

NOTE.

Correction.—The formula for methylguanido-glyoxylic acid, given on page 1110 of the July, 1919 number should read $\text{NH}_2\text{C}(\text{NH})\text{NCH}_3\text{-COCOOH}$.

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NEW BOOKS.

The Preparation of Substances Important in Agriculture. A Laboratory Manual of Synthetic Agricultural Chemistry. 3rd Edition. By CHARLES A. PETERS, Ph.D., Prof. of Inorganic and Soil Chemistry, Dept. of General and Agricultural Chemistry, Mass. Agricultural College. John Wiley and Sons, Inc., New York: Chapman and Hall, Ltd., London, 1919. vii + 81 pp. 13 × 19 cm. \$0.80.

The laboratory course outlined in this small volume makes use of the preparation of substances important in agriculture to train the student who has already had a one year course in chemistry at high school, or its equivalent. The table of contents includes: Superphosphate, Sulfate of Ammonia, Potassium Nitrate, Potash Salts, Lead Nitrate, Lead Arsenate, Lime-Sulfur, Copper Sulfate, Paris Green, Bordeaux Mixture, Emulsions.

Under each of these headings the main object of the process is first stated; the laboratory directions are then given; following this are notes on the chemical, commercial, and agricultural aspects of the subject; lastly comes a series of questions to be answered by the student in the laboratory note book.

Many teachers are of the opinion that the kind of laboratory work presented in this book is of the greatest value as chemical training. The experiments are sustained, so that the interest centers on one point over a considerable period of time. Incidental problems come up in connection with the major problem, so that they have a significance they would not possess if they were taken as independent experiments. There is a distinct incentive to use judgment and skill in manipulation because the amount and quality of the final product are influenced thereby. Professor Peters remarks in his Preface: "The method of presentation aims to put a few major points before the student and extend the work on such points over so long a time that the student will absorb it. The author feels that when a student, in his earlier years in college, works interestedly for a whole exercise around one thing he grasps something while if a dozen important points pass in review during the time he is left in a maze and gets little but technical benefit. While, however, the student is busy on the one major piece of work other minor points may be gathered round it and readily absorbed."

A trip over the northern peaks of the White Mountains from which the reviewer has just returned, although somewhat remote from chemistry, offers a convenient analogy. He found those peaks swarming with young girls from the various girls' camps. This was delightful on one of the days