exist in various parts of the country. The Brasch collection of 2,000 mathematicians and astronomers now in the library of Stanford University, the Howard collection of 3,000 entomologists in the Bureau of Entomology in the U. S. Department of Agriculture, the National Museum collection of some 10,000 prominent men and a similar collection of some 50,000 portraits in the library of the Wisconsin Historical Society at Madison give some idea of the character and scope of a few of these collections. But the Deane collection differs from all the others in several notable respects. The Howard collection is accompanied by a card index of names but without further data. The National Museum series is provided with a typewritten list of names also without further data. Each of these collections may contain two or three pictures of an individual, whereas the Deane collection has 15 to 18 of some men. Finally, the accompanying index card shows at a glance the essential facts regarding each individual—his age, birthplace, position, publications and a reference to his biography.

A similar collection in a university or historical library in each state, based on the activities of local workers, would make available a vast amount of information concerning the progress of science and industry that is now more or less inaccessible.

Ruthven Deane builded better than he realized. His desire to know what his confrères looked like developed into a hobby. His desire to know something about each individual developed into the museum concept of making a portrait illustrate a label or index card, and finally his long search for a suitable depository for his life work resulted in the development of his hobby into a national collection, a model of its kind, devoted to the diffusion of knowledge and accessible to all who may be interested in it.

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SCIENTIFIC BOOKS

ALLERGY

Allergy, Anaphylaxis, and Immunotherapy. By BRET RATNER, M.D. Baltimore: Williams and Wilkins Co., 1943. 864 pp. $8.50.

THIS book has a misleading title. Knowing that Ratner has long been concerned with problems of allergy, the reader will be considerably surprised that the index does not mention ragweed, or pollen, or even hayfever. The subtitle is more clearly descriptive: "A treatise presenting the fundamental principles and practice governing the use of antisera, vaccines, toxoids, blood transfusions, blood substitutes and sulfonamides, in the prevention and treatment of infectious diseases and of the allergic phenomena resulting from their use."

As the author frankly intimates in his prefatory remarks the book really represents "The Education of Bret Ratner" acquired as a preliminary to the writing of a text on allergy in childhood. It appears to me that the projected volume will probably be more unified than the present one, which is essentially made up of three books bound together.

I. *Principles and practice of immunotherapy:* 157 pages dealing with the nature and preparation of various materials used in the diagnosis, prevention, and treatment of infectious diseases (including 50 pages on the sulfonamides); 218 pages on the application of these materials to the control of about 40 diseases. The chapter-headings in this section are arranged alphabetically, which results in some strange and illogical bedfellows—xix, Meningitis, Mumps, Plague. xxv. Scarlet Fever, Syphilis.

This Book I is distinctly inferior to the remainder of the volume. It is a rather tiresome compilation of the author's readings rather than his doings and is burdened with trivial and irrelevant details—"wearing of heavy leather puttees . . . gauntlets . . . tourniquets"—for the prevention and treatment of snakebite, are recommendations that seem out of place in a book of this kind.

Books II and III, *Allergy to Immunotherapeutic Agents* (sera, blood, drugs) and *The Allergic State* (physiological pathology, blood changes, mechanism) reflect Ratner's experience and critical thinking. The presentation, therefore, is much more effective than in Book I. The discussion of allergy to serum is particularly extensive and detailed; it should be carefully examined by all students of the subject although many readers will have some dissenting opinion. Had this section, perhaps with some expansion, been presented as a monograph the contribution to medical literature would have been more clear-cut than is the book as a whole.

The full bibliography (55 pages) is a valuable feature, especially because it is arranged alphabetically by authors' names. As are many others, the reviewer is exasperated by the footnote-style of citation with its repetitious and virtually useless *loc. cits* and *ibids.*

The index, however, merits little praise. There are many examples of such entries as "Diphtheria, prophylaxis. *See* active immunization." "Diphtheria, Schick test. *See* Schick test." "Dog anaphylaxis. *See* Canine anaphylaxis." "Electrocardiographic changes. *See* under Allergy." Most cross-references

of this kind are quite unnecessary. They waste space as well as the reader's time and patience. If their inclusion is considered desirable the page-numbers should accompany them so that backward or forward search for an informative entry may be avoided. The tedious preparation of an index is frequently left to the publishers. Authors should take more responsibility for this useful part of their books.

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QUANTITATIVE ANALYSIS

Introduction to Quantitative Analysis. By SAUL B. ARENSON and GEORGE RIEVESCHL. New York: Thomas Y. Crowell Company. 1944. $2.75.

EVERY one has known the obstreperous sort of person who always manages a resounding back-slap and pumping right hand by way of greeting. This book is written in the style of such an over-friendly fellow. The second person is used, you, the reader or student, being addressed throughout the book. The analogies used are very homely: tea mixing, the distance and rate of travel between Akron and Cincinnati and similar examples are used to solve problems. Such analogies seem inconsistent with the chapters on electrochemical and neutralization theory, students capable of mastering the latter very probably being insulted by the former. Some of the many procedures listed probably are of doubtful value to the elementary student. For example, the determination of moisture in butter, alcohol in a beverage, free fatty acid in fats and oils, Al $(OH)_3$ in a medicinal preparation, vitamin C in vegetables and four volumetric methods for sulfate are listed. In all fairness, it should be stated that a sufficient number of other procedures are included, placing the above-mentioned experiments in the "optional" category.

On the positive side, the book seems to be a serious attempt to step out away from the stogy, time-honored and, in many cases, dull procedures to be found in the ordinary text on quantitative analysis. It is to be hoped that this book exerts an influence in such a direction on the field as a whole. An excellent series of problems is included, the book is well documented, and the variety of procedures exceeds any other book of comparable scope.

The physical make-up of the book follows war-time standards. Typographical errors are relatively few, but rather crucial. For example, the student is advised to take 25 ml of 3 per cent. H_2O_2 for N/10 permanganate titration, and 0.25 M "ferroin" is recommended as indicator for ceric sulfate titrations.

Quantitative Inorganic Analysis. By I. M. KOLTHOFF and E. B. SANDELL. Revised edition. New York: Macmillan Company. 1943. $4.50.

THIS revision of a well-known book brings it up to the times, the chapters on organic reagents, spectrophotometry, errors and precipitation phenomena being augmented and brought in line with the latest work in the field. A section on amperometric titrations has been added.

For a book with as wide a scope as this one, it seems regrettable that no mention is made of some of the modern theories of acid-base phenomena or of the fallacies inherent in ionic equations. It would seem to be less misleading to use molecular equations, obviously fallacious, than to use ionic equations containing, for example, Ti^{+4}, Fe^{+3}, Cr^{+3}, etc., which give an impression of correctness.

Many instructors will find the book too all-inclusive for a general elementary course, although it should be excellent when used as an elementary book for chemistry majors.

The physical make-up of the book is exceptionally attractive, being scarcely different from the pre-war product.

In general, the book is by far the best link between elementary and advanced quantitative analysis yet produced.

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REPORTS

ARCTIC INSTITUTE OF NORTH AMERICA

A MEETING of Canadians and Americans interested in scientific research into Arctic problems met in Montreal on September 8 and completed plans for the early establishment of an Arctic Institute of North America, first reported in SCIENCE[1] in May of this year. The project was initiated at a similar meeting held in New York on May 13.

[1] SCIENCE, 99: 2578, 423, May 26, 1944.

The thinking of the organizing group has been broadly as follows:

Wide interest in the Arctic is being expressed at present in both Canada and the United States and a strong scientific and developmental movement in Arctic North America is expected to begin as soon as the war is over.

Despite the excellent reconnaissance studies accomplished by a number of exploring expeditions,