

Quesne, Milne, Alwall, Dent); V, "Renal share in volume control of body fluid" (Borst, Hamburger, Black).

Almost every paper is a valuable summary of an active area of modern renal physiology, pathology, or morphology. While much of the material stands in the literature, it is served here in a series of thumbnail sketches that are commendable for brevity, lucidity, and documentation. In format, each presentation is followed by a typographically distinct section containing the discussion.

The general excellence of the whole makes it invincible to draw attention to selected, unfavorable aspects. It is with no intent, therefore, to plant a seed of disaffection that we dispute the treatment accorded to renal volume control. The renaissance of interest in the kidney as a regulator of body fluid volumes is reflected in its coverage, at least nominally, to the extent of 20 percent of the symposium. However, the fundamental biology of volume regulation such as outlined by Henderson and others is nowhere acknowledged, much less clarified; and no one comes to grips with this slippery problem. The papers and discussions are agreeable enough in summarizing facts but do not go far toward an understanding of the subject. It might have been more enlightening if, for example, Heller's censure of the term *volume receptor*, instead of being allowed to evaporate, had been examined critically in discussion.

*The Kidney* is an attractive book, printed on good paper, carefully edited, properly indexed, and fairly priced.

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**The Moon Puzzle.** A revived classical theory correlating the origin of the moon with many problems in natural science. N. O. Bergquist. Grafisk Forlag, Copenhagen, 1954. xiii + 378 pp.

The author gives a comprehensive survey of what he considers to be the consequences of the following theory. The origin of the moon was caused by a cosmic collision; the birth of the moon occurred at the end of Lower Cretaceous time and caused the great break in continuity at this time observed by both geologists and paleontologists.

The story unfolded by Bergquist is fascinating but often gives the impression of science fiction rather than of science. There is a practically complete lack of quantitative mathematical argument (frankly admitted by the author). And the multitude of effects that he attempts to explain leads one to think of the quotation "Methinks he doth protest too much."

A few detailed criticisms—which are invited by the author explicitly—may follow here. Page 39: It is nowadays generally believed that the development of spiral nebulae is one toward and not away from orderliness (see, for example, von Weizsacker, *Z. Astroph.* 1948). Page 69: East Indies is an obsolete term and the correct term is Indonesia. Page 366: If

the moon originated in the way proposed by the author, the calculations of Jeffreys (*The Earth*), of the moon's age, are relevant and they lead to an age of at least 2000 million years in contradiction to the age inherent in the proposed theory.

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**An International Bibliography on Atomic Energy.** vol. 2: *Scientific Aspects*. Suppl. No. 2. United Nations, New York, 1953 (U.S. Distr.: Columbia Univ. Press, New York). vii + 320 pp. \$3.50.

This is a classified listing of 7997 periodical articles that appeared during 1951–52 on fundamental nuclear science, physics and engineering of nuclear energy, biological and medical effects of high-energy radiation, isotopes in biology and medicine, and applications of nuclear physics in nonbiological sciences and technology. An author index is appended.

**Gmelins Handbuch der Anorganischen Chemie: Selen** (Selenium), System No. 10, pt. A, sec. 3, 1953. xviii + 184 pp. Illus. Paper, \$26.64.

**Gmelins Handbuch der Anorganischen Chemie: Bor** (Boron), System No. 13, supp. vol., 1954. vii + 253 pp. Illus. Paper, \$33.60; cloth, \$34.80.

**Gmelins Handbuch der Anorganischen Chemie: Gold**, System No. 62, pt. 2, 1954. v + 306 pp. Illus. Paper, \$40.32

**Gmelins Handbuch der Anorganischen Chemie: Gold**, System No. 62, pt. 3, 1954. xxi + 558 pp. Illus. Paper, \$74.88. Edited by Gmelin Institute. Verlag Chemie, Weinheim, W. Germany, ed. 8. (U.S. Distrib.: Walter J. Johnson, New York, and Stechert-Hafner, New York.)

In rapid succession the various sections of Gmelin have been making their appearance, bringing up to date this classic handbook of inorganic chemistry. The sections here considered total approximately 1300 pages and reflect credit on those responsible for these revisions.

Section A3 on selenium is devoted to the selenium rectifier and the selenium photocell, subjects that have increased in interest in the past 15 years. The literature in this section is covered to 1953.

The present volume on boron is the first complete and modern monograph of this element and its compounds. It is a supplementary volume to that on boron published in Gmelin's handbook in 1926 and covers the literature for the years 1925–1950. Its subject index contains references to both these volumes. A feature of the new volume is the inclusion of the advances that have been made on borane and its related compounds, such as the borazoles, borazens, borazanes and their alkyl derivatives, alkyl boron compounds, alkyl boric acids, the boroxoles, boric acid

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.

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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 Bergenstal 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,