and in at least 53 they are handled every time the covers of the species they represent are taken out, even for routine determination, filing, etc. Over a period of years this handling inevitably results in breakage.

Considering that types are irreplaceable and that they are one of the basic assets of the science of botany, the complacency of American botanists is indeed remarkable. That many European scientific institutions have been severely damaged by bombs is an indisputable fact. Yet apparently only three institutions in the United States are taking steps during the war to get their types out of bombing range. This is almost beyond belief, considering the magnitude of steps taken in other aspects of civilian defense throughout the nation.

F. R. FOSBERG

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QUOTATIONS

THE PITTSBURGH MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE[1]

TO THE MEMBERS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE:

WHEN the American Association for the Advancement of Science and all similar societies planned their winter meetings, the present situation could not have been foreseen. We had not even entered the war, and did not dream of a congestion of transportation such as now exists. When the present situation had developed, it was (in the opinion of a majority of the committee having power) too late to postpone our meeting.

Transportation is now so greatly overtaxed that necessaries of life can barely be carried; the railways should be spared every extra burden. Great simultaneous pilgrimages on important trunk lines are especially to be avoided, since they demand extra trains, needing extra locomotives and coal, and causing much confusion. Therefore, in my opinion it behooves every patriotic and unselfish member to consider very seriously whether he can really serve his country by attending the meeting, or whether he can not better serve in this fateful time by staying at home, especially during a period of highly congested travel, when many of our soldiers may wish to take leave of their families before departing for the front. I believe that only those persons bringing really important contributions to the problems of the war should attend such meetings now. All others, in my opinion, should conserve their money for Liberty bonds and for those in distress, and should save their strength for action in this time of extraordinary crisis. For these reasons, with great regret, I have decided not to attend the meeting at Pittsburgh.

So far as I have been able to ascertain, all the responsible authorities at Washington concerned with transportation agree with me as to the importance of avoiding unnecessary journeys in such a crisis.

The very great usefulness of the American Association for the Advancement of Science is not dependent upon the unbroken continuity of its social meetings.

Science is incalculably important, indeed indispensable, in this world-wide cataclysm. The excellent work of the association in the past is now bearing fruit; but this moment demands action rather than general discussion. We must devote all our energies to winning the war. Let us all make every endeavor to apply our knowledge and strength in our country's noble cause.

THEODORE W. RICHARDS,
President of the Association

CAMBRIDGE, MASS.,
DECEMBER 15, 1917.

SCIENTIFIC BOOKS

CHEMISTRY

The Chemistry of Organic Medicinal Products. By GLENN L. JENKINS and WALTER H. HARTUNG. xii + 457 pp. Planographed by John S. Swift Co., Inc., St. Louis. 1941. 6½ × 9½ in. $3.00. Bound in stiff paper.

THIS book, by the dean of the Purdue University School of Pharmacy and the professor of pharmaceutical chemistry of the School of Pharmacy of the University of Maryland, has been written primarily as a text-book for those advanced students in pharmacy who have had the requisite training in chemistry, particularly organic chemistry, but should prove useful also to the organic chemist interested in this field and to the medical practitioner who wishes to know something more about the chemistry of the drugs he is prescribing.

The classification of the subject-matter is strictly chemical, although not following entirely the customary division into the major groups of I. Acyclic (or Aliphatic), II. Isocyclic, and III. Heterocyclic.

[1] SCIENCE, December 28, 1917, p. 638.

Acyclic and isocyclic compounds are discussed together in chapters whose headings are determined by the particular functional groups present. Thus, the chapter entitled "Hydroxyl Derivatives of Hydrocarbons" deals with Alcohols, Polyhydroxy Alcohols, Unsaturated Alcohols, Cyclic Alcohols, Sterols, Aromatic Alcohols, Phenols and Halogenated Hydroxyl Compounds, in that order. After considering the acyclic and isocyclic compounds in such chapters, there follow two on Heterocyclic Compounds and a final one on Stereoisomerism. Before proceeding to a consideration of the separate chapters, a bibliography of standard reference works likely to be helpful to the reader, and occupying five pages, is inserted; in addition to which numerous references are given throughout the text.

Although, as already noted, the classification varies somewhat from the conventional, the volume constitutes an abbreviated text-book of organic chemistry, in which the usual sections on isomerism, nomenclature, preparation, physical and chemical properties, are supplemented by paragraphs or sections on physiological activity and, where justified, on the apparent connection between such activity and chemical structure. Pharmacological and therapeutic information is presented concisely without attempting to record details more appropriate for treatises in these special fields. Uses and modes of administration are also recorded, as well as the accepted trade names for the more important drugs.

The ancient materia medica, consisting largely or wholly of natural products of complex and variable composition, are rapidly being displaced by the products of the organic chemists' laboratory, and ere long most of them will be as extinct as the dodo, giving place to such triumphs of the laboratory as arsphenamine, the hormones, vitamins and the sulfanilamides. The book is profusely illustrated with structural formulas, tables, charts and diagrams, and is provided with an excellent index. A laboratory manual to accompany the text has been prepared by Drs. Hartung, Summerford and Dunker.

Chemistry of Insecticides and Fungicides. By DONALD E. H. FREAR. viii + 300 pp. 6¼ × 9¼ in. New York: D. Van Nostrand Company, Inc. April, 1942. $4.00.

IN these days of global warfare, when every one is praying for an early cessation of the conflict, we can not overlook the fact that we are engaged also in another kind of struggle, in which our enemies are not fellow humans but other living organisms, and that this war has been going on since the dawn of man's history and will probably continue until its close. Little is to be feared from the larger animals, for they all recognize man as their master and their fate as in his hands; but it is in the smaller animals and the lower forms of life that man finds his deadliest and most implacable enemies. These attack him either directly, by causing various diseases, or indirectly by destroying his means of subsistence. One of the important hostile armies in the latter category is that of the plant pests, and the present book discusses the chemistry of those compounds which have been found useful as insecticides or fungicides, in order that the campaign against these enemies may be conducted more intelligently and more successfully.

The text is based upon a graduate lecture course organized and given by the author at the Pennsylvania State College, and each chapter concludes with an excellent bibliography.

After the Introduction, the separate chapters are grouped under five general headings as follows: *Part I. Stomach Poisons or Protective Insecticides.* Arsenicals, Lead Arsenate, Fluorine Compounds and Miscellaneous Stomach Poisons; *Part II. Contact Poisons or Eradicant Insecticides.* Nicotine and Pyrethrum, Rotenone and Miscellaneous Contact Poisons, Sulfur and Inorganic Sulfur Compounds, Oils and Fumigants; *Part III. Fungicides.* Copper Compounds, Mercury Compounds and Miscellaneous Fungicides. *Part IV. Spray Supplements and Residue Removal.* Wetting, Spreading and Emulsifying Agents, and Spray Residue Removal; *Part V. Analytical Methods.* Macro Methods and Micro Methods.

As can be seen from these titles, the book should be useful to inorganic, organic and bio-chemists, as well as to plant pathologists and economic entomologists, and it is cordially commended to them. Paper, type, presswork and binding are admirable; the proofreading has been done carefully; and some interesting illustrations of natural products are included.

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A FRESHMAN TEXT IN MATHEMATICS

Basic College Mathematics, A General Introduction. By CARL WALLACE MUNSHOWER and JAMES FLETCHER WARDWELL. xiii + 612 pp. New York: Henry Holt and Company. 1942.

THIS text is designed to cover in one year essential selected topics in algebra, trigonometry, analytic geometry and calculus, so as to provide a profitable terminal survey for students taking but one college course in mathematics, and also an introduction for those who prepare for further mathematical work. The subject-matter organization is intended to furnish a psychologically acceptable unified course with the rate concept introduced in the first chapter. So much material has been provided in these twenty-one