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Apparatus for the Storage and Use of Carbonate Free Alkalies

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It is frequently desirable to have available solutions of carbonate free alkali without the necessity of taking up valuable bench space in the laboratory by the usual elaborate systems which involve the use of side arm burets, connecting tubes and storage reservoirs.

The apparatus shown in Figure 1 can be used to store small quantities of carbonate free alkali without the necessity for an elaborate set up. When not in use a pinchcock is placed on the rubber tube through which the buret tip is inserted and the buret is removed. The solution can then be stored like any other reagent in a cabinet or other safe place.

The operation of the apparatus is simple. Carbonate free alkali can be prepared by one of the usual methods (1). Assuming a flask of carbonate free alkali to be at hand the stock bottle is freed of carbon dioxide by attaching the tube in which the buret is subsequently to be mounted to a vacuum line. Air is drawn in through the release valve (situated just above the rubber bulb), thence through the ascarite trap and finally through the bottle itself sweeping it clear of all carbon dioxide. The prepared alkali is then siphoned into the stock bottle through the tube used for insertion of the buret and the rubber connection closed with a pincheock.

For use, select a suitable buret provided with a guard tube, attach the tip to a vacuum line and draw air through the ascarite filled guard tube for several minutes. Close the buret pinchcock, slip the tip of the buret into the rubber connection, forcing the pinchcock to open a small way and proceed to fill the buret with the alkali in the usual manner employed in utilizing automatic burets.

Using the apparatus in this manner, carbonate free barium hydroxide solution, for example, can be preserved for long periods of time without change in normality.



FIG. 1.

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