

substances analyzed, uniformly satisfactory determinations can readily be obtained. For substances of unknown structure, however, the results furnished by the Kjeldahl process should not be accepted without verification by other methods.¹

NOTES.

A Back Pressure Valve for Use with Filter Pumps.—The body of the valve is constructed of two pieces of glass tubing of fairly heavy gauge, drawn out as in sketch. The valve itself is an improvement on the old Bunsen valve, with a glass rod of slightly smaller diameter than the rubber tubing, wired on, to prevent collapse. Soft rubber tubing works best. The device has



given excellent service and can be made at little expense of time and material. It was originally devised for use with condensers in a laboratory where the water pressure sometimes gave out and the water ran back. It gives equally good service for both purposes.

R. N. KOFOID.

The Conversion of Calcium Oxalate to the Sulphate.—The customary process of reducing a calcium oxalate precipitate to a sulphate by applying a flame directly to a platinum crucible, after saturating the precipitate with sulphuric acid, is a slow one at best, and there is great danger of losing a portion of the contents of the crucible on account of boiling over or spattering.

These difficulties may be avoided by the following method: The precipitate is placed into a platinum crucible and saturated with concentrated sulphuric acid in the usual manner. A porcelain crucible about one-half inch larger in diameter than the platinum crucible is then filled about half full with powdered asbestos, or calcium sulphate, and the platinum crucible is sunk into the asbestos until it clears the porcelain crucible by about one-fourth inch at the bottom. After covering the platinum crucible loosely,

¹ Since the above was written, an article by Sørensen and Pedersen (*Ztschr. physiol. Chem.*, **39**, 513 (1903)) has appeared with reference to Kutscher and Steudel's work. For a further criticism cf. also Schöndorff: *Arch. f. d. ges. Physiol.*, **98**, 130 (1903).