be more efficient and less expensive than general screening. The number of cases detected in this way is too small to affect the total result. Squamous cell tumors seem to have a better prognosis, but the localization is more important.

The chapter on radiation therapy, palliative and otherwise, is long and detailed, while that on psychotherapy is very short. The chapter on the controversial subjects of statistics, geographic distribution and causative factors makes interesting reading. The book is well arranged and well printed; the subtitles at the top of every page are very helpful. I object to introducing the term bronchiologenic instead of bronchiolar. Bronchogenic, which is widely used instead of bronchial, is bad enough.

ALFRED PLAUT Armed Forces Institute of Pathology.

La Genese des Sols en tant que Phénomène Géologique. Esquisse d'une théorie géologique et géochimique biostasie et rhexistasie. H. Erhart. Masson, Paris, 1956. 83 pp. F. 560.

The 80 pages of text in this book are divided into five chapters: the first setting up and defining the theory of "biorhexistasiene." Here the author proposes the new term rhexistasie, which may be defined as a sudden break in the biological balance but not the catastrophic type proposed by Cuvier in the last century. Erhart also uses the term biostaise for a continuing biological balance but not quite in the same way as Lyell's rules of uniformity would be applied. His contention is that since the days of Lyell and Cuvier many additional facts of geology and geochemistry have been discovered and that these therefore modify Lyell's conclusions.

In Chapter 2 are considered the genesis of soils and sediments showing the importance of vegetable cover in both cases and the several problems connected with them. The question of chronology and its geologic implications are handled in Chapter 3. Rhexistasie is again discussed as due to climate evolution in connection with forest cover. Chapter 4 discusses the relation of continental sediments as the red sandstones, the bauxites, the iron-bearing beds (Laterites), and the clays. The land-derived marine sediments are fitted in here.

The last chapter, 5, is entitled "Evolution of the mineral material and biological transformation." In other words, the development of sediments is interdependent on the evolution of life, especially plants. It is a sort of attempt to cross the ideas of Cuvier and Lamarck. To quote, "Evolution of minerals and biologic evolution are both the result of Time, but an essential difference is char-

acteristic of their metamorphism." New forms and new aptitudes develop.

This is an interesting brochure and should bring comment from many areas of earth science. The importance of soil cover on the development of soils and of sediments derived from such areas deserves more attention than it has had. After all, sediments may be simply transported fossil soils. The author makes a fairly good case for his ideas. It seems to me that more examples and more detailed explanation would make a clearer presentation.

E. WILLARD BERRY Department of Geology,
Duke Uninversity

New Books

Biographical Memoirs. vol. XXIX. National Academy of Sciences of the United States of America. Columbia University Press, New York, 1956. 359 pp. \$4.

Immunity, 203 pp., \$5; The Nature of Viruses and the Origin of Life, 454 pp., \$7. Hideo Moriyama. Shonan Hygiene Institute, Kamakura, Japan, 1955 (order from Igaku-Shoin, 20 Hongo-6, Bunkyo-Ku, Tokyo).

La Régulation des processus métaboliques dans l'organisme. Théophile Cahn. Presses Universitaires de France, Paris, 1956. 681 pp.

Machine Design. Joseph Edward Shigley. McGraw-Hill, New York, 1956. 523 pp. \$7.75.

Mental Health and Infant Development. Proceedings of the International Seminar held by the World Federation for Mental Health at Chichester, England. vol. 1, Papers, 308 pp.; vol. 2, Case Histories, 289 pp. Kenneth Soddy, Ed. Basic Books, New York, 1956. \$4.50 per volume.

Fluid Models in Geophysics. Proceedings of the first symposium on the use of models in geophysical fluid dynamics. Held at John Hopkins University, 1–4 September 1953. Robert R. Long, Ed. Sponsored by Office of Naval Research, Geophysics Research Directorate, and U.S. Weather Bureau. Supt. of Documents, GPO, Washington 25, 1956. 162 pp.

Principles of Human Physiology. Charles Lovatt Evans and H. Hartridge. Lea & Febiger, Philadelphia, ed. 12, 1956. 1233 pp. \$12.50.

The Theory of Games and Linear Programming. S. Vajda. Methuen, London; Wiley, New York, 1956. 106 pp. \$1.75.

Psychical Research. R. C. Johnson. Philosophical Library, New York, 1956. 176 pp. \$2.75.

Chemical Market Research in Practice. Richard E. Chaddock, Ed. Reinhold, New York; Chapman & Hall, London, 1956. 196 pp. \$3.

General Biology. Gordon Alexander. Crowell, New York, 1956. 881 pp. \$6.75.

The Growth and Structure of Motives. Psychological studies in the theory of action. James Olds. Free Press, Glencoe, Ill., 1956. 277 pp. \$5.

The Biology of Senescence. Alex Comfort. Rinehart, New York, 1956. 257 pp.

Miscellaneous Publications

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

The Cultural Heritage of 20th Century Man. Philomathean Lecture Ser., 1955. Pennsylvania Literary Review and Philomathean Society, Philadelphia, 1956 (order from Pennsylvania Literary Review, 3443 Woodland Ave., Philadelphia). 96 pp. \$0.50.

What Are Business and Industry Looking for in College Graduates? Summary of the report of the Detroit Board of Commerce and Wayne University. Harold A. Basilius, Walter A. Crow, Orville F. Linck. Wayne University, Detroit, Mich., 1956. 15 pp.

Teachers Handbook, a Guide to the Interpretation and Follow-up of Achievement Scores. Louis P. Thorpe, D. Welty Lefever, Robert A. Naslund. 1955. 47 pp. \$0.35. Guide to Good Leadership. Kenneth A. Wells. 1956. 48 pp. \$0.50. Combating the Dropout Problem. Charles M. Allen. 1956. 46 pp. \$1. Helping Children Discover Books. Doris Gates. 1956. 48 pp. \$0.50. Modern Man. The story of his past development and future possibilities. Ashley Montagu. 1956. 48 pp. \$0.60. How to Work with Parents. Maria Piers. 1955. 42 pp. \$1. Make Your Study Hours Count. C. d'A. Gerken and Alice Kemp. 1956. 40 pp. \$0.50. Science Research Associates, Chicago.

Second Annual Computer Applications Symposium, Proceedings. 24-25 October 1955. Armour Research Foundation, Chicago, 1956. 108 pp. \$3.

The Production and Properties of Graphite for Reactors. A paper presented at the United Nations International Conference on the Peaceful Uses of Atomic Energy, Geneva, Switzerland, 8-20 August 1955. L. M. Curries, V. C. Hamister, H. G. MacPherson. National Carbon Co., New York, 1956. 61 pp. Free.

Catalogue of Southern Double Stars, vol. XI, Publ. of the Observatory of the University of Michigan. Richard A. Rossiter. University of Michigan, Ann Arbor, 1955. 283 pp.

What Are the Facts about Mental Illness in the United States? National Mental Health Committee, Washington 5, 1956. 36 pp.

Cancer Cytology and Cytochemistry. Annals, vol. 63, art. 6. Ray W. Miner, Ed. New York Academy of Sciences, New York, 1956. 430 pp. \$4.50.

Fibrocystic Disease of the Pancreas. Report of the Eighteenth Ross Pediatric Research Conference. Ross Laboratories, Columbus 16, Ohio, 1956. 92 pp.

The Flavonoids in Biology and Medicine. A critical review. Maurice E. Shils and Robert S. Goodhart. National Vitamin Foundation, New York 22, 1956. 101 pp. \$2.

Solar Radiation, Absorption Rates and Photochemical Primary Processes in Urban Air. Rept. No. 14. Philip A. Leighton and William A. Perkins. Air Pollution Foundation, Los Angeles 14, 1956. 129 pp. \$5.

Industrial Directory of Washington Metropolitan Area. Economic Development Committee, Washington Board of Trade. Washington Board of Trade, Washington, D.C., ed. 2, 1956. 24 pp.