

W. GEE.

Syrup Devices for Soda-Fountains.

No. 134,880.

Patented Jan. 14, 1873.

Fig: 1

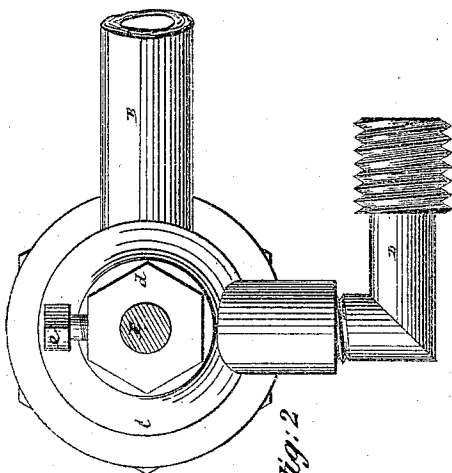
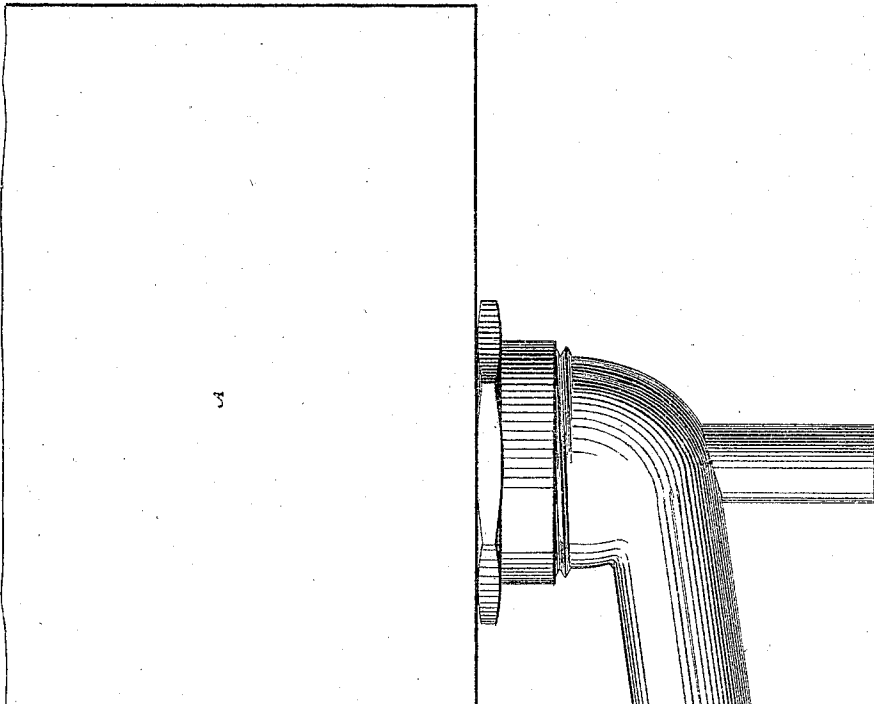
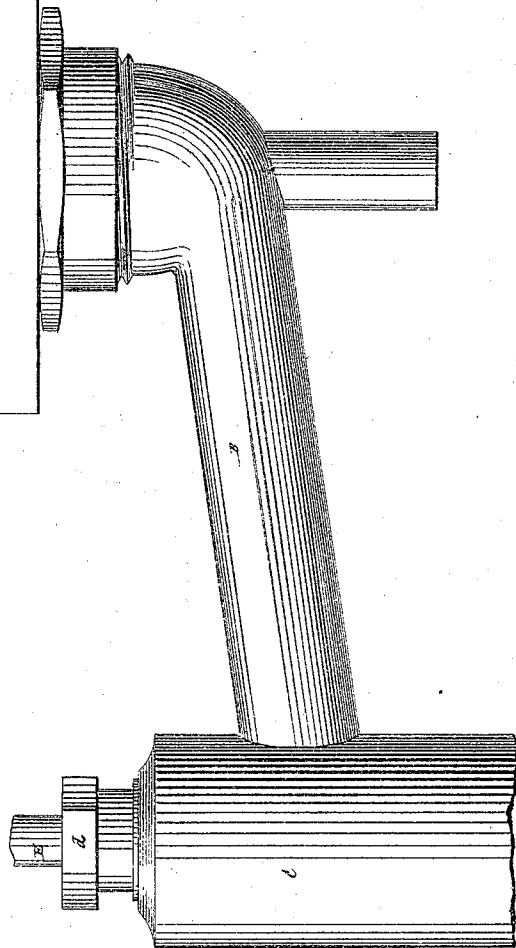


Fig: 2



Witnesses:
Geo. Harnes
Fred. Duerck

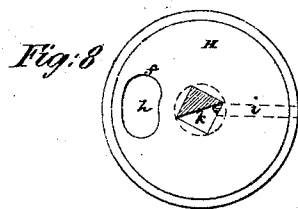
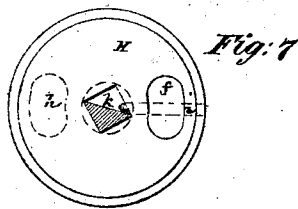
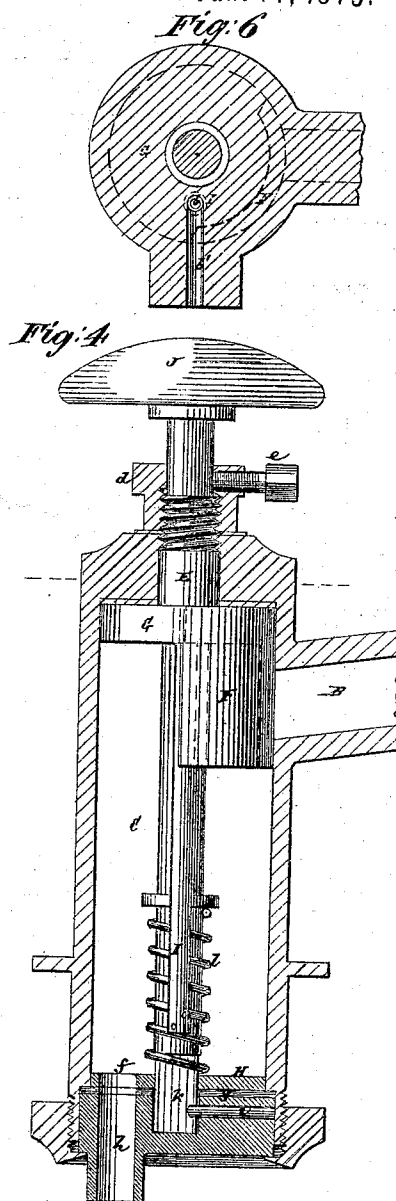
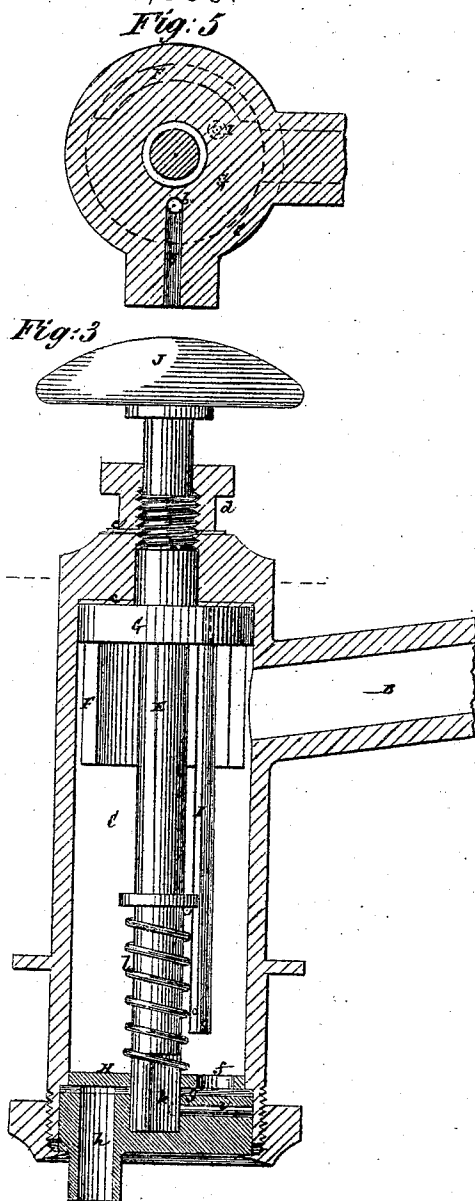
William Gee

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2 Sheets--Sheet 2.

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UNITED STATES PATENT OFFICE.

WILLIAM GEE, OF NEW YORK, N. Y.

IMPROVEMENT IN SIRUP DEVICES FOR SODA-FOUNTAINS.

Specification forming part of Letters Patent No. 124,880, dated January 14, 1873.

To all whom it may concern:

Be it known that I, WILLIAM GEE, of the city, county, and State of New York, have invented a new and useful Improvement in Siruping Devices for Soda Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 is a side elevation, and Fig. 2 a plan, of the whole device; Figs. 3 and 4 represent sectional elevations in part, with the valves in different working positions; Figs. 5 and 6, transverse sections at the lines *x x*; and Figs. 7 and 8, top views of the lower valve in reversed positions relatively to a general outlet.

Similar letters of reference represent corresponding parts.

My invention consists in a novel construction of cock and sirup-measuring chamber, arranged for operation in relation with a sirup-supply pipe, soda-water orifice, and general outlet for dispensing flavored soda-water direct from the fountain, whereby the operation of a single valve-stem controls, in a simple and effective manner, the mixture of the soda-water with the sirup before passing to the glass or tumbler, and the sirup is expelled by the water without an air vent or tube.

A separate measuring-cock, as above referred to, is used for each different sirup or flavoring mixture, and connects with a separate sirup can or vessel; but a single soda-reservoir suffices for all of the cocks, each of which may sustain its own sirup-can.

Referring to the accompanying drawing, A represents a sirup can or tank, which may be supported in a removable manner through a screw-and-nut connection by the leg or pipe B that supplies the measuring-chamber C of the cock with sirup. Each sirup-can, containing its own particular sirup, may be thus supported by its respective cock, thereby doing away with racks or frames for the cans. These cans may be arranged side by side at any suitable distance apart, and they, as well as the cocks, be under cover of the main case or stand, excepting at the general outlet from each cock. The soda-water may be supplied

from a single reservoir by a main pipe connected by branches D with each cock. The plug portion of the cock is composed of a stem, E, having valves or valvular portions F G fast to it within the upper portion of the sirup-measuring chamber, and having connected with it, at the bottom of said chamber, on the inside thereof, a general discharge-valve, H. The valve F is a lateral one, and may be composed of a segment or sweep to open and close, as required, the sirup-supply pipe B, while the valve G occupies a concentric relation, and is formed of a disk to open and close the soda-water supply from the branch D, said disk having a downward discharge-pipe, I, which, as the stem E is turned, is put into or out of line with an orifice, *b*, in the head of the measuring-chamber C, such orifice connecting by a branch orifice, *b'*, with the soda-water supply branch D. These valves F and G are so arranged in relation with each other and the openings or passages they control that when the valve F is open to admit sirup from the supply-pipe B to the measuring-chamber C, which is the normal or standing position of the cock, the valve G is closed, or has its discharge-pipe I out of line with the soda-water-supply orifice *b*; and when the latter valve G is open to pass soda-water by the orifice *b* and discharge-pipe I into the measuring-chamber C, the valve F closes the sirup-supply pipe B. Figs. 3 5 and 4 6 represent the changed positions of these valves, as described. The valve G is kept tight, and leakage prevented around the stem of the cock, through the top of the measuring-chamber, by leather or other suitable washers *c c*; and a screw-nut or gland, *d*, arranged to fit a screw-thread on the valve-stem, and capable of being locked to the latter by a set-screw, *e*. The valve H, which may be a disk having a discharge-opening, *f*, in it, is arranged to rest upon and travel over the bottom of the measuring-chamber C or washer *g'* thereon. This valve is also actuated by the stem E, when turning the latter by its handle J, to bring the opening *f* over or out of line with a general discharge-nozzle or outlet, *h*; and said valve is so arranged in relation with the valves F G that when the sirup-valve F is open the valve H is closed; but when the sirup-valve F is closed, and after the valve G has

been opened, the valve H is also opened or brought in line with the general discharge-nozzle *h*. A pin, *i*, acting upon a reduced portion, *k*, of the valve-stem, serves to arrest the movement of the cock in both directions to open and close the several valves, as described. The valve H is made to fit freely an angular portion of the valve-stem, so that while it is turned by said stem it is free to be borne down to its seat by a spring, *l*.

The discharge-pipe I is provided with side perforations to produce a more perfect mixture of the soda with the sirup when the latter is being discharged from the sirup-measuring chamber C by the pressure of the soda-water.

A single motion by the hand of the cock serves to discharge both the measured quantity of sirup and the necessary quantity of soda-water, which latter, toward the close of

its discharge and after the sirup has been expelled, also serves to wash out the sirup-chamber C.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The combination of the stem E and valves or valvular portions F, G, and H of the cock; with the sirup-measuring chamber C, the sirup-supply pipe B, the soda-water orifice *b*, and the general outlet *h*, essentially as and for the purposes herein set forth.

2. The perforated soda-water discharge-pipe I of the valve G, in combination with the sirup-measuring chamber C, substantially as specified.

WILLIAM GEE.

Witnesses:

FRED HAYNES,
FERD TUSCH.