

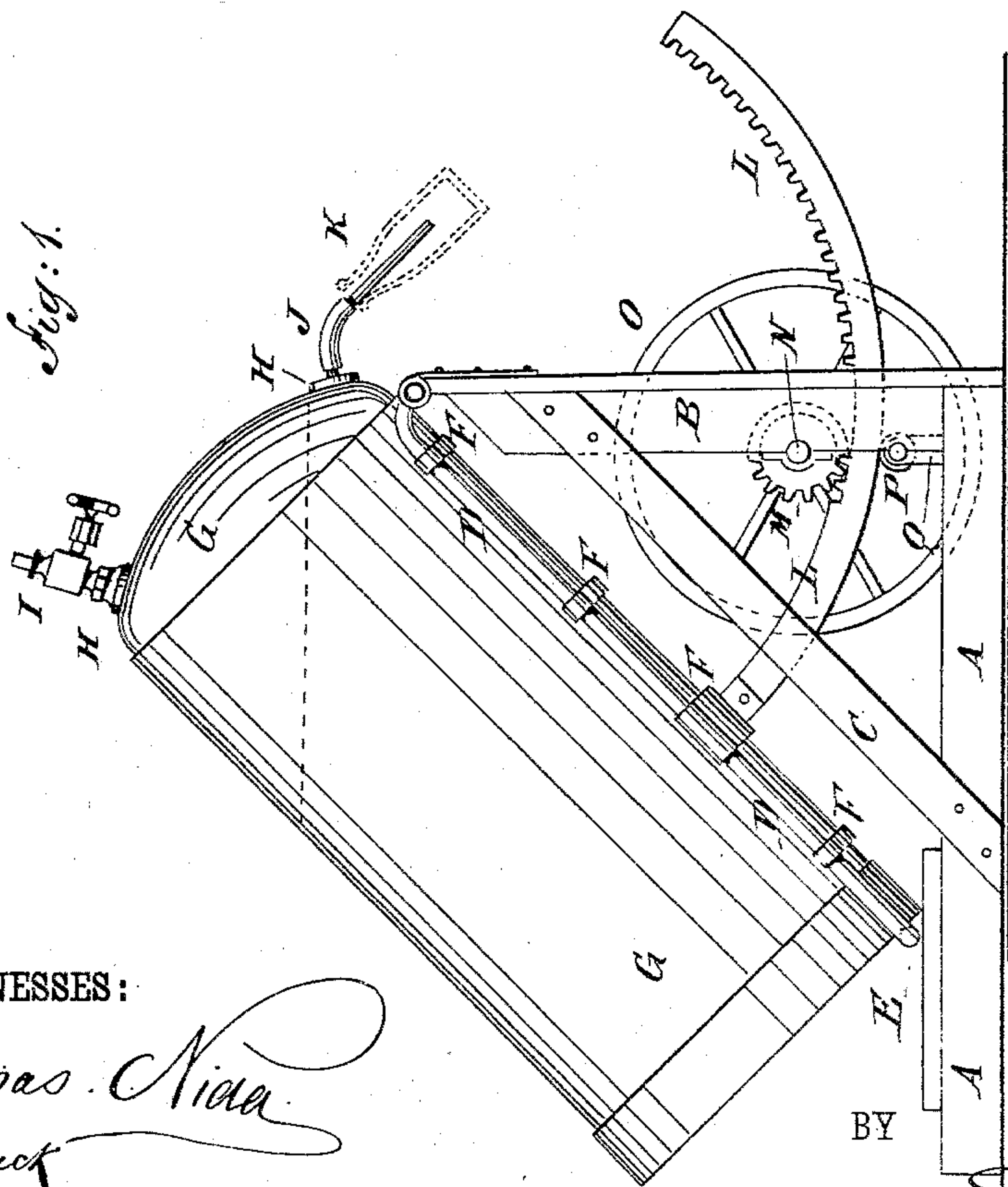
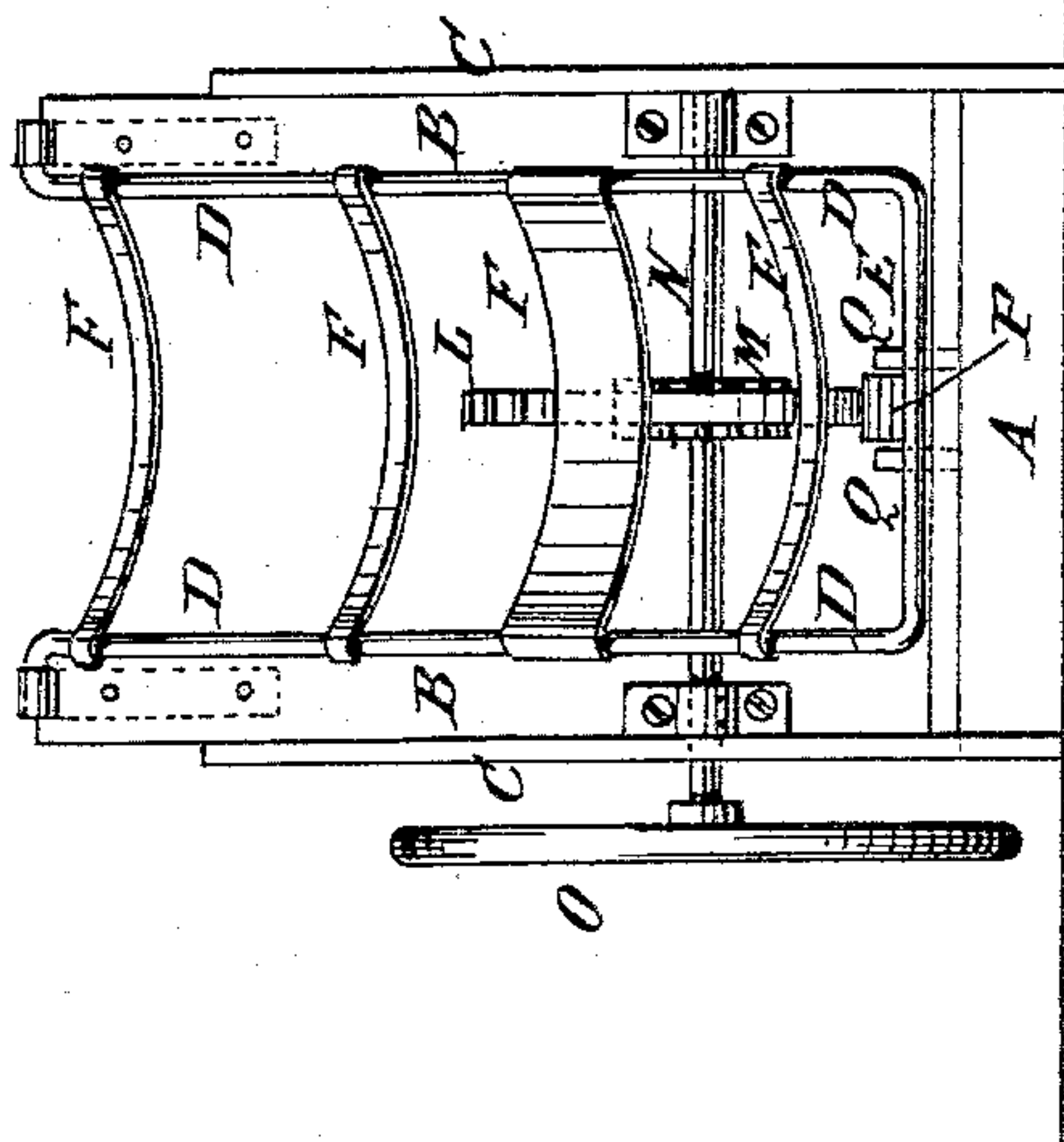
(No Model.)

A. WERNER.

APPARATUS FOR FILLING BOTTLES WITH HIGHLY AERATED LIQUIDS
WITHOUT PRESSURE.

No. 323,612.

Patented Aug. 4, 1885.



WITNESSES:

WITNESSES:
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UNITED STATES PATENT OFFICE.

AUGUST WERNER, OF NEW YORK, N. Y.

APPARATUS FOR FILLING BOTTLES WITH HIGHLY-AERATED LIQUIDS WITHOUT PRESSURE.

SPECIFICATION forming part of Letters Patent No. 323,612, dated August 4, 1885.

Application filed April 25, 1885. (No model.)

To all whom it may concern:

Be it known that I, AUGUST WERNER, of the city, county, and State of New York, have invented a new and Improved Apparatus for
5 Filling Bottles with Highly-Aerated Liquids without Pressure, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification,
10 in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side elevation of my improved apparatus, illustrating its use. Fig. 2 is a front
elevation of the same.

15 The object of this invention is to facilitate the bottling of highly-aerated liquids and promote convenience in conducting said operation.

20 The invention consists in the construction and combination of various parts of the apparatus, as will be hereinafter fully described and then claimed.

A represents the base of the apparatus, to one end of which are attached the lower ends
25 of two uprights, B. The uprights B are strengthened in place by inclined braces C, the lower ends of which are attached to the middle parts of the side edges of the base A, and their upper ends are attached to the up-
30 per parts of the outer sides of the uprights B.

To the upper ends of the uprights B are hinged the upper ends of two bars, D, the lower ends of which are connected by a cross-
35 bar, E, which may be formed in one piece with the said side bars, or may be formed separate and attached to them. The bars D are further connected by four (more or less) cross-bars or straps, F, which are curved to receive the fountain G, a cask, or other vessel, the
40 straight or bottom cross-bar, E, serving as a foot to keep the said fountain in place.

The fountain G is made the same as ordinary fountains for aerated liquids, except that it has two openings, H, in its upper end, both of
45 which can be provided with stop-cocks I.

In the drawings, one of the openings H is shown provided with a stop-cock, I, and the other with a short rubber tube, J, having a
50 nozzle, K, of celluloid or other suitable material, attached to its outer end, and which is made of such a length as to reach nearly to the bottoms of the bottles to be filled.

To one of the lower curved cross-bars of the frame or cradle D E F is attached the end of a rack-bar, L, which is curved in the arc of a
55 circle, and has teeth formed in its concave side to mesh into the teeth of the pinion-wheel M, attached to the shaft N. The shaft N revolves in bearings attached to the uprights B, and to one of its ends is attached a hand-
60 wheel, O, for convenience in turning the pinion-wheel M.

The curved rack-bar L is held in gear with the pinion-wheel M by the roller P, against which the convex side of the said rack-bar
65 rests, and which is journaled to supports Q, attached to the base A.

In using the apparatus the fountain G is charged with an aerated liquid in the ordinary manner, and is then placed in a cooling-room
70 to cause the liquid to absorb the greatest possible amount of the gas. The fountain G is then placed upon the cradle D E F, and the stop-cocks I are opened to allow the unabsorbed gas to escape, and one of the said stop-
75 cocks is replaced by the rubber tube J and nozzle K. The hand-wheel O is then operated to incline the cradle D E F and fountain G to such an angle that the water-line of the contents of the said fountain will be so much
80 above the opening H, to which the rubber tube J is attached, that the aerated liquid will be forced by its own gravity through the tube J and nozzle K into a bottle held over the said
85 nozzle, as indicated in dotted lines in Fig. 1. When the bottle is filled the operator, by compressing the rubber tube J with his fingers, stops the outflow of the liquid while the filled
90 bottle is being removed and replaced by an empty bottle, the water-line of the contents of the fountain being kept all the time at the necessary height above the discharge-opening H by turning the hand-wheel O.

Having thus fully described my invention, I claim as new and desire to secure by Letters
95 Patent—

1. An apparatus for filling bottles with highly-aerated liquids without pressure, constructed substantially as herein shown and described, and consisting of the stationary
100 frame A B C, the cradle D E F, hinged to the said frame and disposed obliquely and wholly to one side of said frame, and the curved rack-bar L, connected to said cradle near its lower

end, pinion-wheel M, and hand-wheel O, for adjusting the said cradle, as set forth.

2. The combination, with the cradle D E F, hinged to the stationary frame A B C, and
5 provided with an adjusting rack-bar, said cradle being disposed obliquely and wholly to one side of said frame, and said rack-bar being connected to said cradle near its lower
end, pinion-wheel and hand-wheel L M O, of
10 the fountain G, having two openings, H, in

its upper end, one provided with a stop-cock, I, and the other provided with a rubber tube, J, having rigid nozzle K, substantially as herein shown and described, whereby highly-aerated liquids can be bottled without pressure, as set forth. 15

AUGUST WERNER.

Witnesses:

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