

Feb. 10, 1931.

R. F. McCrackan

1,791,829

SANITARY ATTACHMENT FOR PIPETTES

Filed April 6, 1928

2 Sheets-Sheet 1

Fig. 1.

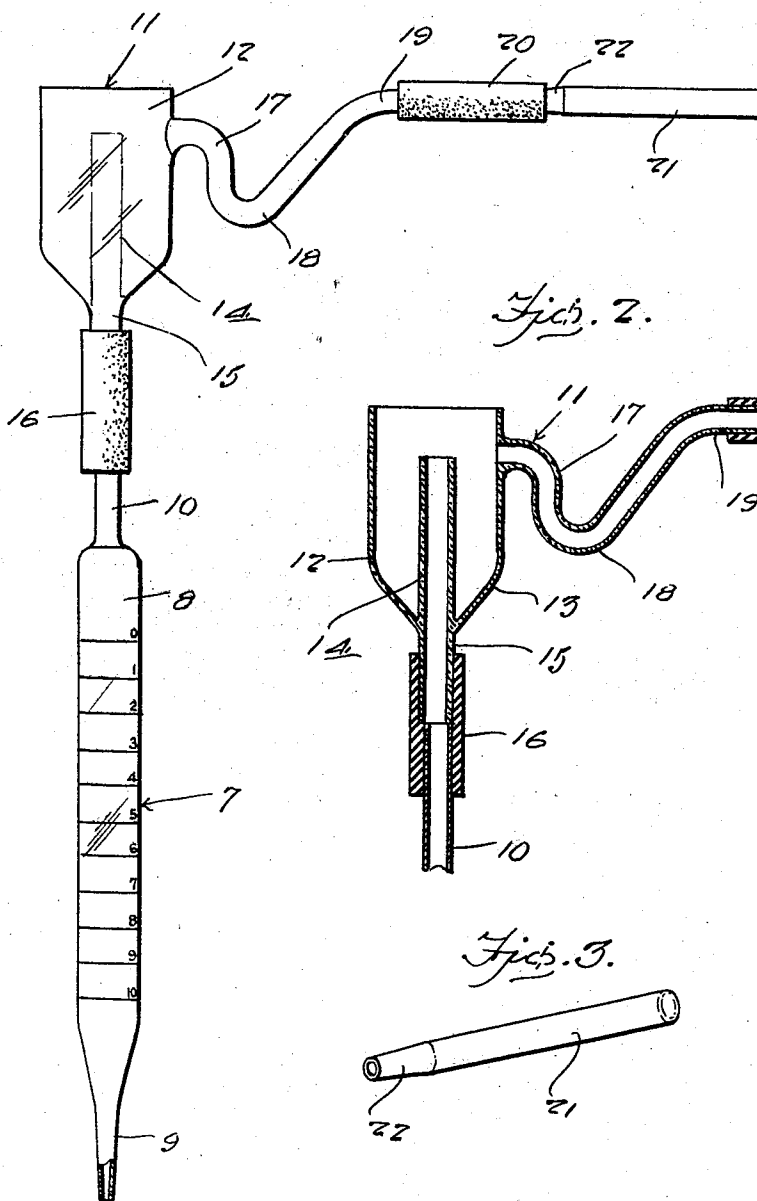


Fig. 2.

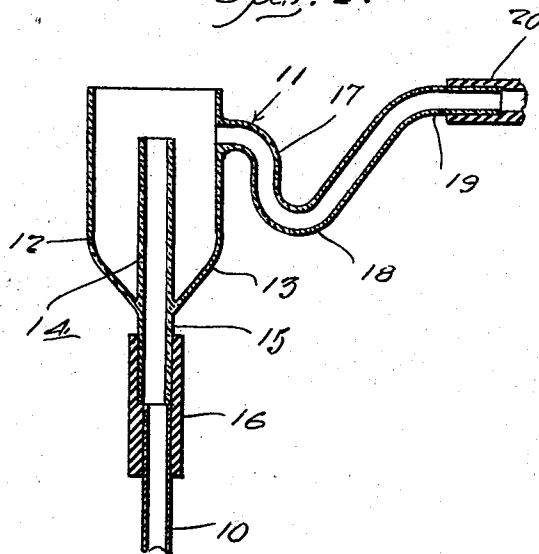
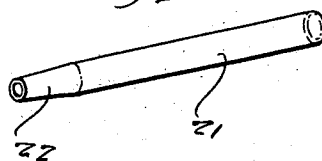


Fig. 3.



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Fig. 4.

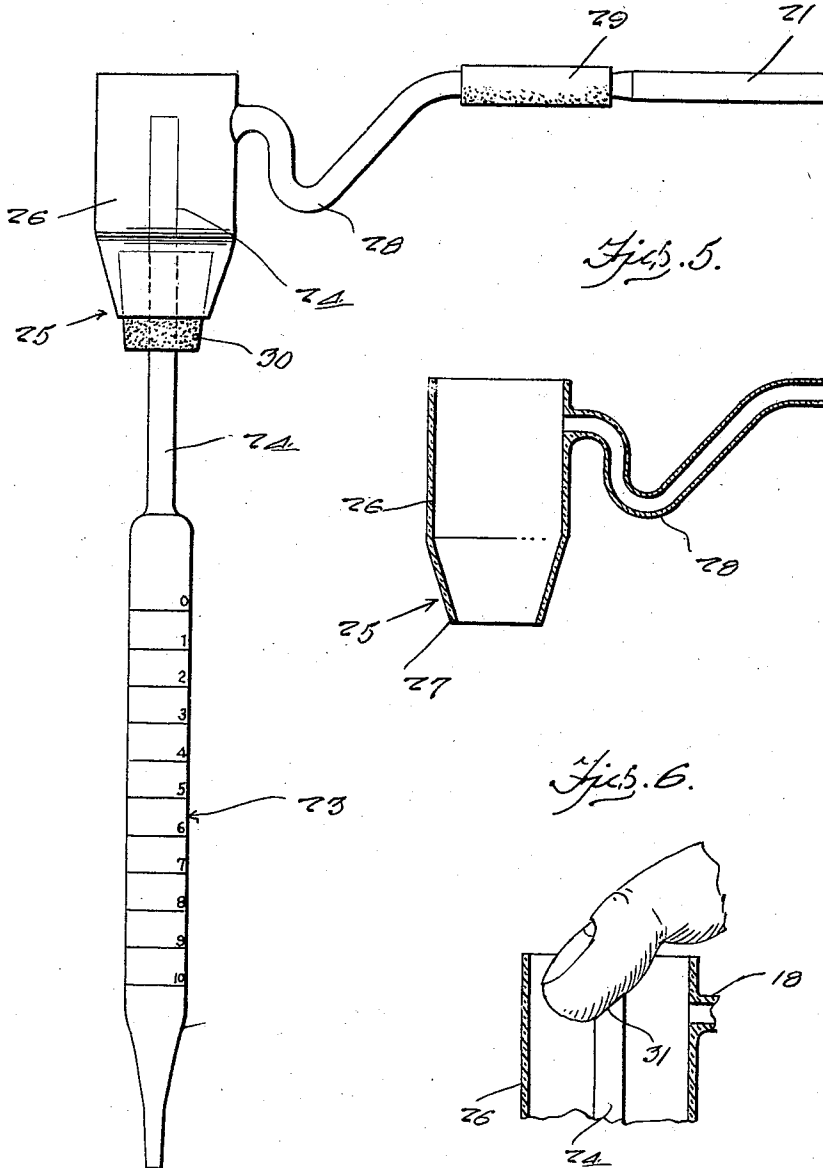


Fig. 5.

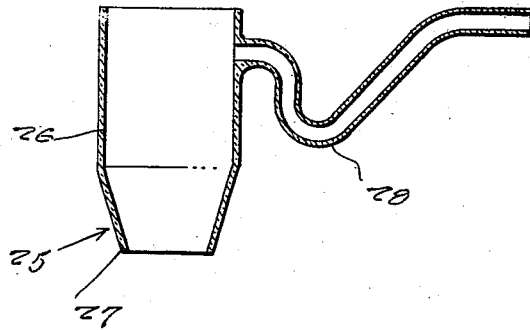
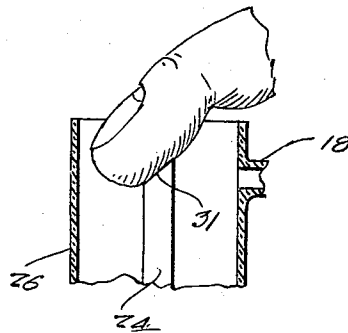


Fig. 6.



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UNITED STATES PATENT OFFICE

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SANITARY ATTACHMENT FOR PIPETTES

Application filed April 6, 1928. Serial No. 267,998.

This invention relates to a new appliance to be used in association with a liquid measuring pipette, and it has more particular reference to a structure of this class which is in the form of a sanitary attachment for a conventional form of pipette.

My principal aim is to generally improve upon structures of this class, by providing one which is characterized by exceptional simplicity, and inexpensiveness, and which is such in construction as to better fulfill the requirements of a device of this class.

The invention is carried into effect in the first application, through the medium of two different embodiments, each of which includes the common feature of an individual sanitary mouth-piece removably held in operative position.

Also, from a generic standpoint, these forms of the invention, each embody an open-top cup carrying an integral irregularly shaped stem and means for quick separable connection with the conventional measuring pipette.

The other more specific features of construction will become more readily apparent from the following description and drawings.

In the drawings:—

Figure 1 is a side elevational view of one embodiment of the invention, showing it attached to the pipette.

Fig. 2 is a sectional view detailing the parts and their relative association more emphatically.

Fig. 3 is a perspective view of the individual removable mouth-piece.

Fig. 4 is a view like Fig. 1, showing a different embodiment of the invention.

Fig. 5 is a sectional view through the principal part of this embodiment.

Fig. 6 is a fragmentary sectional and elevational view showing the method of use.

Attention is first invited to Figs. 1 to 3 inclusive, wherein it will be observed that the pipette is generally designated by the reference character 7. This comprises an elongated container 8 having customary restricted discharge end 9, and a reduced tube 10 at the top.

The principal part of the attachment is generally designated by the numeral 11 and this includes a glass body having an open top cup 12 equipped with a tapered bottom 13, and a vacuum release pipe 14. The upper end of this pipe extends into the cup and terminates below the top of the cup and above the points shown. The lower end portion 15 is tapered, and adapted to receive a rubber sleeve-like coupling 16, which as shown in Fig. 2, is connected with the tube 10 of the pipette.

Extending from one side of the cup adjacent the upper end of the pipe 14 is a hollow stem 17 provided with an irregular downward bend 18 forming a suspension hook, by means of which the attachment may be suspended from the supporting nail or the like.

Connected with the end portion 19 of the stem is a coupling 20 into the opposite end of which the mouthpiece 21 fits. It will be noted from Fig. 3 that the mouth piece has a tapered end 22 which merely telescopes into the coupling 20. This is important in that it is desirable in a structure of this class to provide individual sanitary mouth pieces, thus rendering the invention more desirable for use by different persons.

It has of course been noted that the pipe 14 is formed integral with the cup 12.

Attention is now invited to Figs. 4 to 6 inclusive. Here the pipette is designated by the numeral 23, and as is usual, it includes a reduced suction tube 24, on its top upon which the attachment is mounted. The attachment 25 embodies a glass cup 26 having a tapered or truncated conical bottom portion 27. On one side is the curved stem 28, with which the coupling 29 is connected, the coupling to receive the aforesaid mouth pipe 21.

In this form of the invention, a tapered stopper 30 is provided, this having a central opening thru which the tube 24 extends. This stopper is located in the truncated bottom portion 27 of the cup, as shown in the assembled view in Fig. 4.

Attention is invited to the fact that the open bottom of the cup is of a diameter to

permit the pipette 23 to be inserted downwardly therethrough. Thus, the cork or rubber stopper 30, may be assembled on the tube 24, and the pipette inserted downwardly through the cup to bring the stopper into place. Then the pipette is adjusted so that the extending portion of the tube 24 is located, in downwardly spaced relation to the upper edge of the cup.

10 In some instances, it is desirable indeed to have the upper end of the tube 24 beveled as indicated at 31 in Fig. 6 in order to permit the end of the finger to be conveniently placed thereover in operating the device.

15 In operation, it is obvious that the user must place the lower end of the pipette in the liquid to be drawn after which the hand is placed over top of the cup. Then by placing the mouth on the mouth-piece and drawing in an obvious manner, sufficient suction is produced to draw the liquid into the pipette to the desired elevation. In fact the liquid is always drawn to a point above the desired graduation. Then the hand is
25 slipped off the cup in a manner to permit the finger to be placed over the upper end of the tube 24 in Figs. 4 to 6, or the part 14 in Figs. 1 to 3. Then by gently lifting the finger, some of the liquid in the pipette can be allowed to drop out to bring the liquid
30 down to the desired level or graduation, to insure proper measure.

With this arrangement, it is obvious that the suction cup is not intended as an overflow, but as a convenient means for drawing the liquid into the pipette, and then releasing it gradually by the finger as explained. The cup is very small, and provides a novel means of attachment for the sanitary mouth
40 piece. The entire structure is comparatively inexpensive, yet highly efficient in use and operation.

The structure is dependable, compact and convenient, and otherwise advantageous for
45 use in the capacity stated.

The simplicity of the invention is such as to permit a clear understanding of the same to be had after considering the description in connection with the drawings. Therefore,
50 a more lengthy description is regarded unnecessary.

Minor changes in shape, size, and materials, and arrangement of parts, coming within the field of invention claimed may
55 be resorted to if desired.

Having thus described my invention, what I claim as new is:—

1. In combination a pipette including a graduated container, a cup opened at its top, a suction tube in longitudinal alignment with said container and having one end thereof interiorly of said cup to facilitate the placing of the finger over the last mentioned end of said suction tube to hold or
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discharge the liquid contents of said graduated container.

2. In a device of the character described, and in combination, a pipette including a graduated container terminating at one end into a suction tube, a cup opened at its top and having a truncated conical bottom portion, a tapered stopper fitted into the truncated opening at the bottom of said cup, said stopper being provided with a central passage through which the suction tube extends into said cup, the inner end of said suction tube terminating inwardly from the open top of said cup to facilitate the placing of the finger over the last end of said suction tube to hold or discharge the liquid contents of said graduated container, said cup being formed on one side thereof with a hollow stem.

In testimony whereof I affix my signature.
ROBERT F. McCrackan.