

avoided by filling the cell through a thin glass tube introduced beyond the stopcock, which for this purpose was chosen to be of large bore. Mercury is added until its surface reaches the middle of bulb C. At this point the diameter of the bulb is the same as the body of the cell allowing a good surface of contact between mercury and calomel. The bulb is limited by two constrictions. The lower one, usually found in electrodes of this type, prevents the solutions from wetting the platinum wire. The upper constriction is filled with KCl crystals by filling the cell with slightly supersaturated KCl solution. The crystals settle and pack together in a short time. This minimizes the disturbance of the active interfaces when the electrode is moved.

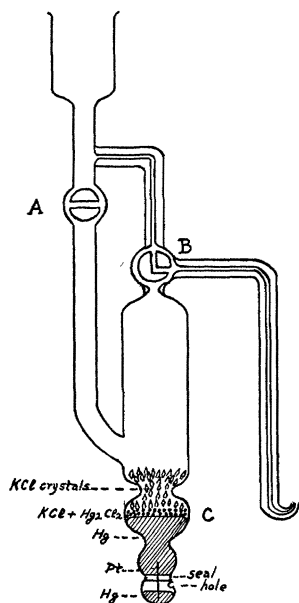


FIG. 1

Flushing the connecting arm with saturated KCl from the reservoir is done by turning the stopcock B to the position indicated in the diagram. During determinations the stopcock B is turned a quarter turn from the position in the diagram, providing a continuous column of conducting liquid with little resistance. If the cell has been subjected to changes of temperature, the change in the internal pressure can be eliminated by momentarily opening the cell towards the connecting arm after previously flushing the latter.

The end of the connecting arm may be shaped in any form desired such as the enlarged bulb type designed by Clark to obtain reproducible liquid junctions.

The cell as described is very rugged and gives very constant potentials.

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A CONVENIENT METHOD OF LABELING BOTTLES

I AM interested in the note furnished by Messrs. Gurchot and Finnegan¹ regarding the labeling of bottles. I have used the same method and found it satisfactory. Also I have found that one-inch wide transparent cellulose tape is excellent for protecting the labels on microscope slides. Formerly I used clear shellac to protect the label, but I find that cellulose tape is better since it gives enduring protection.

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HOW TO REMOVE THE PLUNGERS OF "FROZEN" GLASS SYRINGES

IN the hands of the inexperienced or of the absent-minded, a syringe that is used to draw blood often becomes "frozen." The plungers of such syringes can be removed by boiling them for fifteen or twenty minutes in glycerine. The syringe should be completely submerged in a container with walls high enough to prevent boiling over. The job should be done in a hood and the low flame watched carefully.

While the glycerine is boiling, the syringe should be removed with tongs and the plunger pulled with a towel or a pair of heavy forceps. If the plunger does not come out the syringe may be boiled again and a second or third trial made. It usually comes out the first time.

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¹ Charles Gurchot and Jack K. Finnegan, *SCIENCE*, 93: 2412, 288, March 21, 1941.

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