areas. But he does not confine himself to a more detailed description, rather an attempt is made to find a physical explanation for the occurrences and course of climatic elements. Although there are not many tables and maps, the text is sufficiently illustrated; nevertheless, foreigners would perhaps derive more benefit from the book had more tables been used.

Generally, this book presents considerable information. It is easy and pleasant to read and even has some poetical citations, among them a wonderful description, from Turgenev's classic "The Diary of a Hunter," of a summer day in the forest-steppe area.

The translation is generally good. However, there are some shortcomings that may be partly misprints—for example, burana instead of buran; Benzenchuk instead of Bezenchuk, a misprint in Table 16, and "Papanintsev's observations showed . . ." instead of "Observations during Papanin's expeditions showed . . ." (p. 108). More serious is "nucleus-less winters" (p. 108). This is wrong; it should be "coreless winters," or a German word, frequently used in this country, "kernlose winters." It is also difficult to understand why the translator writes "Vize"; the same persons also published numerous papers in Germany as "Wiese." Unfortunately this same error stems back many years in translation practice, apparently owing to the translators' ignorance of the subject matter.

The subject index is a very commendable addition to the translation. The printing is excellent.

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Introductory Astronautics

Science education seems to be the common concern of scientists and engineers, and **Astronautics for Science Teachers** (Wiley, New York, 1965. 398 pp., $8.95), edited by John G. Meitner, represents another contribution in this area. Specifically, this book was "prepared by space scientists and engineers in order to bring [high school] teachers up to date in astronautics, so that they can introduce some of its facets into their science classes." Unfortunately, astronautics seems to embrace practically every phase of science and engineering, and in their zeal the authors cover the spectrum of subjects from DNA to relativity.

The longest chapters are those entitled "Orbits," "Semiconductor electronics," "Rocket propulsion," and "The nature of space." The remainder are concerned principally with space exploration, life in space, and the next decade in astronautics. The emphasis throughout is on space travel and space exploration; and the book is replete with speculation that borders on science fiction, and with sweeping generalizations. ("Most innovations of our civilization—in fact *all* innovations throughout the history of mankind—are either engineering developments or medical developments.")

In view of the intended reader, it is not surprising that the technical discussions are usually grossly oversimplified; but they are also often incorrect. Not infrequently the level of presentation seems geared for the student in grade school. On the other hand, the chapter on orbits and trajectories offers a formidable challenge to any science teacher.

The experienced teacher will have little difficulty in spotting numerous errors. Some are understandable in view of the need for simplification of advanced concepts. Others display either a lack of understanding on the part of the author or a disdain of the comprehension level of science teachers. Still others, like the figure that displays trajectories of projectiles and satellite orbits (p. 111), are inexcusable by any standards.

No doubt the perceptive reader will gather a great deal of information on astronautics. It is doubtful, however, whether the average teacher will have learned much of the basic principles of the subject.

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New Books

General

Abridged Science for High School Students. vols. 1 and 2. Nuclear Research Foundation, School Certificate Integrated Science Textbook Group of Authors and Editors. H. Messel, Chairman. Nuclear Research Foundation, Univ. of Sydney, Australia, 1966. vol. 1, 288 pp.; vol. 2, 334 pp. Illus.

Action and Purpose. Richard Taylor. Prentice-Hall, Englewood Cliffs, N.J., 1966. 283 pp. $5.95.

The Annual of Czechoslovak Medical Literature 1963. Josef Navráil, Ed. Czechoslovak Medical Press, Prague, 1965. 688 pp. Paper. Books, the proceedings of congresses and conferences, university publications, and journals are listed; there is a list of the periodicals indexed.

Antarctica: The Worst Place in the World. Allyn Baum. Macmillan, New York, 1966. 159 pp. Illus. $3.95.

Applied Research in Education. E. Wayne Courtney, Ed. Littlefield, Adams, Totowa, N.J., 1965. 355 pp. Paper, $2.25.

Astronomical Dictionary: Chinese-English, English-Chinese. Hong-Yee Chiu, Ed. Consultants Bureau, New York, 1966. 187 pp. $15.

Bibliography of Hookworm Disease (Ancylostomiasis) 1920–1962. WHO, Geneva, 1965 (order from Columbia Univ. Press, New York). 251 pp. Paper, $4. More than 4000 references, arranged alphabetically by author, and a combined subject and geographical index in English and French.

Birds of Colorado. vols. 1 and 2. Alfred M. Bailey and Robert J. Niedrach. Denver Museum of Natural History, Denver, Colo., 1965. vol. 1, 466 pp.; vol. 2, 451 pp. Illus. Plates. $35.

Chemistry. Royal B. Leach and Galen W. Ewing. Doubleday, Garden City, N.Y., 1966. 408 pp. Illus. $5.95. A TutorText.

The Correspondence of Henry Oldenburg. vol. 3, 1666–1667. Edited and translated by A. Rupert Hall and Marie Boas Hall. Univ. of Wisconsin Press, Madison, 1966. 679 pp. Illus. $12.50.

Defense Purchases and Regional Growth. Roger E. Bolton, Brookings Institution, Washington, D.C., 1966. 203 pp. Illus. Paper, $2.50.

Depths of the Earth: Caves and Cavers of the United States. William R. Halliday. Harper and Row, New York, 1966. 414 pp. Illus. $7.50.

Dictionary of Chemistry and Chemical Technology in Six Languages: English, German, Spanish, French, Polish, Russian. Z. Sobecka, W. Choinski, and P. Majorek. Pergamon, New York; Wydawnictwa Naukowo-Techniczne, Warsaw, 1966. 1333 pp. $30. Revised edition of *Dictionary of Chemistry and Chemical Technology in Four Languages* (1962).

A Dictionary of Quotoons. O. A. Battista. Reader-Services Company, Morrisville, Pa., 1966. 283 pp. $4.95.

Elementary Logic. Willard Van Orman Quine. Harvard Univ. Press, Cambridge, Mass., ed. 2, 1966. 141 pp. Illus. $3.50.

The Experimental Investigation of Meaning: A Review of the Literature. Marjorie B. Creelman. Springer, New York, 1966. 240 pp. $6.75.

How to Live with Schizophrenia. Abram Hoffer and Humphry Osmond. University Books, New Hyde Park, N.Y., 1966. 189 pp. $5.95.

Illustrierte Geschichte der Medizin. Th. Meyer-Steineg and K. Sudhoff. Robert Herrlinger and Fridolf Kudlien, Eds. Fischer, Stuttgart, Germany, 1965. 361 pp. Illus. $10.50.

Integrated Data Processing Systems. E. Jerome McCarthy, J. A. McCarthy, and Durward Humes. Wiley, New York, 1966. 575 pp. Illus. $8.95.

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