(No Model.) 2 Sheets—Sheet 1.

G. E. COLLINS & E. H. WEATHERHEAD.

BUNG

No. 342,184. Patented May 18, 1886.

Fig. 1.

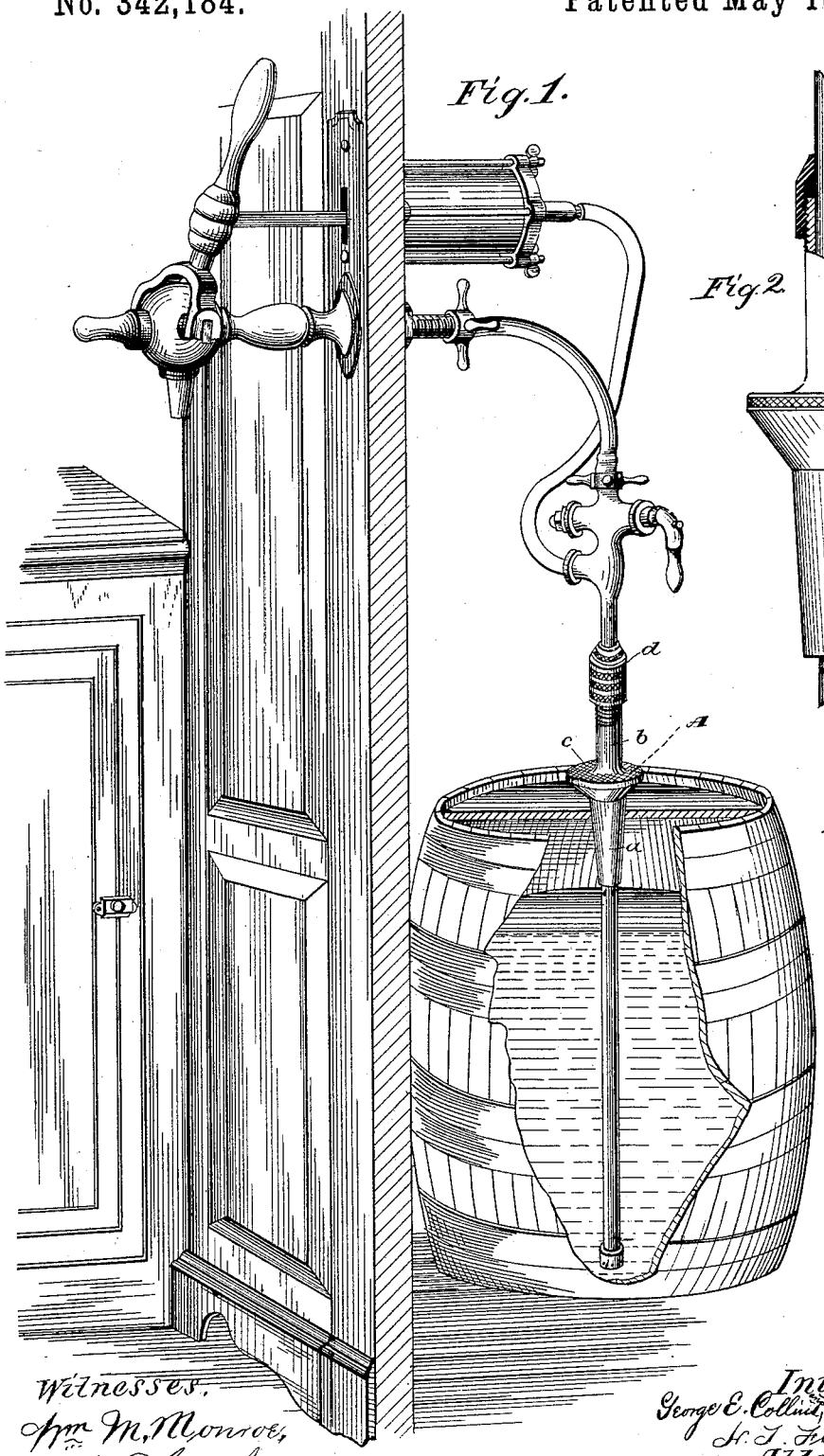
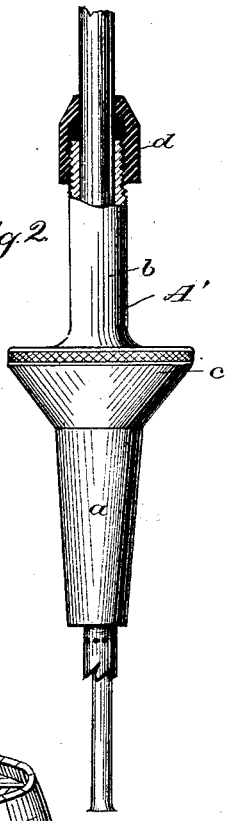


Fig. 2.



Witnesses.
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M. L. Combes

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(No Model.) 2 Sheets—Sheet 2.

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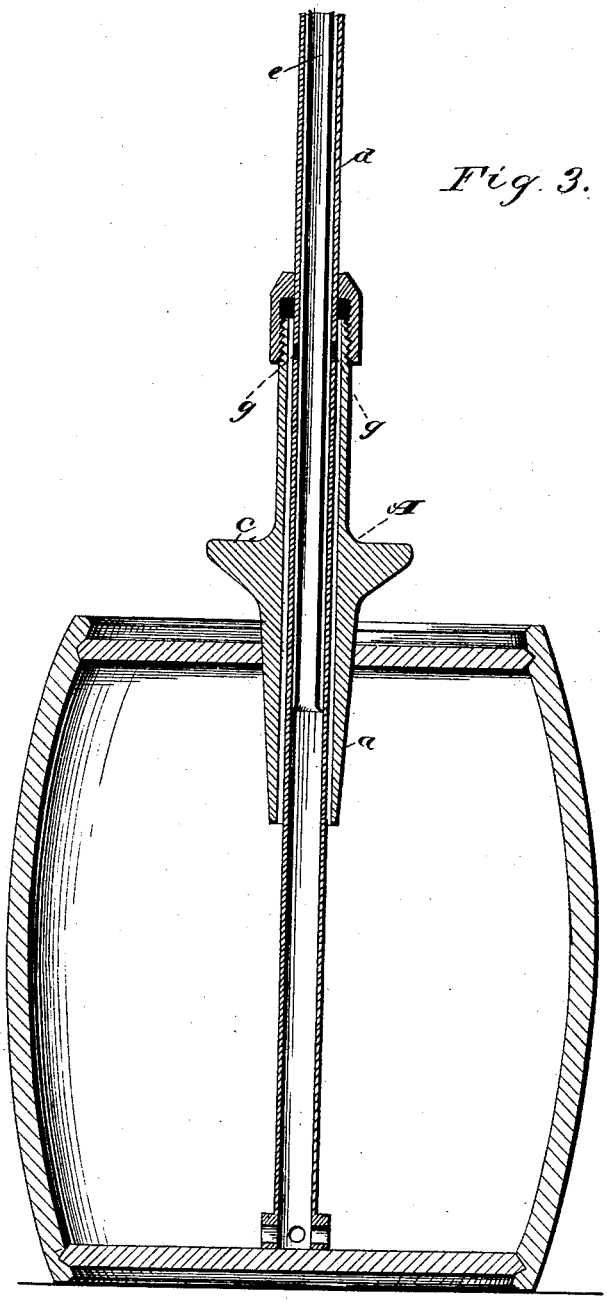

Fig. 3.

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UNITED STATES PATENT OFFICE.

GEORGE E. COLLINS AND EDWARD H. WEATHERHEAD, OF CLEVELAND, OHIO.

BUNG.

SPECIFICATION forming part of Letters Patent No. 342,184, dated May 18, 1886.

Application filed March 26, 1886. Serial No. 196,608. (No model.)

To all whom it may concern:

Be it known that we, GEORGE E. COLLINS and EDWARD H. WEATHERHEAD, citizens of of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Bungs; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in bungs.

Heretofore, as far as we are aware, bungs of the variety to which our improvement pertains have been formed with a longitudinal bore through the center for the passage of the draft-tube, which is adjustable therein, and a head having a recess in its center about the tube to receive the packing and packing-nut, the nut, when in position to press the packing closely about the tube, being down flush with the surface of the head. The method of proceeding with a bung thus constructed is as follows: Supposing a barrel of beer to be in position for tapping, a cork is placed in the inner end of the bung, and the bung thus closed is driven into the barrel. This being done, the draft-tube is inserted in the bung and pressed inward, which drives the cork before it into the barrel, and then, when the packing-nut is screwed down to its place about the tube, the apparatus is ready for use; but this proceeding is slow and tedious, as well as otherwise objectionable. In the first place, there is the objection of always separating the tube and bung and placing them separately in each succeeding barrel. To do this, it is necessary to get a wrench and unscrew the packing-nut so that the draft-tube may be released from the rubber packing and withdrawn. Then, before it is safe to drive the bung into another barrel, the nut must again be screwed back into its seat flush with the head of the bung, or there is great danger of striking it with the hammer, and so impairing the thread that the parts become seriously if not fatally damaged. The bung being driven in, the nut must again be released to insert the draft-tube, and then again screwed down to pack the tube, all of which is necessary before any beer can be drawn, and involves the loss of much valuable time. By our improved draft-tube having a perforated head on its lower end we are enabled to overcome these objections. We entirely dispense with the cork and place the tube and bung in working relation before inserting them in the barrel. By this organization there is no separating of the parts in changing them from one barrel to another, and an important step toward perfecting the art is thereby accomplished; but in doing this we encounter a new difficulty not met with in the old device. As the head of the bung thus far referred to is small and narrow and has but little surface on which to strike, we found that by inserting the draft-tube in the bung before the bung is driven into the barrel or by leaving it there while the bung is being knocked out there is great danger, by reason of accident, carelessness, or awkwardness, of striking the tube with the hammer and inflicting material injury thereon. These tubes being formed of light soft metal—such as brass—they are easily dented, bent, or otherwise damaged, if not, indeed, rendered worthless in this way, and it therefore became a matter of great importance to us to overcome and remedy this difficulty in some simple and practical manner. This we have done, and the construction by which it is accomplished constitutes our present improvement.

The invention consists in a bung constructed as hereinafter fully described, and especially pointed out in the claim.

In the accompanying drawings, Figure 1 shows our improved bung in position in a beer apparatus. Fig. 2 is an enlarged partly-sectional elevation of the same, and Fig. 3 is a longitudinal section of our improved bung and the air and beer conveying pipes in working position therein.

A represents the bung in its entirety, provided with the tapering lower part, *a*, adapted to enter the barrel, the tubular upper part, *b*, and the enlarged body part or head *c*. All these parts are made in a single piece of metal having a longitudinal bore through the center and imperforate sides. The body part *c* is formed with a wide flat top, to provide surface for driving the bung in the barrel and a conical base which gives it strength and affords a surface for striking when the bung is to be removed. This part of the bung might be made in the form of a flange; but it is preferably constructed as shown.

The tubular part *b* projects from the top of the body, and is about the same length as the lower part, *a*. It is screw-threaded at the top, where it is provided with a nut, *d*, containing the packing. The use of packing in a device of this kind we do not consider new, as we know it was shown as early as June 21, 1870, in the patent to Knocke, and appears to have been old at that date; but its peculiarity here consists in its position and relation to the other parts of the bung, as shown and described.

This bung is designed especially to be used with our improved venting and draft tube, for which application was filed March 11, 1886, Serial No. 195,020. In said application, and as shown in this case, two tubes, one arranged within the other, are used, an air-space being formed between said tubes and between the outer tube and the bung, the outer tube in all cases extending entirely through the bung. This organization was conceived to overcome the objection to taking the air through a tubular projection at the side of the bung, as has heretofore been the practice. It has been found in our experience with this art as manufacturers that in the course of usage the tap-hole in the end of the beer-barrel becomes so much worn and enlarged that the bung must be driven in its full length to fasten it therein and prevent leakage about its sides; but in thus driving the bung hurriedly into the barrel to effectually close the opening there is great liability of snapping off the rigid air-tube by its striking on the high projecting chine of the barrel, and thus rendering the bung useless until repaired, and working great embarrassment to the owner if he has not a duplicate on hand to replace it. It is a matter of daily occurence that these rigid side tubes are broken off in this way or by an accidental blow of the hammer in knocking the bung in or out. We have overcome this objection by omitting the side tube entirely and employing two tubes, *d e*, one within the other, which are protected their entire length through the bung.

The neck *a* serves another important purpose, peculiarly adapting it to our improved apparatus. Beer-barrels come in what are known as "half," "quarter," and "eighth" sizes. It of course is desirable to have an apparatus which is adaptable to all these sizes; but the difference between the largest and the smallest sizes is so great that a very considerable range of adjustment is required to fit the apparatus to both; hence the necessity of the neck above the head of the bung. Thus, for example, the parts are so arranged that when a half-size barrel is tapped the openings *g* will come about the lower end of the bung and deliver the air on top of the beer. When a quarter-size is tapped the openings will be correspondingly higher in the bung, and when an eighth-size barrel is tapped the openings will be well up in the neck, as shown in Fig. 3. The outer pipe in all instances is driven to the bottom of the barrel, which changes the relation of the perforations *g* to the bung, according to the size of the barrel in use. This makes the neck *a* an essential and indispensable element in adapting our improved draft-tube to all the needs of the trade, and renders the tube equally useful with all sizes of barrels.

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

In beer apparatus, a bung formed with an enlarged flange about its head, a neck extending above the flange and imperforate at its sides, in combination with two tubes, one within the other, extending through the bung, air-passages being formed between said tubes and between the outer tube and the bung, respectively, with perforations connecting said passages, substantially as set forth.

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EDWARD H. WEATHERHEAD.

Witnesses:
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WM. M. MONROE.