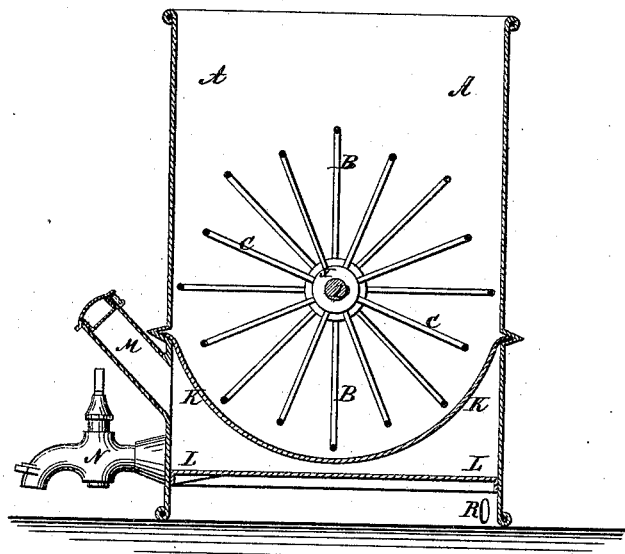
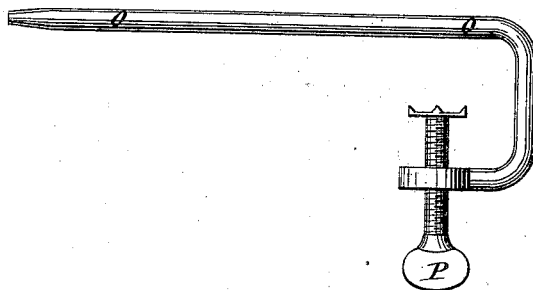


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ROBERT MORTON, OF WISHAW, COUNTY OF LANARK, SCOTLAND, ASSIGNOR
TO JOSEPH BAKER & SONS, OF LONDON, ENGLAND.

APPARATUS FOR WHIPPING AND CHURNING LIQUIDS.

SPECIFICATION forming part of Letters Patent No. 343,834, dated June 15, 1886.

Application filed December 11, 1885. Serial No. 1-5,362. (No model.) Patented in England March 25, 1876, No. 1,283.

To all whom it may concern:

Be it known that I, ROBERT MORTON, of Wishaw, in the county of Lanark, North Britain, have invented a new or Improved Apparatus for Whipping, Beating, or Churning Liquid or Semi-Liquid Substances, of which the following is a specification, reference being had to the accompanying drawings, wherein—

- 10 Figure 1 is a vertical section of the apparatus constructed in accordance with my said invention. Fig. 2 is a plan thereof with the cover removed; and Fig. 3, a vertical section at right angles to Fig. 1 and drawn upon the line *a b*, Fig. 2. Fig. 4 is a detail view of a part of the machine.

My said invention, which relates to a new or improved apparatus for whipping, beating, churning, or agitating liquid or semi-liquid substances, has for its object to more speedily and effectually perform these operations than obtains with apparatus hitherto employed for such purposes. A patent, numbered 1,283, was granted me in England for this invention March 25, 1876.

A is a case or vessel, provided at its interior with two beaters, B C, placed one within the other, and composed of curved or bent wires fixed at their ends in collars or disks. The collars or disks *x*, carrying the inner beater, C, are formed or fixed on a shaft, D, the outer beater, B, being carried loosely on collars *e e*, that are loose on the said shaft. The inner beater, C, is stationary, being held in position by a square or other suitably-shaped portion, *y*, formed at one end of the shaft D; but the outer beater, B, is capable of rotating, such motion being imparted to it by means of a handle, E, spur-wheel F, and pinion G, a square or other suitably-shaped portion, *w*, on one end of the shaft or axis H of the said pinion being entered into a similarly-formed recess in one of the collars or disks *e e* of the outer beater, as shown.

45 The beaters B and C are held in their posi-

tion in the casing A by a pinching-screw, I, at one end of the shaft D, and by a gland, J, screwed against a collar formed on the shaft H; or they may be held by other equivalent means.

In order that the fluid or semi-fluid being whipped, beaten, churned, or agitated by the rotation of the beater B may be kept at any desired temperature the case or vessel A is constructed with two bottoms, K and L, which inclose a space whereinto water, steam, or other medium capable of raising or lowering the temperature within the apparatus is admitted through the pipe M and withdrawn when desired by the cock or tap N. Holes or openings R are made at the lower end of the casing or vessel beneath the bottom L, as indicated in Figs. 1 and 3, through which the straight part of a clamp, O, (illustrated in detail at Fig. 4,) passes.

The clamp, which is bent at one end, so as to pass round and under the edge of any table or stand on which while in operation the apparatus is situated, is provided with a pinching-screw, P, to fix or hold the said apparatus in position; or any other equivalent means of holding the apparatus may be employed instead of this arrangement.

I claim—

1. The combination of the case A with the fixed shaft D, having squared part *y*, fixed beater C, rotary beater B, collars *e e*, shaft H, and gland J, all arranged as herein shown and described.

2. The combination of the case A, having double bottoms K and L, with the fixed shaft D, having squared part *y*, fixed beater C, rotary beater B, collars *e e*, shaft H, and gland J, all arranged as herein shown and described.

ROBERT MORTON.

Witnesses:

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