

books OF THE WEEK

FIVE PATIENTS: The Hospital Explained—Michael Crichton—Knopf, 1970, 231 p., \$5.95. Describes the experiences of five actual cases in a university teaching hospital indicative of some of the ways medicine is now changing.

MECHANISM AND MATERIALISM: British Natural Philosophy in an Age of Reason—Robert E. Schofield—Princeton Univ. Press, 1970, 336 p., \$9.50. History of a pair of ideas manifest in changing patterns of experiment and interpretation during a century of British science.

NINETEENTH-CENTURY SPECTROSCOPY: Development of the Understanding of Spectra, 1802-1897—Johns Hopkins Press, 1970, 233 p., diagrams, \$11. Describes the development of the principle of spectrum analysis and also traces the concomitant evolution of physicists' notions of atoms and molecules during the second half of the 19th century.

PRACTICAL ELECTRICAL WIRING: Residential, Farm and Industrial—H. P. Richter—McGraw-Hill, 1970, 8th ed., 664 p., photographs, diagrams, \$12.50. Based on the 1968 National Electrical Code, the instruction manual deals with the electrical materials and how they are installed, and tells why they are installed in a certain way.

RACE AND CLASS IN LATIN AMERICA—Magnus Morner, Ed.—Columbia Univ. Press, 1970, 309 p., \$10. Outgrowth of a joint conference of Cornell and Columbia Universities, the contributions represent a broad diversity of area and emphasis within the general topic of race and class relations.

SCIENCE NEWS YEARBOOK 1970—Compiled and edited by Science Service, introd. by Glenn T. Seaborg—Scribner, 1970, 373 p., photographs, diagrams, maps, \$9.95. Accurate, succinct and highly readable information featuring the important scientific events of 1969, arranged by discipline under 50 subheads.

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films OF THE WEEK

WITHIN THIS DECADE: AMERICA IN SPACE. 16mm, color, sound, 28½ min. A pictorial review of major accomplishments in NASA research from 1959 through preparation for the first manned lunar landing, with emphasis on manned space flight. The film is a revision of America in Space: The First Decade. Audience: upper elementary, secondary, adult. Free loan from NASA Field Libraries or National Aeronautics and Space Administration Headquarters, Code FAD-2, Washington, D.C. 20546.

IN SEARCH OF A CRITICAL MOMENT. 16mm, color, sound, 28 min. Tells the story of the ZPPR—the Zero Power Plutonium Reactor, a special split-table test reactor that is designed to supply information essential to the development of economic fast breeder central station nuclear power plants. Although most current reactors "burn" uranium, the trend is toward fast breeder reactors that will produce or "breed" more nuclear fuel (plutonium) than they consume, thus dramatically increasing the world's supply of fissionable material. Film shows the construction of the ZPPR by Argonne National Laboratory, its many safety features, plutonium handling and storage, the instrumentation and computer to record data, and the fuel loading and eventual attainment of the state of criticality of the ZPPR to prepare it for its important testing program. Audience: general. Purchase from National Audiovisual Center, NAR/GSA, Washington, D.C. 20409 or free loan from Audio-Visual Branch, Department of Public Information, U.S. Atomic Energy Commission, Washington, D.C. 20545.

IT'S UP TO YOU. 26mm, color, sound, 10 min. A dental health film which tells why people should take care of their teeth and steps they should take to have healthy teeth. Discusses, for example, periodontal disease, visits to the dentist and correct methods of brushing. Audience: schools, colleges, parent-teacher groups, general public. Purchase from General Services Administration, National Archives and Records Service, Washington, D.C. 20409, Attn: Government Film Sales, or free loan from National Medical Audiovisual Center (Annex), Station K, Atlanta, Ga. 30324.

Listing is for readers' information of new 16mm and 8mm films on science, engineering, medicine and agriculture for professional, student and general audiences. For further information on purchase, rental or free loan, write to distributor.

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to the editor

Membranes

The membrane article by Barbara J. Culliton (SN: 5/23, p. 509) was very well done and pointed up the importance that is now being clearly realized for the first time of the essential role of the cell surface in all aspects of malignancy. Interestingly, my recent publications (NASA pub. # L-7164) propose precisely the unifying theory that Dr. Wallach is calling for.

Your coverage of our research is appreciated.

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Age of oil

The statement was made in the article "Canada Makes Her Play" (SN: 5/9, p. 466) limiting the geological age of Alaska's North Slope oil discoveries: "The strata in which oil was discovered on the Alaska North Slope are of the early and middle Paleozoic Era." This is correct only for the Lisburne Oil Pool, which appears to be by far the smallest of the three pools established by the Alaska Oil and Gas Conservation Committee in the Prudhoe Bay Field. The greatest proven reserves in the Prudhoe Bay Field have been found in the Sadlerochit Formation, which is generally agreed to be a Permo-Triassic age (late Paleozoic-early Mesozoic Era), and in the Kuparuk River Sands, which are of Cretaceous Age (late Mesozoic Era). Also on Alaska's Arctic Slope the reservoir of the Umiat Oil Field, discovered in the late 40's, and two other recent indicated discoveries lying west of the Prudhoe Bay Field, have produced commercial quantities of Cretaceous oil. Although no commercial oil discoveries have been found in the Tertiary Age rocks on the North Slope, numerous shows have been reported and these rocks remain a significant exploration target.

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