student in our colleges and universities. Then perhaps interest in beetles would become commensurate with the numbers of species. I think this manual could arouse such interest. It would get the student over the first discouraging stumbling blocks: numbers of species, complexity of terms, and the great variation of form. Perhaps it is the wealth of illustrations that makes the volume a fine manual. And you can bet that a lot of experienced coleopterists will be flipping those 85 plates when trying to identify specimens in groups outside their specialty. *Caveant* Coleoptera!

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Holzanatomie der Europäischen Laubhölzer und Sträucher. Pal Gregus. Akademiai Kiado, Budapest, Hungary, 1959. 330 pp. + plates. Illus.

This large and thorough volume constitutes a major contribution to the literature on the identification of wood and woody species on the basis of xylotomy. It is a presentation of photomicrographs, diagnostic pen and ink sketches, detailed xylotomical descriptions, summary tables of characteristics, and keys to the identification of European deciduous trees and shrubs based on the structure of their wood. As such, it is a revised and enlarged edition of the author's successful *Bestimmung der mitteleuropäischen Laubhölzer und Sträucher auf xylotomischer Grundlage* which is now out of print.

The book is divided into a general section which treats the preparation of material and the fundamentals of the xylotomical determination of woody species, and a detailed section which treats 154 genera of 61 families of the Monochlamydeae, Dialipetalae, and Sympetalae. The detailed section is divided into an expanded key to species and a thorough description of the anatomical features of the wood of each species treated. It is followed by 307 plates (9 by 13 inches) of photomicrographs and drawings of the 303 species treated. Six summary (*Merkmalübersicht*) tables are included inside the back cover of the volume.

The diagnostic key is presented in both German and English and uses both qualitative and quantitative characteristics. It is elaborated to include minor variations within species and specimens; I found it to be quite workable.

The descriptions of the xylotomical features of the wood of each species are presented in German, but they can be readily translated by anyone who has a command of the basic German vocabulary of wood anatomy. The features of cross, radial, and tangential sections are presented in great detail.

The plates are large and exceptionally well done. Each plate shows four photomicrographs (2 by 3 inches) and a series of pen and ink sketches of diagnostic features. The photomicrographs include a cross section (× 30), a cross and a tangential section (× 100), and a radial section (× 200). Where applicable, pen and ink sketches are given of vessels, tracheid shaped vessels, tracheids, wood fibers, fiber tracheids, wood parenchyma cells, ray cells, supplementary fibers, and septate fibers.

This volume, along with its companion, the author's *Identification of Living Gymnosperms on the Basis of Xylotomy*, will provide data and fill a need in the several areas of plant science concerned with wood and woody plants. It provides a comprehensive view of the structure of woody plants, for general botanical purposes. It serves as an exhaustive source of data for advanced study of wood anatomy and its relationship to phylogeny. Finally, it provides a comprehensive reference manual for workers in the fields of plant anatomy, wood technology, forestry, paleobotany, and related areas.

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Staining Methods. Histologic and histochemical. J. F. A. McManus and Robert W. Mowry. Harper (Hoeber), New York, 1960. viii + 423 pp. Illus. $10.

At a time when the value of the information that can be derived from studying cells and tissues has been generally recognized by many disciplines, a book "integrating the newer methods of tissue and cell examination into histologic techniques" is highly welcome. The authors present here a selection of the methods they consider to be most valuable for the proper staining of histologic preparations. The selection, based on the authors' personal experience with the different techniques, includes well-established earlier procedures as well as newer methods—for instance, staining techniques used in electron microscopic studies which have recently been improved by Strugger, who applied additional "staining" with uranium salts for the detection of microstructures in cell constituents.

A discussion of the different methods of preparing the tissue for staining precedes the chapters on specific methods for study of the constituents of cells and tissues and for the study of special cells, tissues, and organs. Two appendixes—one giving an outline of basic techniques and another giving dilution and solubility tables, molar values, and buffers—increase the monograph's value for routine work and research.

The book continues the tradition of the famous standard works by Mallory, Bertrand, Lillie, and Glick, to mention just a few of the earlier and the more recent authors, and it will definitely fill the need of a modern tissue laboratory.

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Miscellaneous Publications

(Inquiries concerning these publications should be addressed, not to Science, *but to the publisher or agency sponsoring the publication.)*

Large-Scale Ground-Water Development. Water Resources Development Centre. United Nations, New York, 1960. 84 pp. Paper, $1.25. The first of a series of studies to be undertaken by various UN organizations. Contents cover basic considerations relating to use, stages of development, economic and financial aspects, the role of governments, and rights and other legislative matters.

Research in Wisconsin. A technical digest of research results in fish management, forestry, and game management, 1959. Ruth L. Hine, Ed. Wisconsin Conservation Dept., Madison 1, 1960. 104 pp.

Scientific and Technical Personnel in American Industry. Report on a 1959 survey. Prepared by the U.S. Department of Labor. National Science Foundation, Washington, D.C., 1960 (order from the Supt. of Documents, GPO, Washington 25). 66 pp. $0.45. American industry employed approximately 800,000 scientists and engineers in January 1959. Engineers were found to number 615,000 (80 percent of the survey); the 149,000 scientists included 72,000 chemists, 18,000 life scientists, 15,000 physicists, 15,000 earth scientists, and a smaller number in other occupational groups.

Soviet Education Programs. Foundations, curriculums, and teacher preparation. Bulletin 1960, No. 17. William K. Medlin, Clarence B. Lindquist, and Marshall L. Schmitt. U.S. Office of Education, Washington, D.C., 1960 (order from Supt. of Documents, GPO, Washington 25). 299 pp. $1.25.