

esters, and alkyl boron halides. Likewise included are boron fluoride with its many addition compounds, fluoroboric acids, crystalline boron, boron oxide, metaboric acid, boron carbide, and borides.

Section 2 on gold covers the main subjects of occurrence, technical extraction, preparation of special forms of gold in the pure state, concentration and separation of gold isotopes, colloidal gold, and the surface treatment of gold and gold alloys.

Section 3 on gold completes the series on this metal. It covers the physical properties of gold, its electrochemical, chemical, and physiological behavior, its detection and determination, the general reactions of gold compounds, and alloys of gold. This last chapter emphasizes the copper-gold and the copper-silver-gold alloys, since they are the ones pertinent to the goldsmith's trade and to dentistry.

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*List of Land Mammals of New Guinea, Celebes, and Adjacent Islands, 1758-1952.* Eleanor M. O. Laurie and J. E. Hill. British Museum (Natural History), London, 1954. 175 pp. + 3 plates. £1 10s.

Our knowledge of the land mammals of New Guinea, Celebes, and many of the adjacent islands has reached a stage where a check list of the known forms has been urgently indicated. Such a list together with a considerable amount of generic revision has now been provided in this work.

As reference material for their revisionary work the authors have had the use of the very fine study collections in the British Museum. Much additional material in foreign museums and the incomparable Archbold collections of nearly 20,000 specimens at the American Museum could not be reviewed first hand. The opinions of the revisers of these collections, however, have been carefully evaluated by the authors in reaching their own decisions. Much additional field-work will be necessary before the systematic picture becomes reasonably stabilized in this "frontier" region. The present list with its meticulously compiled bibliographic detail checked against the original sources and its view of establishing groups with biological reality will be of untold value to future revisers.

Some of the details of solid reference value that should be noted in this work are: complete listing of valid names and synonyms; ranges, when known, concisely drawn; bibliographic notations (for example, last revisers of certain genera) generously provided throughout; when the authors follow the classification of other writers, it is so stated and the reference given; subspecies arranged in the chronological order of their names; a gazetteer of all type localities and of the more obscure collecting stations; an excellent index.

The authors recognize 351 species. They have described a number of new species and subspecies, but

most noteworthy is the description of a new Hydromyine genus, *Mayermys*. The molar teeth of this peculiar little rodent are minute and are reduced to one in each of the upper and lower jaws, a condition now reported for the first time and adequately illustrated by three plates. The omission from the list of the genus *Xenuromys*, described by Tate and Archbold in 1941 is an oversight.

Laurie and Hill should be complimented on their addition to the British Museum's growing file of regional check lists of the mammals of the world. The printing job is excellent.

HOBART M. VAN DEUSEN

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*Proceedings of the Second National Cancer Conference, 1952.* vols. I and II. American Cancer Society, New York, 1954. 1687 pp. + index. Illus. Set of two volumes, \$7.50.

Of nine papers in general sessions, seven dealt with problems of interest to the practicing physician.

According to Overholt, lung cancer should be the most readily discovered form of internal malignancies. In Pendergrass' opinion, early detection of lung cancer requires at least two chest films and interpretation by two competent radiologists. Pack reviewed the puzzles of melanoma and Papanicolaou lectured on cytodagnosis. Wangenstein started his paper asserting that "no one knows very much about cancer," and later maintained that the *only* hope lies in early diagnosis and most radical surgery, the results of which it is still "too early" to appraise.

The philosophy of early diagnosis was courageously challenged by Lees and McKinnon, and defended by others. No decisive proof was provided by either side. The discussion of therapeutic progress encompassed matters of classifying carcinoma *in situ*, of borderline and doubtful cases, of precancerous conditions, of improved technique, as well as the often reviewed problems of clinical versus histological criteria, of simple versus radical mastectomy, of surgery versus roentgentherapy, supervoltage radiation, and hormonal therapy and castration. Following bilateral adrenalectomy Bergensal and Huggins observed temporary tumor regression in some of their 35 patients with only two operative deaths.

One-half of the panels were devoted to histology, diagnosis, clinical features and therapeutic achievements including isotopes, chemistry and caloric restriction in cancer of the head and neck, breast, genitourinary organs, gastrointestinal organs, lung and in lymphoma and leukemia. In other panels were considered virology including "vertical" transmission in mice (Bittner, Gross), chemo-carcinogenesis, radiobiology, steroids and genetics. Several papers dealt with familial occurrence of cancer (Macklin, Busk, Wintrobe, Murphy, Oliver).

Relatively little space was given to epidemiology. Statistical papers were read by Dorn, Symeonidis, and Stewart. Surveying epidemiology of lung cancer,

Graham did not even mention Joachimsthal and the Welshian nickel-refineries. Hueper excellently reviewed occupational bladder cancer. According to Gagnon, cervix cancer is extremely rare in nuns—only 0–3 percent of all uterine plus ovarian malignancies. This ratio for virgins complements the following series of values for single nulligravidae (regardless of virginity), for married nulligravidae, unigravidae, women with 2–10 and with 11–20 pregnancies: 48.3, 58.6, 76.8, 83.8 and 92 percent, respectively (the reviewer, 1923). Gagnon and Nieburgs doubt the existence of a relationship between pregnancies and cervix cancer.

In his closing remarks, Cameron rightfully referred to the broad spectrum of problems of the conference.

SIGISMUND PELLER

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*New Research Techniques in Physics.* Symposium (UNESCO) sponsored by the International Union of Pure and Applied Physics (chapters in English, Spanish, and Portuguese). Academia Brasileira de Ciencias, Rio de Janeiro, Brazil, 1954. 447 pp. Illus.

Published reports on the proceedings of international conferences are valuable, not only to the participants but also to interested scientists who were unable to attend the conference, especially if the various discussions following formal papers are included and if publication is prompt. The proceedings of the symposium held in July 1952 at Rio de Janeiro and at São Paulo have now been issued in the form of a book entitled *New Research Techniques in Physics*. In it are included 65 papers, varying in length from one to 26 pages, on a large variety of subjects, together with the discussions that followed several of the presentations. Although the 2-year delay in publication reduces the interest in some of the work, the lively spirit of the conference is well preserved.

The new research techniques discussed include procedures and methods in both experimental and theoretical physics, classical and modern. There are numerous articles on high energy accelerators, including those at Illinois, Chicago, Wisconsin, São Paulo, and Mexico City. In some articles the techniques are emphasized; others are presentations of results of observations. The techniques related to construction of Geiger counters, ionization chambers, Cerenkov counters, diffusion cloud chambers, and even ionization gages are described. Several papers are devoted to cosmic ray studies, including geomagnetic effects and transition phenomena in the atmosphere and in solid materials.

It is somewhat difficult for me to separate papers on the techniques of theoretical physics from those on the results of theoretical calculations. Several distinguished theorists were present and the subjects ranged from the fundamentals of quantum theory and field theory through meson theory and nuclear forces and fundamental particles to the dynamic theory of scattering.

The papers are quite uneven in quality and importance, but almost every physicist will find something to interest him in this book, if only because of the breadth of the subject matter.

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## Books Reviewed in THE SCIENTIFIC MONTHLY

### January

- Snow Crystals: Natural and Artificial*, Ukichiro Nakaya (Harvard Univ. Press). Reviewed by K. L. S. Gunn.
- The Western End of Lake Erie and Its Ecology*, T. H. Langlois (J. W. Edwards). Reviewed by J. E. Bardach.
- A Brief Text in Astronomy*, W. T. Skilling and R. S. Richardson (Holt). Reviewed by W. F. Shenton.
- The Neolithic Cultures of the British Isles*, Stuart Pigott (Cambridge Univ. Press). Reviewed by R. W. Ehrich.
- V-2, Walter Dornberger (Viking). Reviewed by T. S. Gardner.
- Ways of the Ant*, John Crompton (Houghton Mifflin). Reviewed by G. C. Wheeler.
- Math Is Fun*, Joseph Degrazia (Emerson). Reviewed by S. B. Myers.
- Main Currents of Scientific Thought*, S. F. Mason (Abelard-Schuman). Reviewed by R. J. Seeger.
- World Geography: An Introduction*, Loyal Durand, Jr. (Holt). Reviewed by W. A. Hance.
- Theory and Method in the Social Sciences*, Arnold M. Rose (Univ. of Minnesota Press). Reviewed by Conrad Taeuber.
- Sea-Birds*, James Fisher and R. M. Lockley (Houghton Mifflin). Reviewed by C. H. Rogers.
- The Meaning of Social Medicine*, Iago Galdston (Harvard Univ. Press). Reviewed by A. D. Bass.
- How Strong Is Russia?* G. B. Cressey (Syracuse Univ. Press). Reviewed by M. F. Burrill.
- The Flood Control Controversy*, L. B. Leopold and Thomas Maddock, Jr. (Ronald Press). Reviewed by W. H. Rowan.
- A Thousand Geese*, Peter Scott and James Fisher (Houghton Mifflin). Reviewed by H. I. Fisher.
- Urban Behavior*, E. G. Erickson (Macmillan). Reviewed by H. J. Graafls.
- Man, Time, and Fossils*, Ruth Moore (Knopf). Reviewed by Bentley Glass.
- The Mating Instinct*, L. J. and M. J. Milne (Little, Brown). Reviewed by L. R. Aronson.
- So Little for the Mind*, Hilda Neatby (Clarke, Irwin). Reviewed by Eugene Forsey.
- Educational Psychology*, L. J. Cronbach (Harcourt, Brace). Reviewed by R. W. Husband.
- Applied Atomic Energy*, K. Fearnside, E. W. Jones, and E. N. Shaw (Philosophical Library). Reviewed by R. A. Charpie.
- Fifty Years of Medicine*, Lord Horder (Philosophical Library). Reviewed by M. C. Leikind.
- Engineers' Dreams*, Willy Ley (Viking). Reviewed by T. S. Gardner.