

For experimental assistance I have to thank W. J. Green, B.Sc., and for reading the proofs and checking the calculations I am indebted to J. D. H. Dickson, M.A., Senior Fellow of Peterhouse College, Cambridge.

Specific Gravity of Orthophosphoric Acid. N. P. KNOWLTON and H. C. MOUNCE (*Jour. Ind. and Eng. Chem.*, 1921, xiii, 1157-1158) have determined the specific gravity of aqueous solutions of orthophosphoric acid at 25° C. compared to water at 25° C. The twenty-four solutions used by them ranged from 3.39 per cent. orthophosphoric acid with a specific gravity of 1.0187 to 90.26 per cent. orthophosphoric acid with a specific gravity of 1.7558. From the plotted curve of their results they have prepared a table, giving the specific gravity of aqueous solutions of orthophosphoric acid for each per cent. of the acid from 1 per cent. to 91 per cent., both inclusive.

J. S. H.

Separation of Sucrose from Glucose. LEON A. CONGDON and CHARLES R. STEWART, of Syracuse University (*Jour. Ind. and Eng. Chem.*, 1921, xiii, 1143-1144), have tested the solubility of these two sugars in various organic solvents, using an ordinary Soxhlet extraction apparatus. The sugar was placed in the paper thimble, and the solvent was heated for five hours. When one gram of dry sugar and 100 c.c. of ethyl acetate were used, glucose was almost completely extracted, while sucrose was but slightly affected. When a mixture of equal parts of glucose and sucrose was used, an almost complete separation of the two sugars was obtained. On cooling its solution in ethyl acetate, glucose (dextrose) separated in the crystalline form.

J. S. H.

Proposed Translation of Helmholtz's "Handbuch der physiologischen Optik." James P. C. Southall, President of the Optical Society of America, invites subscriptions to a fund to translate into English the last edition of Helmholtz's great work, which still remains the leading authority in the field. In addition to the value of the work in a form in which its text will be accessible to many who do not read the original language, the publication will neatly mark the centennial anniversary of the birth of the great scientist, whose influence has been felt as deeply in modern scientific thought as that of any of his distinguished contemporaries. It is estimated that the cost of translating and publishing the volume will be at least \$5000. Contributions in any amount may be sent to Adolph Lomb, treasurer, care of the Bausch and Lomb Optical Company, Rochester, New York. A subscription of not less than \$15 will entitle the subscriber to a copy of the complete work.

H. L.