

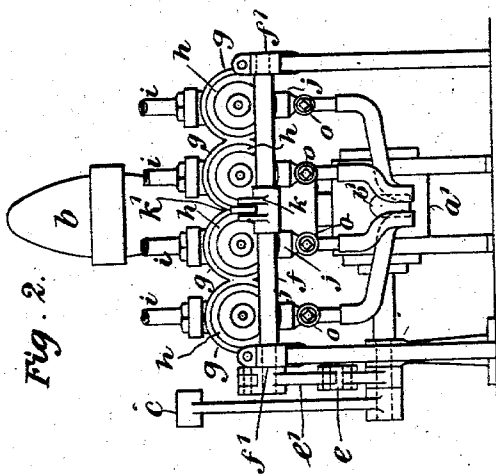
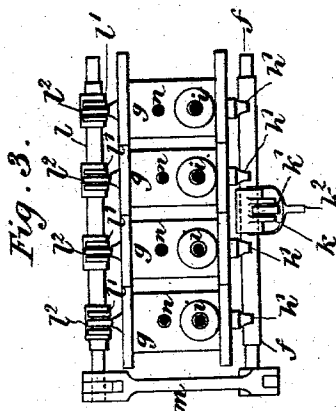
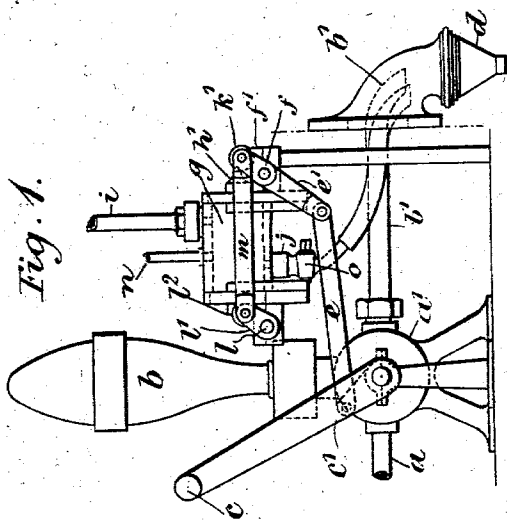
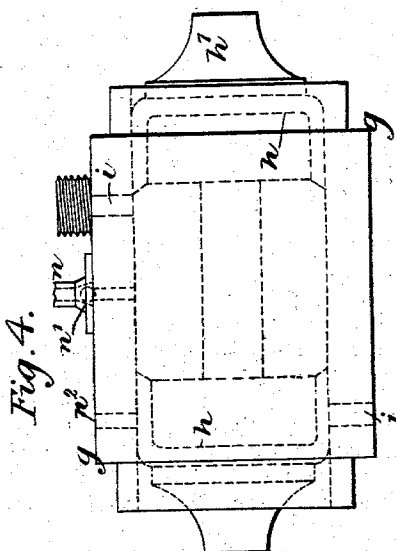
No. 730,286.

PATENTED JUNE 9, 1903.

L. J. MOSER.
MEANS FOR MIXING AND DELIVERING LIQUIDS.

APPLICATION FILED JAN. 2, 1903.

NO MODEL.



Witnesses.

A. M. Perkins.
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UNITED STATES PATENT OFFICE.

LESLIE JAMES MOSER, OF LONDON, ENGLAND, ASSIGNOR TO THE GENERAL AUTOMATIC DELIVERY COMPANY, LIMITED, OF LONDON, ENGLAND.

MEANS FOR MIXING AND DELIVERING LIQUIDS.

SPECIFICATION forming part of Letters Patent No. 730,286, dated June 9, 1903.

Application filed January 2, 1903. Serial No. 137,509. (No model.)

To all whom it may concern:

Be it known that I, LESLIE JAMES MOSER, engineer, a subject of the King of Great Britain, residing at Norfolk House, Laurence Pountney Hill, in the city of London, England, have invented a certain new and useful Improved Means for Mixing and Delivering Liquids, of which the following is a specification.

10 This invention relates to improved means for mixing and delivering liquids, and is especially designed to furnish a machine for delivering aerated beverages flavored with one of a number of syrups or the like, which machine shall be both cheap and of simple construction.

The machine comprises a measuring vessel for aerated water, a delivery-spout, and a valve operated by a lever-arm to admit aerated water to the vessel and to discharge the vessel through the spout. The movement of the lever-arm rocks a shaft in front of a series of measuring-valves for syrups or flavorings. Sliding on the shaft is an arm which can be moved by a handle in the front of the machine, so that it comes opposite to and in position to operate any one of the valves. These valves are in the form of double pistons on a stem covering inlet and outlet ports in a cylinder. A tube fitted, if desired, with a regulating-valve leads from the outlet-port into the delivery-spout. By this means the syrup is delivered during the whole time the water is flowing, and thus a most intimate mixture is obtained.

Figure 1 of the drawings is a side elevation, Fig. 2 a front view, and Fig. 3 a part plan, of such an apparatus. Fig. 4 is a side view, to a larger scale, of one of the syrup-measuring valves.

a is a pipe supplying aerated water to the valve a' , through which it flows in the normal position of the valve to the vessel b . When, however, the handle c is pulled over by an attendant, the valve a' , which may be of any suitable construction, cuts off the supply and allows the water in b to flow out by the pipe b' to the spout d .

Fast with the handle c is an arm c' , linked by a link e to a lever e' on the rock-shaft f , supported in bearings f' and extending in

front of a series of measuring-cylinders g , in which move double pistons h , so arranged that normally the space between them is open to a supply-pipe i and the outflow-pipe j is closed. On the shaft f slides an arm k , carrying a roller k' , adapted to engage one or other of the projections h' on the front of the pistons h . This arm k can be readily moved along the shaft into position to operate the required valve by means of a handle k^2 . When, therefore, any required beverage is desired, the arm k is moved opposite the proper projection h' and the handle c is pulled. This moves the piston h in to close the supply i and allow the syrup contained between the pistons to flow down the pipe j to the spout d , where it mingles with the water from the vessel b . As the handle c moves back to its normal position a rock-shaft l at the rear of the cylinders g and having arms l' and rollers l^2 upon it is rocked by a link m , so as to restore to its forward position whichever piston h has been operated.

n is an air-valve closed by a ball-float n' . An additional air-inlet n^2 , closed by the rear piston, may be provided.

If desired, regulating-valves o may be provided in the tubes j .

Should aerated water only (without flavoring) be required, it can be obtained by placing the arm k between the cylinders g .

What I claim is—

1. The combination of a measuring vessel, a discharge-pipe, a valve between the pipe and the vessel, a handle operating the valve, a rock-shaft rocked by the handle, an arm on the shaft, and devices operated by the arm for supplying a measured quantity of liquid to the discharge-pipe.

2. The combination of a measuring vessel, a discharge-pipe, a valve between the pipe and the vessel, a handle operating the valve, a rock-shaft rocked by the handle, an arm slidable along the shaft, and a plurality of devices adapted to be operated by the arm for supplying a measured quantity of liquid to the discharge-pipe.

3. The combination of a measuring vessel, a discharge-pipe, a valve between the pipe and the vessel, a handle operating the valve, a rock-shaft rocked by the handle, an arm on

the shaft, an additional measuring vessel, a valve in this vessel operated by the arm, means for supplying liquid to this vessel and a pipe leading from this vessel to the discharge-pipe.

5 4. The combination of a measuring vessel, a discharge-pipe, a valve between the pipe and the vessel, a handle operating the valve, a rock-shaft rocked by the handle, an arm
10 slidable along the shaft, a series of measuring vessels valves in them adapted to be operated by the arm, means for supplying liquid to these vessels, and a series of pipes leading from them to the discharge-pipe.

15 5. The combination of a measuring vessel, a discharge-pipe, a valve between the pipe and the vessel, a handle operating the valve, a rock-shaft rocked by the handle, an arm on the shaft, an additional measuring vessel, a
20 valve in this vessel operated by the arm, means for supplying liquid to this vessel, a pipe leading from this vessel, to the discharge-pipe, and means operated by the handle for restoring the valve in the measuring vessel
25 to its normal position.

6. The combination of a measuring vessel, a discharge-pipe, a valve between the pipe and the vessel, a handle operating the valve, a rock-shaft rocked by the handle, an arm
30 slidable along the shaft, a series of measuring vessels, valves in them adapted to be operated by the arm, means for supplying liquid to these vessels, a series of pipes leading from them to the discharge-pipe, and means
35 operated by the handle for restoring the valves to their normal position.

7. The combination of a measuring vessel, a discharge-pipe, a valve between the pipe and the vessel, a handle operating the valve, a rock-shaft rocked by the handle, an arm
40 slidable along the shaft, a series of measuring vessels, valves in them adapted to be operated by the arm, means for supplying liquid to these vessels, a series of pipes leading from them to the discharge-pipe, a second rock-
45 shaft rocked by the handle and a series of arms on this rock-shaft engaging the valves and restoring them to their normal position.

8. The combination of a measuring vessel, a discharge-pipe, a valve between the pipe
50 and the vessel, a handle operating the valve, a rock-shaft rocked by the handle, an arm slidable along the shaft, a series of measuring vessels, valves in them adapted to be operated by the arm, means for supplying liquid
55 to these vessels, a series of pipes leading from them to the discharge-pipe and regulating-valves in these pipes.

9. The combination of a measuring vessel, a discharge-pipe, a valve between the pipe
60 and the vessel, a handle operating the valve, a series of measuring vessels, a double piston-valve in each of these vessels, a pair of rock-shafts rocked by the handle, an arm slidable
65 along one of the rock-shafts and adapted to actuate the valves and a series of arms on the other shaft adapted to restore the valves to their normal position.

LESLIE JAMES MOSER.

Witnesses:

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