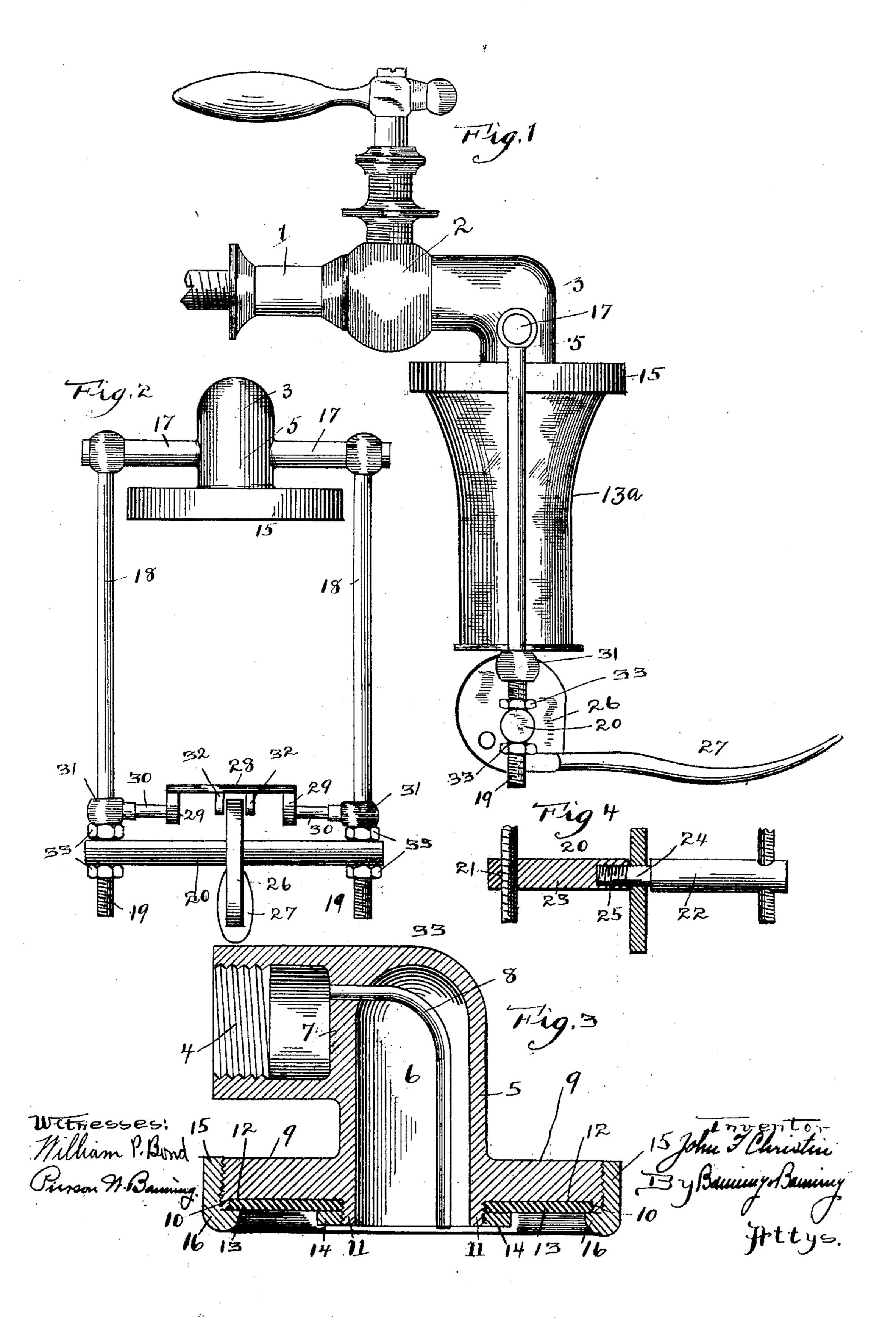
## J. F. CHRISTIN. FILLING DEVICE FOR GLASSES.

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## UNITED STATES PATENT OFFICE.

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## FILLING DEVICE FOR GLASSES.

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Specification of Letters Patent.

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To all whom it may concern:

Beitknown that I, John F. Christin, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, 5 have invented certain new and useful Improvements in Filling Devices for Glasses, of which the following is a specification.

The object of this invention is to provide an adjustable support and sealing-head for 10 use in drawing carbonated beverages into glasses by which it will be possible to retain the entire charge of the beverage until it is desired to hand the glass to the consumer. When carbonated beverages are drawn di-15 rectly into an open glass or cup, about onehalf of the charge is lost by reason of the impact of the carbonated beverage in the glass and by the foaming of the beverage as it is being drawn off, which loss of gas greatly im-20 pairs the quality of the beverage and renders it flat and insipid before it can be drunk. By drawing the carbonated liquid into a glass which is tightly sealed against the escape of the charge the entire amount of gas is re-25 tained and the quality of the beverage unimpaired, and by providing means for quickly disengaging the glass from the sealing-head the beverage may be consumed before it has had time to lose any appreciable amount of 30 its charge, thereby preserving the quality of the liquid in its original condition.

The device of the present invention relates to means for compressing the rim of the glass against the sealing-head and to means for 35 arranging and mounting the sealing-head; and the invention finally consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings illustrating the invention, 40 Figure 1 is a side elevation of a draft-faucet having the sealing-head and adjustable support secured thereto; Fig. 2, a front elevation of the sealing-head and adjustable support; Fig. 3, a sectional view of the sealing-head; 45 and Fig. 4 a view, partly in section, of the lower end of the bracket.

The device, as shown, is secured to a drafttube 1, having a valve 2 of the usual construction, to the forward end of which valve 50 is secured an elbow 3, having interior screwthreads 4 for securement to the valve, and said elbow is provided with a depending por-

arated from the screw-threaded portion of the elbow by means of a cross-wall 7, through 55 which wall is inserted an L-shaped liquidpipe 8 for the discharge of the carbonated beverage into a glass. At the lower end of the elbow is a disk-shaped head 9, having around its lower edge a rim or flange 10 and 60 having a screw-threaded flange or ring 11 around its inner edge, leaving an annular recess 12 for the insertion thereinto of a flat sealing-ring 13, adapted to be contacted by the rim of a glass 13<sup>a</sup> when in use. The seal- 65 ing-ring is held in place by means of a bushing 14, which is screw-threaded onto the flange or ring 11 and by means of an exterior ring or collar 15, provided with an inwardlyextending lip 16, adapted to contact the 70 outer rim of the sealing-ring, which exterior ring or collar is screw-threaded onto the edge of the disk-shaped head 9, as shown in Fig. 3.

The depending portion of the elbow has laterally projecting therefrom rigid studs 17, 75 from which depend side arms 18, which are rigidly secured to the studs and are spaced a sufficient distance to depend on opposite sides of the disk-shaped head, as shown in Fig. 2. The arms are of suitable length to allow 80 glasses of ordinary size to be placed beneath the sealing-head, and each of the arms is provided at its lower end with screw-threads 19, and between the screw-threaded portions extends a supporting cross - rod 20, having 85 smooth openings 21 for the passage therethrough of the screw-threaded portions of the side arms, and the supporting cross-rod, as shown, consists of sections 22 and 23, the former being provided with a screw-threaded 90 stud 24 and the latter with a corresponding recess 25, which allows the two sections to be secured together, as shown in Fig. 4, after the stud has been passed through a cam 26, which cam is pivoted on the stud portion of 95 the section  $2\bar{2}$ , which arrangement permits the cam to be swung back and forth and prevents its lateral displacement by reason of the less diameter of the stud, which leaves a pair of shoulders at opposite sides of the cam. 100 The cam is provided with an operating-lever 27, which adapts it for easy manipulation, and the cam is intended to bear against a circular platform or base 28, provided with depending ears 29, from which project arms 105 tion 5, having therein an air-chamber 6, sep- 130, which terminate in slidable collars 31,

adapted to travel up and down the side arms. The cam is intended to operate between flanges 32, which help to position the cam and prevent its lateral vibration or oscillation. 5 The position of the supporting cross - rod upon the side arms is regulated by means of nuts 33 above and below the cross-rod, which allow it to be adjusted and determine its position with respect to the sealing-head.

In use the operating-lever is thrown downto move the cam into position to allow the supporting base or platform to descend into the position shown in Fig. 2, after which the glass to be filled is positioned on the plat-15 form and the operating-lever thrown up into the position shown in Fig. 1, which carries up the platform and glass and forces the rim of the latter against the rubber packing, thereby sealing the glass preparatory to the dis-20 charge of carbonated beverage, mineral water, or similar liquid. As the liquid is discharged into the glass the air contained therein will pass up into the air-chamber 6, which has a sufficient capacity to allow the air to be 25 compressed thereinto, and after the glass has been filled with beverage the operating-arm is thrown down, which breaks the seal and allows the glass to be delivered to the consumer within a very few seconds after the 30 seal has been broken, thereby retaining practically all of the gas within the beverage, which allows a drink to be served to the consumer greatly superior to that ordinarily handed out.

The method of making and breaking the seal can be performed very quickly, so that | practically no time is lost after the seal has been broken before the beverage is ready for consumption. The method of forming the 40 bracket which supports the platform is extremely simple and at the same time rigid and serviceable. The nuts 33 enable the normal or depressed position of the platform to be adjusted from time to time when neces-45 sary to accommodate glasses of unusual dimensions. It will be seen from the foregoing description that the invention is one which has a great field of usefulness and at the same time is extremely simple in construction and

50 easy of operation.

What I regard as new, and desire to secure

by Letters Patent, is—

1. In filling devices for glasses, the combination of a faucet provided in its end with an 55 air-chamber open at its lower end and closed against the escape of air elsewhere, a flat sealing-head outwardly projecting from the fau-cet, a sealing-ring secured to the under face of the flat head and surrounding the open 60 mouth of the air-chamber, arms rigidly secured to and depending from the studs, a filling-tube passing through the air-chamber in the faucet, a platform slidably mounted between the arms, a cross-rod extending be-

tween the arms, a cam pivoted thereto and 65 adapted to abut against the platform, and a lever for operating the cam the air-chamber having a sufficient capacity to allow the air driven out from the glass to be compressed into the chamber, substantially as described. 70

2. In filling devices for glasses, the combination of a faucet provided in its end with an air-chamber open at its lower end and closed against the escape of air elsewhere, a flat sealing-head outwardly projecting from the fau- 75 cet, a sealing-ring secured to the under face of the flat head and surrounding the open mouth of the air-chamber, arms rigidly secured to and depending from the studs, a filling-tube passing through the air-chamber in 80 the faucet, a platform slidably mounted between the arms, and means for raising and lowering the platform to bring the rim of a glass into contact with the sealing-ring, the air-chamber having a sufficient capacity to 85 allow the air driven out from the glass to be compressed into the chamber substantially as described.

3. In filling devices for glasses, the combination of an L-shaped faucet provided in its 90 vertical section with an air-chamber open at its lower end and having a sufficient capacity to allow the air driven out from the glass to be compressed into the chamber, a filling-tube passing through the air-chamber, 95 a flat sealing-head secured to the faucet near its end and provided in its under face with a recess, a sealing-ring entered into the recess and surrounding the open mouth of the airchamber, an inner bushing adapted to bear 100 against the inner rim of the ring, an outer collar provided with a lip to bear against the outer rim of the ring, studs outwardly projecting from the faucet, arms rigidly secured to and depending from the studs and screw- 105 threaded at their lower ends, a platform provided with arms terminating in collars slidably mounted on the depending arms, a cross-rod adjustably mounted on the screwthreaded ends of the depending arms, nuts for 110 vertically adjusting the cross-rod, a cam pivoted on the cross-rod and adapted to bear against the under face of the platform, and a lever for moving the cam, substantially as described.

4. In filling devices for glasses, the combination of a faucet having secured thereto a sealing-head and having a filling-tube passing therethrough, a sealing-ring secured to the under face of the sealing-head, studs out- 120 wardly projecting from the faucet, arms depending from the studs and screw-threaded at their lower ends, inwardly-projecting arms slidably mounted on the side arms and connected at their inner ends by a platform, 125 a supporting cross-bar formed in two sections, one of the sections being provided with a recess and the other with a stud entered

thereinto, leaving a connecting portion of less diameter than the remainder of the sectional bar, a cam pivotally mounted on the reduced connecting portion and positioned between the remaining portions of enlarged diameter and adapted to abut against the platform for raising the same, and nuts entered onto the screw-threaded ends of the

depending side arms for regulating the position of the supporting cross-bar, substantially 10 as described.

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Witnesses:

SAMUEL W. BANNING, WALKER BANNING.