

and complex ions, each of which contains a satisfying review of current knowledge. The author has, in fact, first become a keen student of the science (as distinct from the art) of analysis, and has then set himself the more difficult task of passing on to others the scientific equipment and critical skill which he has himself acquired. The volume in which this has been done is a noteworthy production, and may be commended heartily to all those who are responsible for teaching analysis, as well as to those who may value it for the additional interest which it may give to analytical practice.

Miscellany.

The Evolution of Earth and Man. By Lorande Loss Woodruff, George Howard Parker, Richard Swann Lull, Charles Schuchert, Harry Burr Ferris, Joseph Barrell, Albert Galloway Keller, George Grant MacCurdy, Ellsworth Huntington, James Rowland Angell, Edwin Grant Conklin, Wesley Roswell Coe. Edited, with a Preface, by Prof. George Alfred Batsell. Pp. xv + 476 + 32 plates. (New Haven, Conn.: Yale University Press; London: Oxford University Press, 1929.) 22s. 6d. net.

THIS volume consists of a reprint of two volumes of elementary lectures, "The Evolution of the Earth and its Inhabitants" (1918), and "The Evolution of Man" (1922), delivered at Yale University, with the addition of a chapter entitled "Cultural Evolution" by Prof. G. G. MacCurdy, and another on "The Mechanism of Evolution", by Prof. W. R. Coe. Most of the chapters are reprinted without any (or with only slight) alteration. Hence the review that appeared in NATURE (June 2, 1923, p. 735) still gives an accurate idea of the new impression, and the criticism of the titles of the individual lectures and of the whole volume is still relevant.

The new chapters are summaries of well-known evidence, which omit a good deal of modern research. For example, the beginning of the Bronze Age is given (p. 285) as 3000 B.C.; although it is now generally admitted that the alloy was not invented before 2500 (or perhaps even 2000) B.C., and some time must be allowed for the building up and diffusion of the culture-complex which in western Europe was called 'The Bronze Age'. The beginning of the Neolithic Period is assigned to 12,000 B.C., which is about nine or ten millennia too early.

Nature: Cosmic, Human and Divine. By James Young Simpson. (The Terry Lectures, Yale University, 1929.) Pp. ix + 157. (London: Oxford University Press, 1929.) 6s. net.

PROF. J. Y. SIMPSON'S three Terry Lectures delivered at Yale last year will interest those students of science who are not indifferent to the speculative and religious bearings of their subject. The first lecture summarises the results of recent astronomical and physical science. The second lecture, which is anthropological, takes an optimistic view of human nature, accepting Elliot Smith's view

that 'savagery' is not natural to man, and expressing the opinion that "human nature not merely can be, but is being changed", and (what seems too good to be true) that "we stand on the threshold of an Age of Reason".

The final lecture essays to present us with some sort of a philosophic synthesis in terms of trends and tendencies. "The association of mind with the energy at work in the world-process is forced on us in contemplation of the sustained and broadly progressive character of the process as a whole, with its present *dénouement* in man." The Christian theologian will discover in this last chapter a point of view indistinguishable from the *Logos* doctrine of the Fourth Gospel; nor would Dante feel that his view of love as the motive power of the world had been neglected. Prof. Simpson may be congratulated on a very useful piece of work.

The Scientific Examination of Pictures: an Investigation of the Pigments used by the Dutch and Flemish Masters from the Brothers Van Eyck to the Middle of the 19th Century. By Dr. A. Martin de Wild. Translated from the Dutch by Dr. L. C. Jackson. Pp. xv + 106 + 46 plates. (London: G. Bell and Sons, Ltd., 1929.) 15s. net.

DR. DE WILD has made an examination of the pigments used in painting Dutch pictures from the fifteenth to the nineteenth century inclusive, by micro-chemical methods, thus enabling him to use tiny samples without injury to the pictures, and carrying on the work done by former chemists such as Raehlmann and Laurie. The work, on the whole, confirms the conclusion formerly arrived at as to the pigments used at different periods in painting, but adds much detailed information on the pigments of the Dutch school during this period. The beautiful photomicrographs of actual examples are well worth looking at.

There are other chapters on the cleaning and preservation of pictures, the examination of them by means of X-ray photographs, and by means of ultra-violet light.

The work is a solid and useful contribution to a subject of growing importance and should find a place both on the bookshelf of the chemist and the picture expert.

A. P. LAURIE.

Isis: or the Future of Oxford. By W. J. K. Diplock. (To-day and To-morrow Series.) Pp. 95. (London: Kegan Paul and Co., Ltd.; New York: E. P. Dutton and Co., 1929.) 2s. 6d. net.

DISSATISFIED with Mr. Julian Hall's "Alma Mater", recently published in the same series, on the future of the two older universities of England, Mr. Diplock has produced a sparkling and thoughtful essay on Oxford as it appeared to him during the past five years, when spending laborious days in chemical laboratories, and nights in discussing 'life' and topics of wider intellectual interest with non-scientific friends. He not unnaturally prefers the Oxford of his leisure hours, and points out how the 'old academic tradition' may be in danger, if women become too numerous, or if benefactors