information. The work by C. and M. Schlumberger is mentioned, but no credit is given to Hans Lundberg for his pioneering developments in the field of alternating current prospecting. The history of magnetic prospecting also suffers from overcondensation; magnetized bars were used in prospecting for iron ore in Sweden as early as 1640, and a dip needle survey was made of New Jersey about 1760.

Some criticism must be leveled against carelessness in editing and proofreading. Some of the bibliographic references are incorrectly cited, and there are also omissions and errors in the text, affecting particularly the field of mining geophysics. The spontaneous polarization method is omitted from the tabulation on page 5, and the electrical resistivity technique is included therein as though its only function were to determine the depth to interfaces, such as water tables and bedrock. Mention of its application in the search for quartz veins, for shear zones, and in mapping geological structures is omitted. The author states (p. 286) that the spontaneous polarization method is ". . . valid only for locating ores within 100 feet of the surface." The depth limitation placed upon the method by those cognizant with the procedure is usually 300 feet. On page 290 he states that, although the strongest spontaneous polarization potentials ". . . are excited in sulphide ores such as pyrites, a number of other minerals such as pyrrhotite and magnetite, give rise to spontaneous polarization patterns. . . ." Magnetite does not ordinarily give rise to spontaneous polarization currents, and pyrrhotite is just as much a sulfide as pyrite. The author tends to use the terms "ore" and "sulphides" as though the two were synonymous, to which any mining engineer or geologist would take violent exception. A line or so further down from the above quotation, the author refers to a 1700 mv potential anomaly in Peru. This is an impossible potential, and the value reported was actually 700 mv.

It is to be hoped that in future editions of this book the subject of mining geophysics will be more adequately treated, and that errors and omissions such as those cited above will be remedied. The present edition suffers from the fact that the author, himself an oil geophysicist, has submited his manuscript for review only to other oil geophysicists, who have given a cavalier treatment to the geophysical techniques used in mining exploration. Aside from this criticism, the author is to be congratulated on having produced a book that fills a serious gap in geophysical literature.

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Proceedings of the London Conference on Optical Instruments 1950. New York: Wiley, 1952. 264 pp. $7.00.

The London Conference on Optical Instruments, sponsored by the Royal Society through its Sub-committee for Optics, was held in July 1950 at the Imperial College. The present volume represents a collection of the papers given, including the introductory address by Sir Thomas R. Merton. Altogether, 21 papers are included, most of them followed by summaries in English and French. The different topics discussed concerned photographic and projection lenses, reflection microscopy, gratings and grating instruments, phase-contrast microscopy, spectrophotometers, reflecting telescopes, and new optical materials.

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Scientific Book Register

The Nile. A general account of the river and the utilization of its waters. H. E. Hurst. London: Constable; New York: Macmillan, 1952. 326 pp. Illus. $6.00.

The Permeability of Natural Membranes. Reissue. Hugh Davson and J. F. Danielli. New York: Cambridge Univ. Press, 1952. 365 pp. Illus. $6.00.

Postural Development of Infant Chimpanzees. A comparative and normative study based on the Gesell behavior examination. Austin H. Riesen and Elaine F. Kinder. New Haven, Conn.: Yale Univ. Press; London: Geoffrey Cumberlege, Oxford Univ. Press, 1952. (For the Yerkes Laboratories of Primate Biology.) 204 pp. Illus. $5.00.

The Oxidation States of the Elements and Their Potentials in Aqueous Solutions. 2nd ed. Wendell M. Latimer. New York: Prentice-Hall, 1952. 392 pp. Illus. $7.50.

Problems of Consciousness. Transactions of the Third Conference, March 10–11, 1952, New York. Harold A. Abramson, Ed. New York: Josiah Macy, Jr. Fdn., 1952. 156 pp. Illus. $3.25.

Computing Methods and the Phase Problem in X-Ray Crystal Analysis. Report of a conference held at The Pennsylvania State College, April 6–8, 1950. Ray Pepinsky, Ed. State College: X-Ray Crystal Analysis Laboratory, Pennsylvania State College, 1952. 390 pp. Illus. $7.50.

Elements of Food Engineering, Vol. I. Milton E. Parker, with collab. of Ellery H. Harvey and E. S. Stateler. New York: Reinhold, 1952. 386 pp. Illus. $8.75.

Photoconductivity in the Elements. Trevor Simpson Moss. New York: Academic Press; London: Butterworths, 1952. 263 pp. Illus. $7.00.

Essentials of Fluid Dynamics: With Applications to Hydraulics, Aeronautics, Meteorology and other Subjects. Trans. of 3rd ed. of *Führer durch die Strömungslehre.* Ludwig Prandtl. New York: Hafner, 1952. 452 pp. Illus. $6.00.

The Molecular Theory of Fluids. Monographs on the Rheology of Natural and Synthetic Products. Herbert S. Green. Amsterdam: North Holland Pub.; New York: Interscience, 1952. 264 pp. Illus. $5.75.