

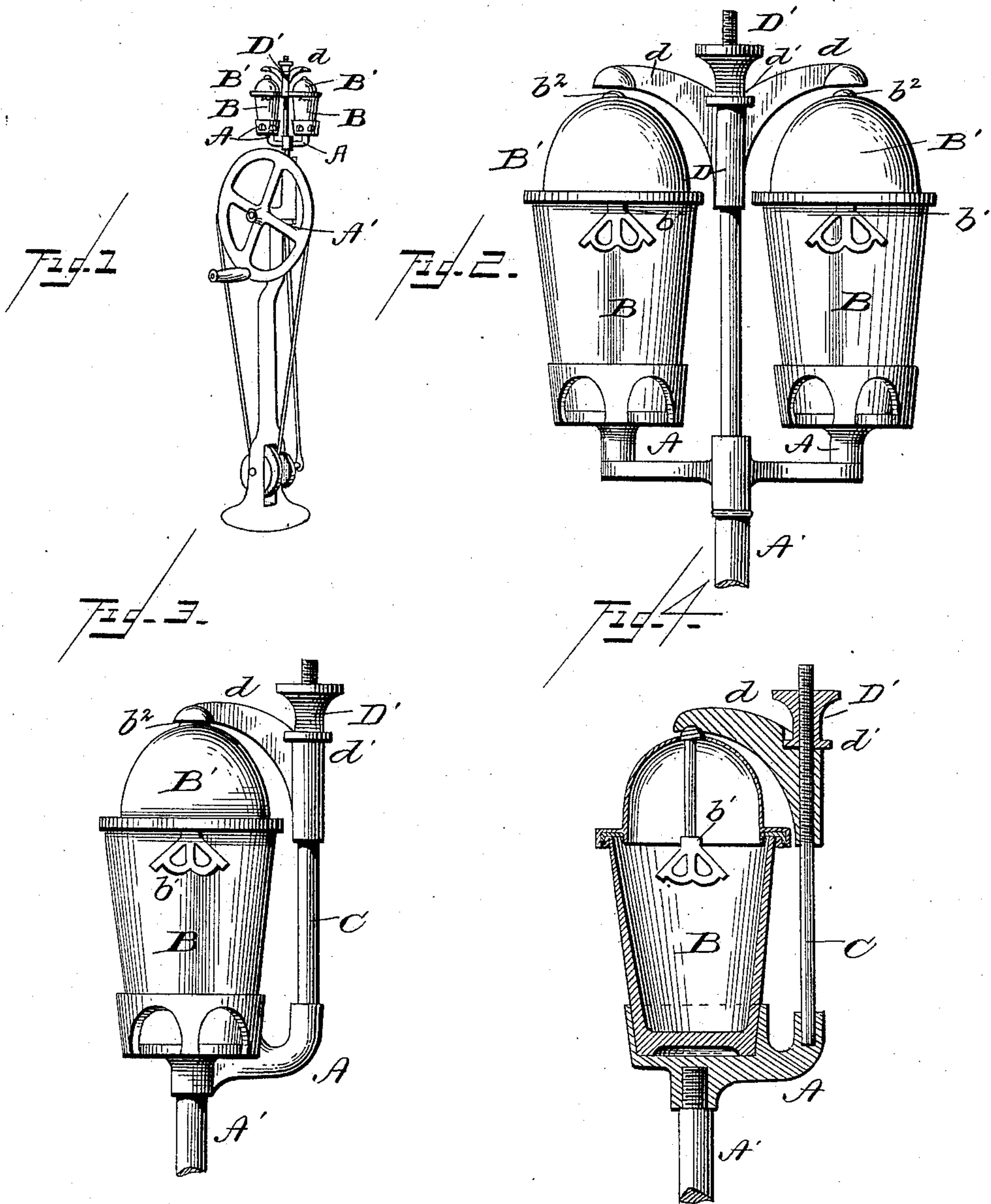
(No Model.)

H. H. FULTON & W. F. CORNELIUS.

LIQUID MIXER.

No. 387,634.

Patented Aug. 14, 1888.



WITNESSES.

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UNITED STATES PATENT OFFICE.

HARMON H. FULTON AND WILBER F. CORNELIUS, OF INDIANAPOLIS,
INDIANA, ASSIGNORS TO DAVID L. WHITTIER, OF SAME PLACE.

LIQUID-MIXER.

SPECIFICATION forming part of Letters Patent No. 387,634, dated August 14, 1888.

Application filed December 5, 1887. Serial No. 257,010. (No model.)

To all whom it may concern:

Be it known that we, HARMON H. FULTON and WILBER F. CORNELIUS, citizens of the United States, residing at Indianapolis, in the
5 county of Marion and State of Indiana, have invented certain new and useful Improvements in Liquid-Mixers, of which the following is a specification.

The principal object of our said invention is
10 to provide a clamp or fastening for the covers of the vessels used in liquid mixers or shakers, which may be adjusted to suit the height of any glass or vessel, and which may be quickly and conveniently operated.

15 A second object is to provide a means for assisting in agitating the liquid inside the glass, all of which will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings,
20 which are made a part hereof, and in which similar letters of reference indicate similar parts, Figure 1 is a perspective view of a machine embodying our said invention; Fig. 2, a side elevation of the glasses and immediately
25 adjacent parts to which our said invention relates on an enlarged scale; Fig. 3, a view similar to Fig. 2, except that the parts are shown constructed for use with a single glass instead of with two; and Fig. 4 a central vertical section of Fig. 3.

30 In said drawings, the portions marked A represent the glass-holder; B, the glass; C, a rod on which our improved clamp is mounted, and D said clamp.

35 The frame-work of this machine and the mechanism for driving it form no part of our present invention, and being simple and easily understood will not be further described herein.

The glass-holder A is mounted on the top of
40 the reciprocating rod A', by which it may be rapidly driven. It consists of suitable cup-shaped receptacles supported on each end of a transverse arm attached to the top of said rod. The construction shown in Figs. 3 and 4, as
45 will be readily understood, is the same as that shown in Figs. 1 and 2, except that the parts are adapted to accommodate a single glass only.

Each glass B is an ordinary glass, and may
50 be of any height or size desired. It is provided with a cap, B', which fits over the same,

and is provided with a rubber ring, *b*, which rests directly upon the edge of the glass when the cover is in position thereon. It is also provided internally with an agitating device, *b'*, supported by a downwardly-projecting rod
55 attached to the top of the cover, which device serves to assist in agitating the liquids when the machine is in operation, as will be readily understood.

The rod C is screwed into a suitable seat in
60 the glass-support A alongside the glass, and is screw-threaded at its upper end.

The clamp D consists of a sleeve mounted loosely on the rod C, and provided with an outwardly-projecting arm or arms, *d*, which
65 are arranged to bear directly upon the top of the cover B' of each glass when desired. At the top of said sleeve is formed a notch or recess extending into the top part of the arms *d*, and a thumb-nut, D', provided with a circum-
70 ferential flange, *d'*, is mounted upon the screw-threaded end of the rod C, said flange *d'* being arranged to enter said notch and support said part in any desired position, and at the same time permit it to swing freely on said rod C. 75

The operation of our invention is as follows: The glass filled with the liquid is placed in position in the glass-holder and the cover put in position thereon, when the clamping device D is swung around to bring one of the arms *d* over
80 the top of said cover, and the thumb-nut D' is then screwed down until said cover is tightly secured in place. A small projection, *b*², is preferably provided in the center of said cover on its top, and a cup-shaped socket is made in
85 the end of the arm *d* and arranged to fit over said projection, thereby insuring a perfect adjustment of the parts and an even pressure on all the portions of the cover. When it is desired to remove the glass, the thumb-nut is
90 simply turned back until the clamp is released, and the device is swung to bring the arms *d* out of the way of the glass and permit it to be easily removed. During the operation the agitating device *b'* in the inside of the cover serves
95 to make the mixing and agitating of the liquid within the glass more perfect by reason of constantly interfering with its motion, as will be readily understood. By this means it is possible to use a glass of any height or size 100

with the machine and clamp its cover tightly in position, and a more perfect agitation of the liquid is accomplished.

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

In a liquid-mixer, the combination, with a reciprocating rod, of a glass-holder mounted on the top of said rod, a glass in said glass-holder, 10 a cover to said glass, an agitating device secured in the top of said cover, a vertical rod mounted on the glass-holder and extending up alongside the glass, screw-threaded on its upper end, a clamp loosely mounted on said rod

and provided with an arm arranged to bear 15 upon the top of said cover, and a nut engaging the screw-threaded end of the vertical rod provided with a ring to engage a notch in said clamp, substantially as described.

In witness whereof we have hereunto set our 20 hands and seals, at Indianapolis, Indiana, this 30th day of November, A. D. 1887.

HARMON H. FULTON. [L. S.]
WILBER F. CORNELIUS. [L. S.]

Witnesses:

E. W. BRADFORD,
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