inaccurate when the same procedure was used in the two instances, we are unable to say. No interfering substances could be demonstrated to be present and it is rather difficult to see just how the urines from the two experiments could differ much in general characteristics, inasmuch as the dietary of each experiment was made up of the same constituents.

Summary.

Two experiments were made to demonstrate the influence of copious water drinking *between* meals upon the uric acid output. The subjects used were two young men 24 and 29 years of age respectively. Each experiment was divided into three periods, a preliminary period during which nitrogen equilibrium was established through the feeding of a uniform diet, a water period during which this uniform diet was supplemented by the daily drinking of a large volume of water *between* meals, and lastly a final period in which the dietary regimé of the preliminary interval was in force.

In one experiment copious water drinking caused no change in the uric acid output, whereas a pronounced decrease in this excretion was observed in the case of another subject. The data indicating a decreased elimination of uric acid under the influence of copious water drinking we believe to be due to the fact that the Folin-Shaffer procedure did not, in the case of this subject, determin the total uric acid content of those urines of extremely low density, *i. e.*, 1.003–1.010. This interpretation has been substantiated by tests made in another connection.

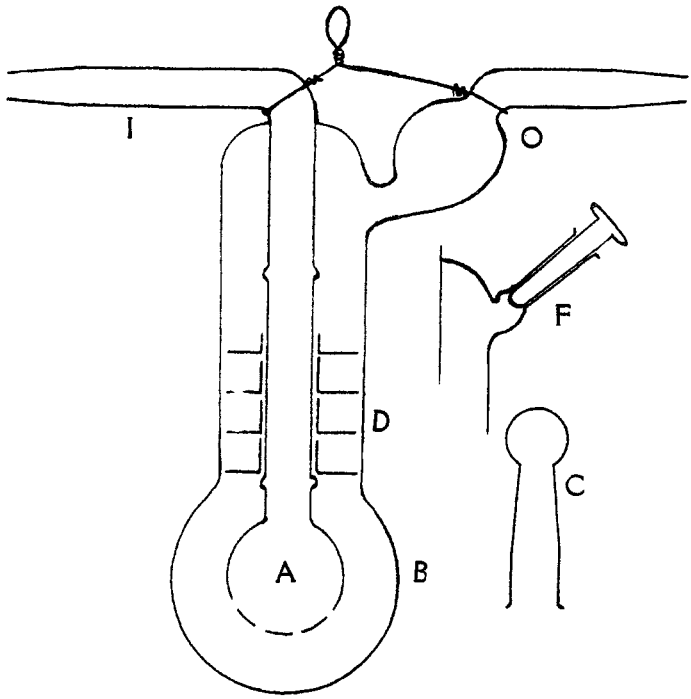
Upon those days when the urine for the twenty-four-hour interval was collected in five sub-periods, there was apparently no relation between the urine volume for the sub-period and the uric acid content. There was likewise no uniformity in the daily course of the uric acid excretion, the maximum output occurring on different days in the first, second, third, and fourth sub-periods respectively. The maximum urine flow occurred uniformly in the second sub-period of those days on which large volumes of water were being ingested. This uniformity was not observed on the days of low water ingestion.

URBANA, ILL.

NOTE.

A Convenient Potash Bulb.—More than a year ago the writer devised a potash bulb much like the one shown in the cut, and it proved to be so convenient and efficient that it was thought worth while to describe the no less efficient and much more convenient form shown. The cut is drawn to scale from one now in use. The inner and outer tubes, A and B, are made of very thin "condenser" tubing, the tubes I and O being of ordinary thickness. The essential feature is the disks, D, which fit so loosely

between A and B that they can move freely up and down between the projections blown in the wall of A. The annular free spaces should be not less than 1 mm. broad. The disks are made by abruptly flaring glass tubing of proper bore and cutting off about 4 or 5 mm. from the end.



When gas is entering through I, it is first broken up into small bubbles on passing through the openings in A. (Instead of being blown into a bulb, the end of A may be flared to form a broad disk.) It is then trapped in succession by the disks which, when working properly, alternately rise and fall, continually wetting the walls of B with fresh solution. The lowest disk must not fall below the cylindrical part of B, and the uppermost must stop rising at least a centimeter below the outlet. The amount of liquid to be used depends on its viscosity and the rate of flow of the gas. Enough to just reach the second disk is usually sufficient. The cleanest way to introduce it is through the filling-tube, F, set on in a plane at right angles to that of I and O. The ground-in stopper is made of glass rod, and is rendered perfectly tight by means of stopcock grease.

In weighing, the caps, C, are placed on I and O, and the tube is suspended by means of a permanently attached loop of platinum wire, as shown.

This form of absorption bulb is less fragile than the Geissler bulb, has a

much smaller surface and is considerably lighter. When filled it weighs from 35–40 grams. The method of filling obviates all danger of contact between the solution and the rubber connections. C. E. WATERS.

BUREAU OF STANDARDS, WASHINGTON,
September 29, 1910.

NEW BOOKS.

A Manual of Volumetric Analysis, Treating on the Subjects of Indicators, Test-papers, Alkalimetry, Including Assay of Drugs by Titration, Acidimetry, Analysis by Oxidation and Reduction, Iodimetry, Determinations by Precipitation, and by Color Comparison. By VIRGIL COBLENTZ, PH.D., Pharm. M., F.C.S., Professor of Chemistry in the New York College of Pharmacy. Second edition, revised, completely reconstructed and enlarged by Anton Vorisek, Phar. D., Professor of Analytical Chemistry in the College of Pharmacy Columbia University, in the City of New York, with 37 illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1909.

"Denn was man schwarz auf weiss besitzt kann man getrost nach Hause tragen." While this suggestion was given by Mephisto to what was presumably a German student, the average American student does not have the time, or at least he thinks he has not the time to take notes for the purpose of taking them home. Neither is he content, as a rule, with such a large text as Sutton or Mohr that can be consulted in the departmental library. He is happiest when he has a textbook that does not contain much more than his immediate necessities demand.

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