

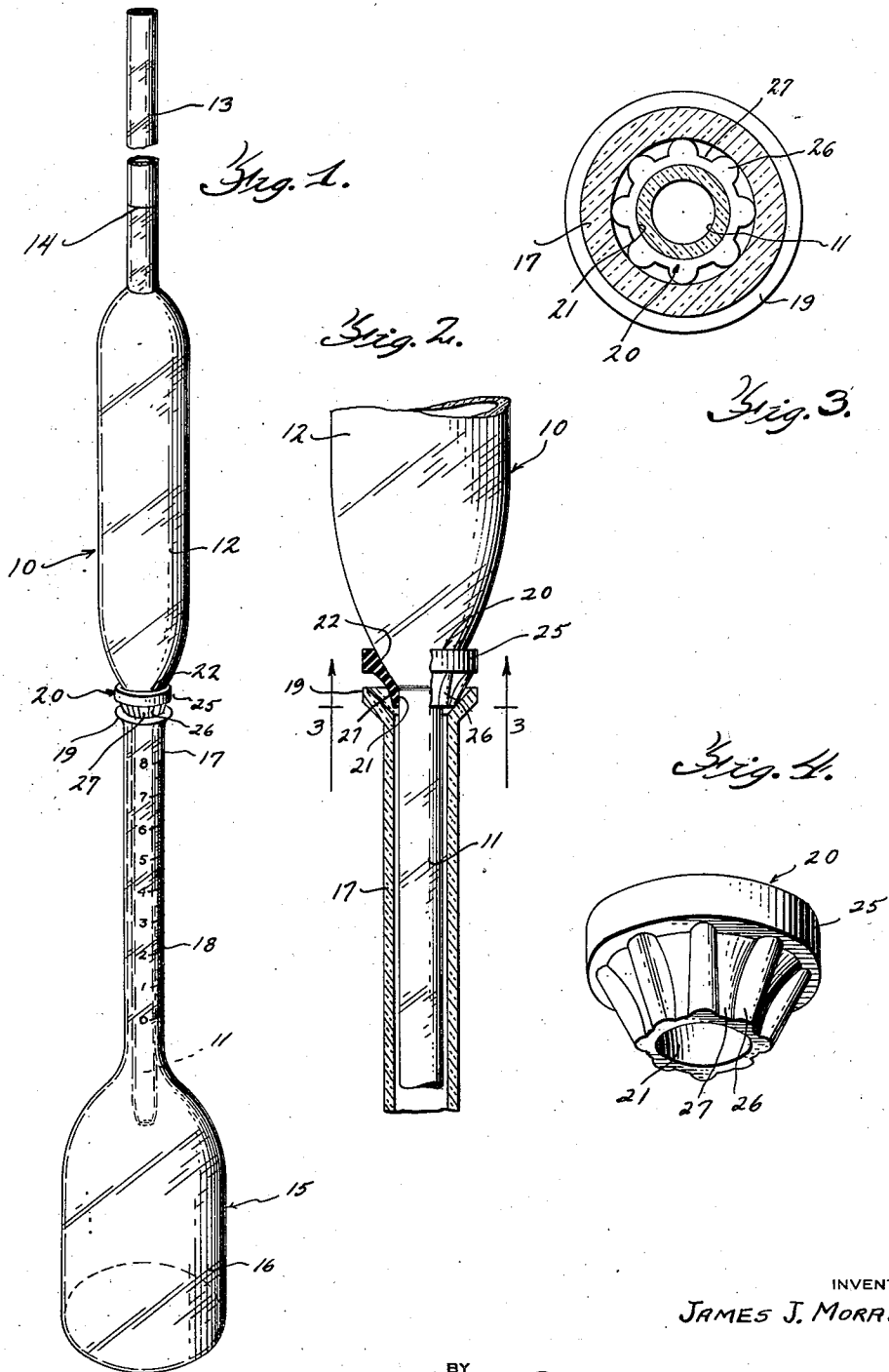
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PIPETTE

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PIPETTE

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1 Claim. (Cl. 23—292)

This invention relates to pipettes and has as a primary object the provision of means for protecting a pipette against breakage during use of the pipette in transferring samples to test bottles.

5 A further object of this invention is to provide protecting means of the above mentioned character which will be simple in construction and which will render the pipette more easy to use.

10 Numerous other objects and advantages of this invention will become more apparent as the following description proceeds particularly when reference is had to the accompanying drawing wherein

15 Fig. 1 is a perspective view of a pipette showing the invention applied to the same, the pipette being shown in cooperative relation with respect to a test bottle;

Fig. 2 is a fragmentary vertical sectional view through the structure shown in Fig. 1;

20 Fig. 3 is a horizontal sectional view taken on the line 3—3 of Fig. 2; and

Fig. 4 is a detail perspective view of the washer forming the protecting means.

Referring then particularly to the drawing 25 wherein like reference characters designate corresponding parts throughout all views, the numeral 10 designates generally a pipette. This pipette is of general construction in that it includes a discharge stem 11, an enlarged body portion 12, and a tubular extension 13 formed on the upper end of the body portion, this extension being provided with the usual line 14 indicating the level to which the pipette should be filled. As is customary, the lower end of the body 30 portion 12 of the pipette is of conical shape adjacent its juncture with the stem 11.

The numeral 15 designates generally a test bottle of usual construction, this bottle including a body portion 16 and an elongated neck portion 17 40 provided with suitable graduations 18. The neck portion terminates at its open end in an outwardly flared portion 19 to facilitate the insertion of the stem of the pipette into the test bottle.

In use, it will be understood that the pipette 45 is adapted for the transferring of samples to be tested to the test bottle. Thus for example, in the Babcock test for determining the cream in milk or the butterfat in cream, the desired quantity of the milk or cream to be tested is trapped 50 in the pipette and then the pipette stem is inserted in the neck of the test bottle as illustrated in Fig. 1 and the sample allowed to flow from the pipette into the test bottle. Heretofore difficulty has been encountered in making this 55 transfer with any degree of rapidity because of

the danger of breaking the pipette stem and the neck of the test bottle. The present invention therefore contemplates the provision of protecting means in the nature of a washer adapted to embrace the lower end of the body of the pipette and the adjacent portion of the pipette stem, which washer will cushion the contact of the pipette with the test bottle neck.

Referring now particularly to Figs. 2, 3 and 4, 10 the numeral 20 designates generally a washer adapted to be associated with the pipette in the manner above indicated. It will be noted that this washer has a lower annular portion 21 adapted to embrace the pipette stem adjacent the point where this stem merges into the pipette 15 body. The washer is also provided with a substantially conical recess 22 of a size and shape to snugly engage the lower portion of the pipette body adjacent the point where the body merges into the pipette stem. Exteriorly, the washer is provided with an annular enlarged rim 25, while the sides of the washer below this rim are provided with ribs 26 to provide spaced grooves 27 20 as clearly illustrated in Fig. 3 of the drawing.

It will be understood that the washer 20 is 25 associated with and becomes in substance a permanent part of the pipette. If desired, the washer may be rigidly secured in position as by cementing or gluing the same to the pipette, although preferably the washer is removably held in position by virtue of its snug frictional engagement with the pipette. In the latter case, it will be understood that the washer may be removed from the pipette when it is desired to wash the 30 pipette.

The washer is formed of some yieldable material such as rubber and in use efficiently cushions the contact of the pipette stem and body with the neck of the test bottle. The ribs 26 of the washer engage the flared portion of the test 40 bottle neck while the grooves 27 provide for the escape of air trapped in the test bottle. The fluted washers may be economically produced and easily applied to pipettes and thus constitute an economical and effective protecting means for 45 the pipettes and test bottles.

While the invention has been described with some detail, it is to be understood that the description is not definitive of the limits of the inventive idea and that the right is reserved to 50 make such changes in the details of construction as will fall within the purview of the attached claim.

What I claim as my invention is:

A cushioning member for use on pipettes of the 55

type having a body portion tapered at one end thereof and a reduced stem connected to said tapered end comprising a washer formed of yieldable material adapted to embrace said stem and
5 said tapered end at the juncture thereof, said washer having an inner substantially conical

surface to fit said tapered end and having an outer substantially conical surface with a plurality of flutes thereon, said conical surfaces converging in the same direction.

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