

H. A. SEIFKE.
 ROTARY MIXER.
 APPLICATION FILED APR. 10, 1912.

1,032,029.

Patented July 9, 1912.

Fig. 1.

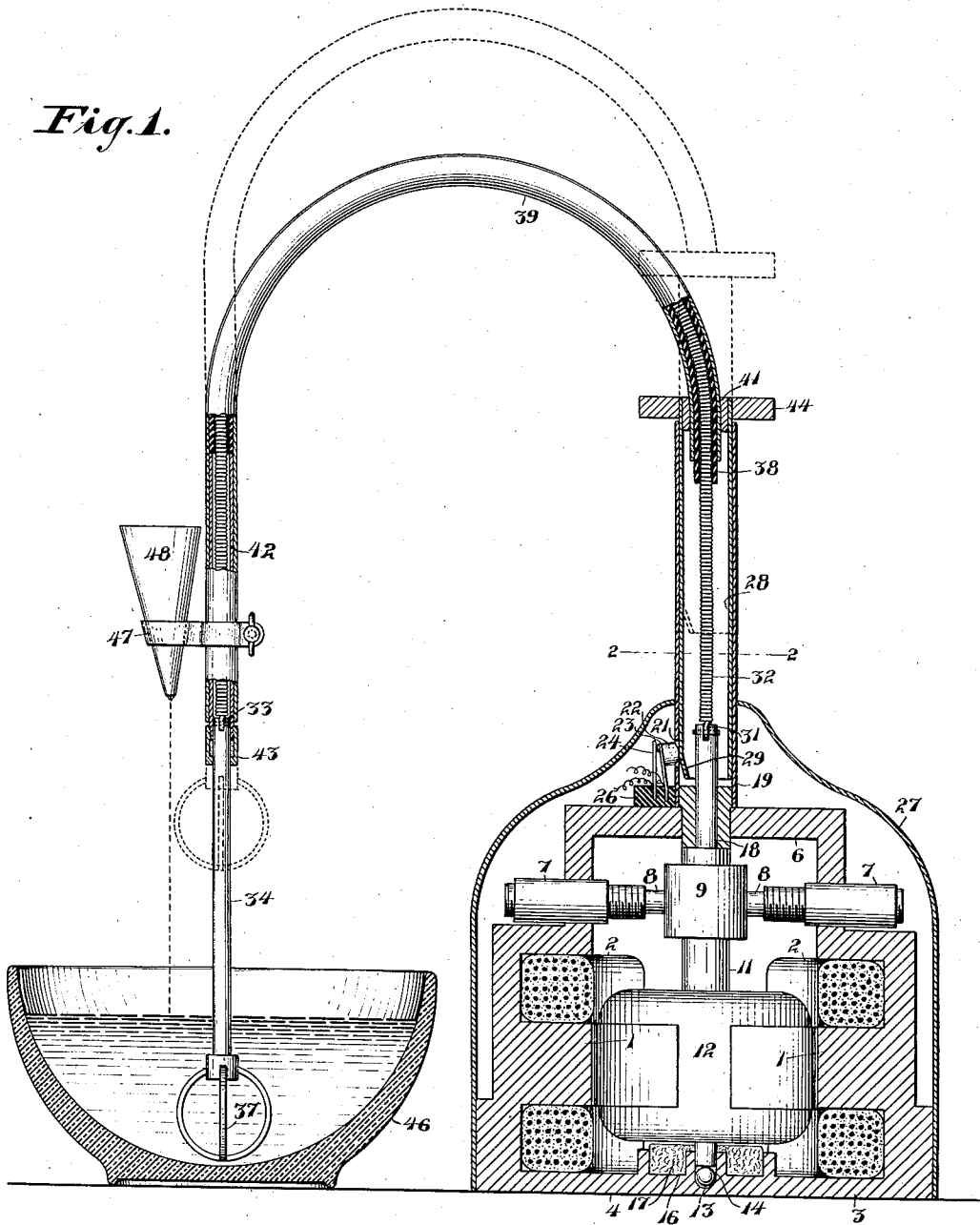
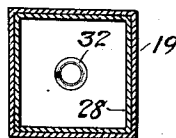


Fig. 2.



WITNESSES

H. C. Fiedner
W. B. Keating

INVENTOR

H. A. Seifke

BY

J. M. Wright

ATTORNEY

UNITED STATES PATENT OFFICE.

HERMAN A. SEIFKE, OF SAN FRANCISCO, CALIFORNIA.

ROTARY MIXER.

1,032,029.

Specification of Letters Patent.

Patented July 9, 1912.

Application filed April 10, 1912. Serial No. 639,830.

To all whom it may concern:

Be it known that I, HERMAN A. SEIFKE, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Rotary Mixers, of which the following is a specification.

The object of the present invention is to provide a machine of small size for mixing beverages, sauces, and other liquids, which will be convenient to manipulate and rapid and effective in its operation.

In the accompanying drawing, Figure 1 is a sectional view of my improved mixer, certain parts being shown in side elevation; Fig. 2 is an enlarged cross section on the line 2-2 of Fig. 1.

Referring to the drawing, 1 indicates the cores of the field magnets 2 of an electric motor 3, supplied with electric current from any suitable source, said cores being connected integrally at the bottom by a base 4 for the motor and at the top by a yoke 6, through which are passed fiber bushings 7, in which are screwed brushes 8 which contact with the commutator 9 on a vertical shaft 11 carrying the armature 12 and rotatably supported on a ball 13. Said ball is received within a socket 14 in the base and said shaft is surrounded by an annular groove 16 having therein absorbent material 17 containing oil. The shaft 11 has a bearing 18 contained in an aperture in a yoke 6, and extends within a vertical square tube or guide 19 surrounding the bearing 18 and supported upon the yoke 6, said tube having an aperture 21, through which projects from the outside a button 22 formed on the upper end of a spring contact 23, adapted to contact with another spring contact 24, both of said contacts 23, 24, being embedded at their lower ends in insulating material 26 and being in the circuit through the electric motor. Surrounding the working portions of the electric motor is a casing 27. Fitting closely within the square tube 19 and slidable therein is a square tube 28 open at its lower end and having a sloping lower portion 29 adapted in the movement of the tube 28 to press the button 22 outward so as to close the circuit through the electric motor and thus revolve its shaft. The upper end of said shaft is connected as shown at 31 to one end of a flexible shaft 32, the other end of which is connected, as shown at 33, to

the upper end of a rigid shaft 34. To the lower end of the rigid shaft 34 is secured a beater 37. Said shaft 32 is contained within a tube 38 of soft rubber, which is contained in a bent tube 39 of metal, one end of which is secured to a cap 41 which is secured to the upper end of the tube 28 and provided with a disk or handle 44 by which the inner tube 28 can be conveniently raised and lowered. In the other end of said bent tube 39 is screwed a straight tube 42, to the outer end of which is screwed a collar 43 fitting closely around the rigid shaft 34.

When the bent tube 39 is drawn to its upper limiting position, shown in dotted lines in Fig. 1, determined by the abutment of the beater 37 against the bottom of the collar 43, then since the tube 28 no longer presses the button 22 outwardly, the circuit through the motor is open and the motor shaft does not revolve. But when the bent tube 39 is depressed, as into a drinking glass or bowl, as shown at 46, then the sloping lower end of the tube 28, bearing against the button 22 presses it outwardly and closes the circuit through the motor and the motor shaft 11, flexible shaft 32 and rigid shaft 34 rotate, and the beater 37 agitates the mixture in the glass or bowl. It will be observed that this break is not closed until the beater arrives at the proper position for mixing the liquid.

Secured to the long arm of the bent tube 39 is a bracket 47 in which is supported a funnel-shaped dropper 48, so that liquid supplied thereto can drop into the glass or vessel and by the rotation of the beater can be thoroughly mixed with a liquid therein.

It will thus be seen that by my invention I provide a beater or mixer which may be started rotating by the mere depression of a tube which is necessary so that the beater may arrive at its proper place to effect the beating of the liquid in the glass or bowl, and can also be stopped by the mere raising of said beater from the glass or bowl.

Although the invention is intended primarily for the beating of liquids, it may be used in other ways, and I therefore claim the same for any use for which it may be applied.

I claim:—

1. The combination of an electric motor, a flexible shaft, one end of which is secured to an end of the motor shaft, a rotary device, operatively connected to the other end

of the flexible shaft, a bent tube surrounding said flexible shaft and longitudinally movable thereon, and a contact in the circuit of the electric motor arranged to be closed with
5 the movement of said tube.

2. The combination of an electric motor, a flexible shaft, one end of which is secured to an end of the motor shaft, a shaft, one end of which is connected to the other end
10 of the flexible shaft, a rotary device connected to the latter shaft, a fixed guide, a tube movable in the guide, a contact in the circuit of the electric motor arranged to be closed by the movement of the tube, a bent
15 tube movable with the first-named tube and surrounding said flexible shaft, and a rubber tube between the flexible shaft and the bent tube.

3. The combination of an electric motor, a flexible shaft, one end of which is secured to an end of the motor shaft, a beater shaft, one end of which is connected to the other end of the flexible shaft, a beater secured to
20 the beater shaft, a fixed guide, a tube movable within the guide, a contact in the circuit of the electric motor arranged to be closed by the movement of the tube, a U-shaped tube movable with the first-named
25 tube and surrounding said flexible shaft, and a rubber tube between the flexible shaft and the U-shaped tube.

4. The combination of an electric motor having a vertical shaft, a flexible shaft, one end of which is secured to an end of the motor shaft, a beater shaft, one end of which is
35

connected to the other end of the flexible shaft, a beater secured to the beater shaft, a square tube connected to the electric motor casing, a square tube fitting closely, and
movable vertically, within the first-named
40 tube, a contact in the circuit of the electric motor arranged to be closed by the downward movement of said latter tube, a bent tube movable vertically with said square
45 tube and surrounding said flexible shaft, and a rubber tube between the flexible shaft and the bent tube.

5. The combination of an electric motor having a vertical shaft, a flexible shaft one end of which is secured to an end of the motor shaft, a beater shaft, one end of which
50 is connected to the other end of the flexible shaft, a beater secured to the beater shaft, a square tube connected to the electric motor casing, a square tube fitting closely, and
55 movable vertically, within the first-named tube, a contact in the circuit of the electric motor arranged to be closed by the downward movement of said latter tube, a U-shaped tube movable vertically with said
60 square tube and surrounding said flexible shaft, and a rubber tube between the flexible shaft and the U-shaped tube.

In testimony whereof I have hereunto set my hand in the presence of two subscribing
65 witnesses.

HERMAN A. SEIFKE.

Witnesses:

FRANCIS M. WRIGHT,
D. B. RICHARDS.