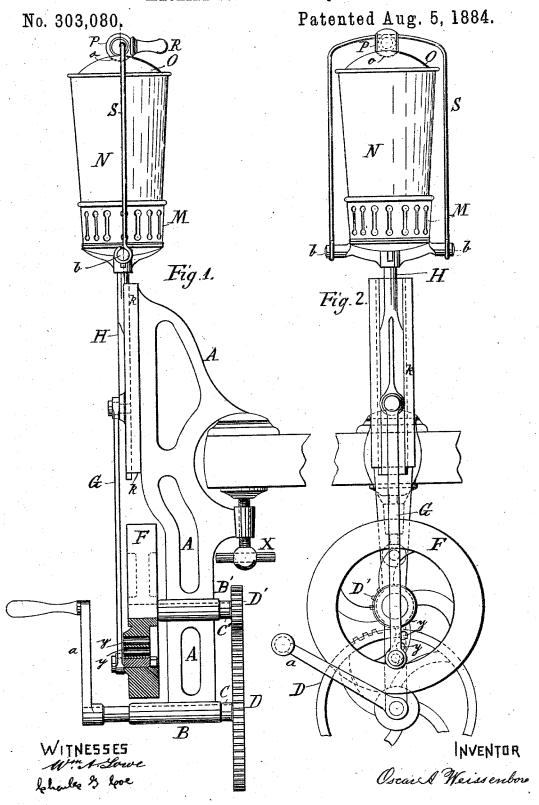
## O. A. WEISSENBORN.

## MACHINE FOR MIXING LIQUIDS.



## UNITED STATES PATENT OFFICE.

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## MACHINE FOR MIXING LIQUIDS.

SPECIFICATION forming part of Letters Patent No. 303,080, dated August 5, 1884.

Application filed May 22, 1884. (No model.)

To all whom it may concern:

Be it known that I, OSCAR A. WEISSEN-BORN, a citizen of the United States, residing at Jersey City, county of Hudson, and State of New Jersey, have invented a new and useful Machine for Mixing Liquids, of which the following, taken in connection with the accompanying drawings, is a full, clear, and accurate description.

The object of my invention is to produce a machine for the purpose of mixing, shaking, or beating any liquid, or combination of liquids, or any compound requiring the thorough mixing, shaking, or beating of its ingredients.

My machine insures a thorough and rapid mixing of the liquids or compounds, thus saving time and labor.

In the drawings, Figure 1 represents a side view of my invention. Fig. 2 shows a front

20 view of the same. A is a frame, of iron or other suitable material, provided with two bearings, B and B',

on which bearings are mounted the shafts C and C'.

Secured to the shaft C is the gear-wheel D, which meshes into the smaller gear-wheel, D', mounted on the shaft C'. Motion is imparted to the gear-wheel D by means of the crank-handle a, which motion is communicated to the gear-wheel D' by the gear-wheel D. The motion of the gear-wheel D' is in turn communicated to the fly-wheel F, which is also mounted on the shaft C'.

Attached to the fly-wheel F is the rod G, 35 the upper end of which is secured to a slide, H, which runs up and down in the guide K. The upper part of the slide H is provided with a cup or receptacle, M, adapted to receive the glass or other holder, N, containing the liquid material or ingredients to be mixed or shaken. It will be seen that the rotary motion of the fly-wheel F is very rapid, and this motion is converted into a rapid up-and-down motion of the slide H into the guide K, which slide H
is connected to the fly-wheel F by means of
the connecting-rod G. This rapid motion of

the slide H insures the thorough agitation, mixing, and beating of the contents of the glass or holder N, containing the liquid mate-50 rial or ingredients to be mixed.

In order to prevent the contents of the vessel or holder N from spilling out, I use a cover, O, having a concavity or indentation, o, in its center, into which fits the ball-like portion P of the handle R. This handle is mounted on 55 a wire, S, or other suitable material, the ends of which are secured to the projections b b. By turning the handle R the ball-like portion P presses into the concave portion o of the cover O, and holds it firmly in position over 60 the glass or vessel N, thus preventing any spilling or loss of contents of the vessel.

The distance which the slide is to travel may be easily regulated according to the wish of the operator by the sockets or holes y y, in 65 which the pin of the connecting-rod G may be placed. (See Fig. 2.)

This whole machine is attached to any suitable place, as a bar, table, or bench, it being held firmly in place by the screw X.

Having thus described my invention, what I claim, and desire to secure by Letters Patent,

1. In a machine for mixing, shaking, or beating liquids or a combination of liquids, 75 the combination of a glass or proper vessel placed within a receptacle or holder attached to a slide working in a guide, and connected with a fly-wheel mounted on a shaft, said flywheel being worked by a gear-wheel mounted 80 on the same shaft, and meshing into another gear-wheel mounted on a shaft.

2. In a machine for mixing liquids, the combination of a glass or proper vessel containing the liquids or materials to be mixed or shaken, 85 and a holder for the glass or vessel, provided with a cover having a cavity or indentation, into which cover a handle provided with a ball-like portion mounted on a wire or other suitable material is arranged to press, sub- 90 stantially as described.

3. In a machine for mixing, shaking, or beating liquids, the combination of a glass or other proper vessel containing the liquids or materials to be mixed, provided with a cover 95 having a cavity or indentation, into which a handle provided with a ball-like part and mounted on a wire or other suitable material is arranged to press, with a receptacle or holder attached to a slide working in a guide and 100 wheel mounted on a shaft.

4. In a machine for mixing, shaking, or beating liquids, the combination of a glass or other proper vessel containing the liquids or materials to be mixed, provided with a cover having a cavity or indentation, into which a handle provided with a ball-like part and the materials of a wire or other suitable materials. 10 mounted on a wire or other suitable material is arranged to press, with a receptacle or

connecting with a fly-wheel mounted on a holder attached to a slide working in a guide shaft, said fly-wheel being worked by a gear- and connecting with a fly-wheel mounted on a shaft, said fly-wheel being worked by a gear-wheel mounted on a shaft, the said shafts and 15 attachments being mounted on a proper frame.

In witness whereof I have hereunto set my hand this 17th day of May, 1884.

OSCAR A. WEISSENBORN.

In presence of— CHARLES G. COE, R. T. VAN ROSKERCK.