

teurs and in a sense as pioneers, looking at science and its relations with other branches of knowledge sympathetically, and with more interest in learning than in judging or proclaiming. But what do they look at?

David Hawkins, author of the fourth essay, gives an answer: "The essential humanistic aspects of science are to be found, not in the method of science if there be such a thing, and not in the results of science as they appear in the text books, and not in the external influences of science on industry or on politics or on poetry or painting, but in the life of science as an expression of human capacities and limitations." To be sure, two of Hawkins' collaborators, F. E. L. Priestley and Harcourt Brown, both professors of literature, do survey wide areas of English and French literature for signs of interplay between scientific thought and imaginative works in various times and places. Karl Deutsch, in the first essay, tackles the formidable subject of "Scientific and humanistic knowledge in the growth of civilization," which includes industry, politics, technology, and the arts. But their several essays may be considered "converging statements" on the area specified by Hawkins.

The enterprise which resulted in this volume was conceived by Charles Odegaard and involved participation by a number of others over a period of five years. It is a good beginning.

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The Clinical Application of Antibiotics.

M. E. Florey. vol. III, *Chloramphenicol and the Tetracyclines*. Oxford University Press, London, 1957. ix + 393 pp. Illus. + plates. \$19.50.

This book is a sequel to the author's earlier work *The Application of Antibiotics: Penicillin*, published in 1952, and will shortly be followed by another volume dealing with more recently discovered antibiotics of proved clinical value. The author's announced aim is to furnish a critical evaluation of the data and to elucidate the general principles upon which the clinical use of antibiotics is founded.

Chloramphenicol and the three tetracyclines are discussed in separate sections under the following headings: "General considerations" (this includes origin, properties, complications of therapy, and so on), "The treatment of diseases due to specific organisms," and "The treatment of diseases considered by systems, age groups or sex."

For each antibiotic, laboratory data

are included on in vitro sensitivity tests, antibacterial spectrum, animal trials, stability, and the levels obtained in blood and certain tissues by various routes of administration. Summaries of this material and illustrations and summaries of pertinent clinical data are presented in easily understood tables and charts. The coverage of toxicity studies and complications of therapy, in particular, is excellent.

In general, the earlier clinical reports on each antibiotic receive full treatment and critical analysis. Many later reports, regarded as containing confirmatory data, are omitted. Some of the clinical reports cited are of questionable validity, due to the use of noncritical diagnostic criteria by certain workers. It is understandable that in a work of this scope the author could not become sufficiently familiar with the reliability of each report to avoid such citations. In occasional instances, because of these two factors, a too optimistic view is presented of the effectiveness of these antibiotics in certain diseases.

In dealing with some diseases not currently presumed to respond to antibiotic therapy and with conditions due to mixed infections, or of unknown etiology, where citations of clinical trials are few, the author has refrained from critical comment. One not familiar with the subsequent clinical experience and current clinical views in these areas might be misled by this treatment.

Notwithstanding these few criticisms, the author has done a creditable job of sifting the fine from the dross. The result is a volume of immediate utility to, and deserving of a place on the bookshelf of, all scientists concerned with antibiotics and all clinicians who prescribe them. It should further serve as a useful reference work for years to come. The book is clearly written, well indexed, and notably free of typographical errors.

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Directory of Geological Material in North America.

J. V. Howell and A. I. Levorsen. Revised with the assistance of Robert H. Dott and Jane W. Wilds. American Geological Institute, Washington, D.C., ed. 2, 1957. vi + 208 pp. \$3.

The first 30 pages of this book list "Sources national and continental in scope," ranging from the Academy of Natural Sciences of Philadelphia to Fred S. Young of Oregon, who supplies diamond-saw blades. These listings carry brief explanations, not just addresses.

The final 178 pages are entitled "Sources provincial and state in scope." Canada is covered in 19 pages, Central America in 1 page, Mexico in 1 page, the West Indies in 6 pages, territories of the United States in 6 pages, and the United States in 143 pages. Listings for these areas are given by province, state, or smaller region, and the contributor is given at the beginning of each section but, beyond, the name, is not identified. It would increase the value of the directory if the contributors were identified and also if a current list of geologists, by province and state, were included.

This is a very handy book, 6¾ by 9½ inches. The information that it contains about where geological materials are available, who has well logs, where mineral collections are located, and so on, make it a "must."

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New Books

Television in Science and Industry. V. K. Zworykin, E. G. Rambert, L. E. Flory. Wiley, New York; Chapman & Hall, London, 1958. 312 pp. \$10.

The Story of Albert Einstein. The scientist who searched out the secrets of the universe. Mae Blacker Freeman. Random House, New York, 1958. 178 pp. \$2.95.

Dr. W. C. Röntgen. Otto Glasser. Thomas, Springfield, Ill., ed. 2, 1958. 176 pp. \$4.50.

The Chemical Industry in Europe. 4th report. Organisation for European Economic Co-operation, Paris, 1957. 199 pp. \$3.

An Introduction to Experimental Surgical Studies. W. J. Dempster. Thomas, Springfield, Ill., 1957. 463 pp.

Encyclopedia of Chemical Reactions. vol. VII. Strontium, sulfur, tantalum, technetium, tellurium, terbium, thallium, thorium, thulium, tin, titanium. Compiled by C. A. Jacobson. Clifford A. Hampel, Ed. Reinhold, New York; Chapman & Hall, London, 1958. 486 pp. \$12.75.

Chronic Schizophrenia. Thomas Freeman, John L. Cameron, Andrew McGhie. International Universities Press, New York, 1958. 168 pp. \$4.

Handbuch der Physik. vol. XXXIV, pt. II, *Corpuscles and Radiation in Matter*. S. Flüge, Ed. Springer, Berlin, 1958. 324 pp. DM. 78.

Flora of the British Isles. pt. I, *Pteridophyta-Papilionaceae*. Drawings by Sybil J. Roles. Cambridge Univ. Press, New York, 1958. 144 pp. \$5.

Chemical Calculations. A systematic presentation of the solution of type problems, with 1000 chemical problems arranged progressively according to lesson assignments. Bernard Jaffe. World Book, Yonkers-on-Hudson, N.Y., ed. 3, 1958. 192 pp.