followed in seeking nominations of candidates for election to the membership of the Commission. These changes have as their purpose the obtaining of candidates with high qualifications, if necessary, at the expense of the geographical distribution of seats as between one country and another. As regards the financial position, a warning was given to the Congress by the Right Hon. Walter Elliot, the Chairman of the Trust, that it was essential that the zoologists of the world should devise a scheme which would provide the requisite minimum income if they wanted the Commission to continue in existence. The Trust possessed no assured income and had to rely almost exclusively upon the income that it could obtain from the sale of publications to cover not only printing costs but also the unavoidable expenses of the Secretariat of the Commission. Mr. Elliot added that even the income so secured amounted to less than half that which would be required if the Secretariat were organized on a commercial basis and did not enjoy the services provided free of charge by the present Honorary Secretary. The gravity of the position disclosed by Mr. Elliot's statement created a deep impression, and a committee was at once appointed under the chairmanship of Professor R. Spärck, the President of the Congress, to devise a new financial plan.

In accordance with a suggestion made by the Colloquium and endorsed by the International Commission and by the Section on Nomenclature, the Congress at its final concilium plenum adopted a resolution advising zoologists to guide themselves in their work in the light of the decisions taken in Copenhagen as soon as these were officially published, even though those decisions would not formally come into force until the publication, some time hence, of the revised text of the Code, as amended at Copenhagen. In order to assist zoologists in taking the advice so offered by the Congress, the International Trust, in agreement with the Congress, in arranging for the early publication (probably at the end of December) and at a low price (75 cents) made possible by the diversion to this purpose of a part of the Trust's slender reserves, of the Official Record of the decisions on zoological nomenclature taken by the Congress. As already explained, the document so to be published is the report of the Colloquium which, on the recommendation of the International Commission and of the Section on Nomenclature, was unanimously adopted at the concluding plenary session of the Congress.

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Book Reviews

Histology. 2nd ed. Arthur Worth Ham. Philadelphia–London: Lippincott, 1953. 866 pp. Illus. + plates. $10.00.

Histology and related fields have been advancing so rapidly that Dr. Ham felt it necessary to issue a new edition of his widely used textbook only three years after its first appearance. This second edition includes a number of major changes. The sections on histological techniques have been expanded and brought up to date, and electron microscopy has been particularly emphasized. The chapter on the cell has been almost completely rewritten, and other chapters or sections that have undergone considerable revision are those on intercellular substances, the cells of the blood, the connective tissues proper, bone, muscle, nervous tissue, the circulatory system, liver, lung, kidney, pituitary, and adrenal. The inclusion of some 144 new illustrations should prove of great value to the student. The general quality of the illustrations is high. A few photomicrographs, however, are not reproduced with the clarity or contrast that one would desire, giving the impression that they were not made from first-rate preparations.

The author has performed a novel service for beginning students in his four opening chapters. This part of the book, which covers some 40 pages and includes 27 figures, presents the elements of histological techniques, both ordinary (fixation, embedding, sectioning, staining, mounting) and special (study of fresh tissue, phase microscopy, electron microscopy, etc.) and attempts to orient the student in the use of the microscope and the proper study and interpretation of histological sections. As an attempt at this important and difficult task, these chapters are praiseworthy. If the author appears at times to descend to banality, it must be remembered how untutored most beginning medical students are in the elements of histological techniques and in the use of the microscope.

The main body of the text is eminently readable and authoritative. An effort is made to present the different views on disputed or unsettled problems, which should be stimulating to the good student if disturbing to the mediocre or poor one. As is inevitable in books of this sort, the quality of the chapters varies. The best ones are probably those that represent the particular interests of the author. The references to the literature at the end of each chapter have been carefully selected; they should be of value to other than the beginning student.

I wish to emphasize that Dr. Ham's textbook, which is one of the most recent in the English language, is one of the very best. It deserves, and undoubtedly will continue to enjoy, great popularity.

In closing, however, I would like to discuss one point that relates not to the basic merit of the book but to its pedagogical outlook. The book is heavily slanted toward pathology and contains frequent excursions into the problems of cancer and other diseases. This is in line with the author's statement in the opening chapter that "in this book no pains will be taken to exclude any reference to the abnormal; indeed, every effort will be made to introduce enough histopathology to help the student to associate and correlate these two subjects [histology and pathology] as much as possible" (p. 7). I recognize that there are different views about the teaching of the human anatomical sciences. But I happen to be one of those who believe that histology is not the handmaiden of pathology; no more, indeed, than gross anatomy is the lackey of surgery or embryology the midwife of obstetrics. There are such things as first things; although, in the mad pedagogical whirl of today, this simple fact is too often lost sight of. I realize, for example, that one cannot properly teach the histology and cytology of the pancreas without reference to diabetes mellitus, but such reference is properly dictated and modified by the aim toward understanding *normal* pancreatic structure and function. The wisdom of distracting the attention of the beginning student with the problems of disease, however, is seriously to be questioned. One would be equally justified in attempting to teach surgical procedures in the first-year dissecting room; indeed, such attempts, unfortunately, are not unknown. Such digressions may serve temporarily to inflate the ego of the poorer medical student, but they do not fool the really good one. In addition, they cause the teacher deliberately to forfeit the last opportunity to give the student an understanding of the normal human body by focusing his attention elsewhere. The normal must be studied and appreciated before the abnormal; hence, at the beginning the latter had best be deliberately put aside wherever possible.

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A List of the Names Proposed for Genera and Subgenera of Recent Mammals. From the publication of T. S. Palmer's *Index Genera Mammalium* 1904 to the end of 1951. L. R. Conisbee. London: British Museum (Natural History), 1953. 109 pp. 1£.

Palmer's *Index Genera Mammalium* (1904) has long been out of print. It is still so useful to the mammalian systematist that the very few copies appearing in the market command a large premium, but it is obviously now long out of date and therefore very incomplete. Mr. Conisbee has painstakingly completed it through 1951 by this excellent supplement. As in Palmer, the supplement gives at least the following essential data for each generic or subgeneric name: author, year, classification (order and family), original reference, type species, type locality, and derivation of the name (when ascertainable). There is also a systematic list of names following the main, alphabetical listing. The work is accurate and nearly exhaustive. It is indispensable for those fortunate enough to have a copy of Palmer and helpful to anyone interested in zoological nomenclature. Its usefulness is, nevertheless, limited by the fact that it omits names of extinct genera and subgenera and that it is a supplement to a practically unobtainable work. What we still need is a complete new edition of Palmer.

Such a list arouses some thoughts on the progress and status of systematic mammalogy. A large sampling of its 611 generic and subgeneric names indicates that only about 25 percent of them were applied to newly discovered species, and even in those instances there is usually reason to challenge the author's opinion that generic or subgeneric distinction of the then new species was warranted. Some 60 percent of the names were applied to groups already well known but not earlier given subgeneric or generic rank. Nomenclatural inflation may be inevitable and may even be occasionally useful, but it does little or nothing to increase zoological knowledge. About 10 percent of the names from the start were invalid on purely nomenclatural grounds. So large a proportion of debris suggests an actual decline in knowledge or, at least wisdom. A final five percent, more or less, of the listed names were substitutes for previous names found invalid on nomenclatural grounds—attempts to clear up still older debris.

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New Books

Adaptation in Micro-Organisms. Third Symposium of the Society for General Microbiology, London, April, 1953. R. Davies and E. F. Gale, Eds. New York: Cambridge Univ. Press, 1953. 339 pp. Illus. + plates. $6.00.

Cultural Patterns and Technical Change. Manual prepared by World Federation for Mental Health; Margaret Mead, Ed. Paris: Unesco, 1953. U.S. distr.: Columbia Univ. Press, New York. 348 pp. $1.75.

International Review of Cytology, Vol. II. G. H. Bourne and J. F. Danielli, Eds. New York: Academic Press, 1953. 545 pp. Illus. $11.00.

Chemical Methods in Industrial Hygiene. Frederick H. Goldman and Morris B. Jacobs. New York: Interscience, 1953. 274 pp. Illus. $3.75.

Procedures in Experimental Metallurgy. A. U. Seybolt and J. E. Burke. New York: Wiley; London: Chapman & Hall, 1953. 340 pp. Illus. $7.00.

Augustine to Galileo. The History of Science A.D. 400–1650. 1st American ed. A. C. Crombie. Cambridge, Mass.: Harvard Univ. Press, 1953. 436 pp. Illus. + plates. $8.00.

Frontal Lobes and Schizophrenia. Second lobotomy Project of Boston Psychopathic Hospital. Milton Greenblatt and Harry C. Solomon, Eds. New York: Springer, 1953. 425 pp. Illus. $12.50.

Surgery of the Biliary Tract, Pancreas, and Spleen. A handbook of operative surgery. Charles B. Puestow; illus. by Jessie W. Phillips. Chicago: Year Book Publ., 1953. 370 pp. Illus. $9.00.