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human dentition is best understood in terms of its evolutionary background. Hence, the book's first chapter is given over to "evolution and dental degeneration." Here are pointed organic origins and trend, with emphasis upon present involutionary trends, leading (by inference) to various kinds of structural and functional disuse atrophy.

Such a trend may be recognized today in two major fields: first, consolidation in racial dento-facial patterns; second, entrenchment in unit characters or trait-complexes, genetically speaking, in face and teeth. These fields are covered, although of necessity the racial data are simplified in the sense of bypassing moot or obscure points of detail.

For present consideration the authors stress the dynamics of functional integrity. The discussion of "diet and its effect upon the masticatory apparatus" is focused upon the problem that primitive diets—"rough, bulky, and resistant"—conduced to dental health and vigor, while modern diets—"refined texture of the food, and the sophisticated methods of its preparation and consumption"—lead to poor tissue and muscle tonus, incorrect tooth-bone relationship, and rotten teeth. It must be noted however, that claims of this nature are, in this book, stated rather than demonstrated or proved.

There are very useful genetic chapters on "The relation of genetics to dental science," on "dental anomalies," and on "the future of our third molar." Many traits of teeth and jaws are discussed in genetic terms. Perhaps the most far-reaching discussion is that of "dentistry as a public health service," for the authors feel that "the health and welfare of the human masticatory apparatus . . . is a public health problem which must be solved by united effort."

This book, I feel, is a useful contribution toward such a goal.

W. M. KROGMAN

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Structure Reports for 1945-46, vol. 10. A. J. C. Wilson, Gen. Ed.; C. S. Barrett (Metals), J. M. Bijvoet (Inorganic compounds), and J. Monteath Robertson (Organic compounds), Section Eds. Utrecht: Oosthoek, 1953. (For the International Union of Crystallography.) 325 pp. Illus. \$12.

This volume follows the pattern and maintains the standard of volumes 11 and 12. It is divided into three sections: "Metals," "Inorganic compounds," and "Organic compounds." In the introduction the general editor says:

Structure Reports are not intended to be abstracts in the ordinary sense. Ideally they extract only material of structural interest . . . so completely that no further structural information would be gained by consulting the paper itself,

This aim has been achieved, in general, and, in some cases, critical comments added by the reporters as

well as derivative information computed from the original data make the report even more useful than the original paper. The difficult problem of classification, particularly in the sections dealing with inorganic and organic compounds, has been neatly sidestepped by placing these substances roughly in order of increasing complexity and by providing excellent author, subject, and formula indexes.

The considerable number of papers which are reported from behind the Iron Curtain and from Japan make this invaluable to the crystallographer who is remote from the larger libraries and whose command of the Russian and Japanese languages is either very elementary or, more probably, nonexistent. The type is clear and the diagrams are excellent. Although the paper used is thick and of good color, it soils quickly with use. It seems a pity that a higher gloss paper was not selected for this publication that undoubtedly will be frequently consulted for many years to come.

Crystallographers and all others who are interested in the structures of elements and compounds, whether they are chemists, metallurgists, physicists, or natural scientists owe a considerable debt of gratitude to the International Union of Crystallography who conceived the plan for *Structure Reports* and to A. J. C. Wilson, his section editors, and reporters for the careful, exhaustive, and accurate execution of their task. When the gap between volume 10 and the last volume of *Strukturbericht* is finally closed there will be available, in a most convenient collection, an almost complete record of structural investigations from the birth of x-ray diffraction studies to the present time.

F. J. LLEWELLYN

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New Books

Relativity for the Layman. A simplified account of the history, theory, and proofs of relativity. James A. Coleman. William-Frederick, New York, 1954. 131 pp. \$2.75.

Laboratory Exercises on the Plant Kingdom. Paul C. Lemon and Norman H. Russell. Brown, Dubuque, Ia., 1954. 121 pp. \$2.50.

The Chemistry of Petroleum Hydrocarbons, vol. I. Benjamin T. Brooks, Cecil E. Boord, Stewart S. Kurtz, Jr., and Louis Schmerling, Eds. Reinhold, New York 22, 1954. 664 pp. \$18.

Concise Dictionary of American Grammar and Usage. Robert C. Whitford and James R. Foster, Eds. Philosophical Library, New York, 1955. 168 pp. \$4.50.

Cancer: Race and Geography. Some etiological, environmental, ethnological, epidemiological, and statistical aspects in Caucasoids, Mongoloids, Negroids, and Mexicans. Paul E. Steiner. Williams & Wilkins, Baltimore, 1954. 363 pp. \$5.

Charles Darwin and the Golden Rule. The late William Emerson Ritter. Edna Watson Bailey, Ed. Science Service, Washington; Storm, New York, 1954. 400 pp. \$5.

Instrumental Methods of Chemical Analysis. Galen W. Ewing. McGraw-Hill, New York-London, 1954. 434 pp. \$6.50.

The Earth as a Planet. Gerard P. Kuiper, Ed. vol. II of *The Solar System*. Univ. of Chicago Press, Chicago, 1954. 751 pp. \$12.50.

Intelligent Layman's Medical Dictionary. Harry Swartz, Frederick Ungar, New York, 1955. 306 pp. \$4.75.

The Material Culture of Pueblo Bonito. Neil M. Judd. Appendix, Canid remains from Pueblo Bonito and Pueblo del Arroyo. vol. 124 of Smithsonian Miscellaneous Collection. Glover M. Allen, Ed. Smithsonian Institution, Washington, 1954. 398 pp. \$5.

Legg-Calvé-Perthes Syndrome. And related osteochondroses of youth. Charles Weer Goff. In association with Ned M. Shutkin and Myerma R. Hersey. Thomas, Springfield, Ill., 1954. 332 pp. \$10.75.

The Lost Villages of England. Maurice Beresford. Philosophical Library, New York, 1954. 445 pp. \$12.

Jet. The story of a pioneer. Frank Whittle. Philosophical Library, New York, 1954. 320 pp. \$6.

Endothelium. Its development, morphology, function, and pathology. Rudolf Altschul. Macmillan, New York, 1954. 157 pp. \$3.50.

The Structural Chemistry of Proteins. H. D. Springall. Academic Press, New York; Butterworths, London, 1954. 376 pp. \$6.80.

Thoreau: A Century of Criticism. Walter Harding, Ed. Southern Methodist Univ. Press, Dallas, Tex., 1954. 205 pp. \$3.75.

Recent Developments in Cell Physiology. Proceedings of the 7th Symposium of the Colston Research Society held in the University of Bristol, Mar. 29–April 1, 1954. J. A. Kitching, Ed. vol. VII of the Colston Papers. Academic Press, New York; Butterworths, London, 1954. 206 pp. \$6.50.

A Policy for Skilled Manpower. National Manpower Council. A statement by the Council with facts and issues prepared by the research staff. Columbia Univ. Press, New York, 1954. 299 pp. \$4.50.

The Design and Analysis of Industrial Experiments. Owen L. Davies, Ed. Oliver and Boyd, London–Edinburgh; Hafner, New York, 1954. 636 pp. \$10.

Fluorine Chemistry. vol. II. J. H. Simons, Ed. Academic Press, New York, 1954. 565 pp. \$13.50.

The Development of the Concept of Electric Charge. Electricity from the Greeks to Coulomb. Duane Roller and Duane H. D. Roller. Harvard Case Histories in Experimental Science, Case 8. James B. Conant and Leonard K. Nash, Eds. Harvard Univ. Press, Cambridge, Mass., 1954. 97 pp. Paper, \$1.60.

Genetic Homeostasis. I. Michael Lerner. Wiley, New York, 1954. 134 pp. \$3.25.

Development of the Guided Missile. Kenneth W. Gatland. Iliffe, London and Philosophical Library, New York, ed. 2, 1954. 292 pp. \$4.75.

Entire Functions. Ralph Philip Boas, Jr. vol. V of *Pure and Applied Mathematics*, Paul A. Smith and Samuel Eilenberg, Eds. Academic Press, New York, 1954. 276 pp. \$6.

A Developmental Study of the Behavior Problems of Normal Children Between 21 Months and 14 Years. vol. 2 of Univ. of Calif. Pubs. in Child Development. Jean W. MacFarlane, Lucile Allen, and Marjorie P. Honzik. Univ. of Calif. Press, Berkeley, 1954. 222 pp. Paper, \$2.25.

A Dictionary of Pastoral Psychology. Vergilius Ferm. Philosophical Library, New York, 1955. 336 pp. \$6.

The 5th Amendment Today. Erwin N. Griswold. Harvard Univ. Press, Cambridge, Mass., 1955. 82 pp. Cloth, \$2; Paper, 50¢.

Miscellaneous Publications

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

Utilization of Peanut Hulls as Activated Char. Engineering Expt. Sta. Ser., No. 95. vol. 47, No. 11. Frank C. Vilbrandt and Stephen M. Gano. Virginia Polytechnic Inst. Blacksburg, 1954. 10 pp. 25¢.

Training for Human Relations. An interim report. F. J. Roethlisberger; collabs. George F. F. Lombard and Harriet O. Ronken. Harvard Business School, Boston, 1954. 198 pp. \$2.

Atomic Energy Commission Predoctoral and Postdoctoral Fellowships in the Physical and Biological Sciences. Final report, 1 May 1948–30 Sept. 1953. Oak Ridge Inst. of Nuclear Studies, Oak Ridge, Tenn., 1954. 149 pp.

Syllabus of a Course of Lectures on Chemistry by Benjamin Rush. A facsimile reprint of the 1770 edition. Friends of the Univ. of Pennsylvania Library, Philadelphia 4, 1954. 48 pp. \$2.

Protection Against Radiations from Radium, Cobalt-60, and Cesium-137. Handbook 54. Natl. Bur. of Standards, Washington 25, 1954 (Order from Supt. of Documents, GPO, Washington 25). 60 pp. 25¢.

ISMR Bulletin. Bibliography issue. Illinois Society for Medical Research, 951 E. 58 St., Chicago 37, 1954. 8 pp. Gratis.

The Systematic Position of Lanthanotus and the Affinities of the Anguinomorph Lizards. Bull., vol 105, Article 1. Samuel Booker McDowell, Jr., and Charles M. Bogert. American Museum of Natural History, New York, 1954. 142 pp. \$3.

Silica Sand Resources of Western Virginia. Bull., Engineering Expt. Sta. ser., No. 96. vol. 47, No. 12. W. D. Lowry. Virginia Polytechnic Inst. Blacksburg, 1954. 62 pp. 75¢.

Testing of Hydrometers. NBS circular 555. J. C. Hughes. Natl. Bur. of Standards, Washington 25, 1954 (Order from Supt. of Documents, GPO, Washington 25). 10 pp. 10¢.

Laboratory Study of Effect of Varying Wave Periods on Beach Profiles. Tech. Memo. No. 53. George M. Watts. Beach Erosion Board, Corps of Engineers, Dept. of the Army, Washington 25, 1954. 19 pp.

Technique et Problèmes des Sondages Aérologiques. Contributions, No. 13. L. M. Malet. Institut Royal Meteorologique de Belgique, Brussels, 1954. 16 pp.

Expert Committee on Venereal Infections and Treponematoses, Subcommittee on Serology and Laboratory Aspects, Third Report. Tech. Rpt. ser. No. 79. World Health Organization, Geneva, 1954 (Order from Columbia Univ. Press, New York 27). 50 pp. 50¢.

Proceedings, Forty-first Annual Meeting, New Jersey Mosquito Extermination Association, and Tenth Annual Meeting, American Mosquito Control Association. The Associations, Atlantic City, N.J., 1954. 310 pp.

"The Adolescent Exceptional Child, a Realistic Approach to Treatment and Training." Proc. of the 1954 Spring Conference of the Child Research clinic of The Woods Schools, held in New Orleans, La., 9–10 April. The Woods Schools, Langhorne, Pa., 1954. 79 pp. Gratis.

Effect of Water on Bitumen-Aggregate Mixtures. Highway Research Board Bibliography 17. Natl. Acad. of Sciences–Natl. Research Council, Washington 25, 1954. 45 pp. 60¢.