

est point] is in the northern hemisphere, and its apogee [highest point] in the southern hemisphere. The moon passes over the earth areas stretching approximately between the north and the south polar circles. . . . Due to resistance encountered . . . in the atmosphere's upper layer, its [elliptical] orbit will gradually take on a circular shape.

"The satellite has the form of a sphere whose body is made of aluminum alloys. All the instruments are installed inside the sphere. Before launching, the satellite was filled with the gaseous nitrogen which is forcibly circulated during the flight. This is needed to maintain the necessary temperature.

"The satellite has light sensitive elements which alter the radio frequencies of the signals and the correlation between their durations and intermissions as soon as the temperatures or other parameters of the satellite change. . . . The received radio signals are now being decoded and analyzed. . . .

"The Soviet Union will also launch a satellite having animals as passengers for the purpose of studying the behavior of living organisms during cosmic flight."

To American observers, perhaps the two most impressive facts about the *Sputnik* are its weight and the height of its orbit. The United States Project Vanguard has been hoping to launch a 21½-pound vehicle, less than one-eighth the size of the Soviet one. In addition, this country has been planning a satellite that would orbit at only about 300 miles above the earth. This altitude, roughly half that of the *Sputnik*, would touch the fringe of the atmosphere, probably limiting our satellite's life to a few days.

The Soviet accomplishment has had a significant impact on both international and domestic affairs. In the United States, there have already been demands in the press for a Congressional investigation of our missile programs. A number of high-ranking military officials in the Army, Navy, and Air Force have made public statements revealing interservice rivalry, and there has been controversy about the Federal budget allocations for scientific research (see editorial on page 723). In addition, it is predicted that long-neglected requests to the Civil Service Commission and to the White House for salary increases for Government scientists and engineers will again receive attention.

Cole to Head IAEA

W. Sterling Cole, Republican representative of Congress from upstate New York, was elected director general of the International Atomic Energy Agency by unanimous vote of its 23 governors during the recent initial general conference in Vienna of the new organization. How-

ever, the Soviet delegate stated that the U.S.S.R. would have preferred that the agency be headed by a representative of a neutral country but that in the interests of harmony there would be no opposition to the choice of Representative Cole.

The appointment, which is effective on 1 December, will be for a term of 4 years. The recommendations of the preparatory commission to the general conference were that Cole be assisted by a staff of 370 persons. Fifteen of these would have the rank of director, with salaries of \$10,000 to \$12,500, and Cole's salary would be \$20,000.

Cole, 53 years old, has been a member of Congress since 1935 and has served on the Joint Congressional Committee on Atomic Energy since it was established in 1946; he was its chairman in 1953 and 1954. It was under his chairmanship that the basic United States law concerning atomic energy was rewritten to make it possible for peaceful uses of atomic energy to be developed more rapidly in the United States and for these applications to be made broadly available to other nations. This legislation authorized, among other things, United States activities in establishing the International Atomic Energy Agency.

Cole served as a member of the United States delegation to the conference to draft the statute of the International Atomic Energy Agency in October 1956. He also served as a member of the Congressional delegation to the Geneva atoms-for-peace conference in 1955.

News Briefs

The Metals Research Laboratory of Carnegie Institute of Technology is observing its 25th anniversary this year with a reunion program in Pittsburgh on 24 October. The laboratory is a special research institute associated with the department of metallurgical engineering in C.I.T.'s College of Engineering and Science.

* * *

October has been designated Geology Month in Scouting. As part of the month, a Boy Scout Geology Kit of program aids has been prepared by the American Geological Institute, the American Association of Petroleum Geologists, and the American Petroleum Institute, and distributed to all Boy Scout Troops and Scout Explorer Unit leaders. Many geologists have volunteered to give talks on geology, minerals, and fossils, and to conduct geology field trips during the month.

* * *

San Jose State College has announced that a \$2.5-million addition to its science building has been completed for use this fall term. This facility doubles the space available for the natural sciences.

Paperbound Science Library

An Inexpensive Science Library, a list of paperbound science and mathematics books, has been compiled by Hilary J. Deason, director of the AAAS High School Science Library Program [*Science* 124, 1013 (23 Nov. 1956)]. The library program is supported by the National Science Foundation.

Deason's list includes books of varying degrees of difficulty, all of which are recommended for the nonspecialist adult reader. A majority of the titles will appeal to senior high school or junior-college students, and many can be read by junior high school students.

The list, which has been published in pamphlet form, may be obtained for 10 cents from AAAS headquarters. Copies will be sent free to teachers and librarians. The books selected are as follows:

Anatomy

Frohse, F.; Brodel, M., et al. *Atlas of Human Anatomy*. Barnes & Noble 70, 1957. 88 pp. illus. \$2.25.

Sproul, E. E. *The Science Book of the Human Body*. Cardinal C174, 1955. 232 pp. illus. 35¢.

Anthropology

Alpenfels, E. J. *Sense and Nonsense about Race*. Friendship Press, 1957. 64 pp. illus. 50¢.

Benedict, R. *Patterns of Culture*. Mentor MD89, 1946. 272 pp. 50¢.

Collier, J. *Indians of the Americas*. Mentor MD171, 1948. 191 pp. 50¢.

Cotlow, L. *Amazon Head-Hunters*. Signet S1094, 1954. 239 pp. illus. 35¢.

Lips, J. E. *The Origin of Things*. Premier s33, 1956. 240 pp. illus. 35¢.

Mead, M. *Cultural Patterns and Technical Change*. Mentor MD134, 1955. 352 pp. 50¢.

Archeology

Albright, W. F. *The Archaeology of Palestine*. Pelican A199, 1956. 271 pp. illus. 85¢.

Cottrell, L. *The Anvil of Civilization*. Mentor MD197, 1957. 256 pp. illus. 50¢.

Edwards, I. E. S. *The Pyramids of Egypt*. Pelican A168, 1947. 256 pp. illus. 65¢.

Gurney, O. R. *The Hittites*. Pelican A259, 1954. 240 pp. illus. 85¢.

Pallottino, M. *The Etruscans*. Pelican A310, 1955. 295 pp. illus. 85¢.

Vaillant, G. C. *The Aztecs of Mexico*. Pelican A200, 1950. 333 pp. illus. 95¢.

von Hagen, V. W. *Realm of the Incas*. Mentor MD192, 1957. 231 pp. illus. 50¢.

Wheeler, M. *Archaeology from the Earth*. Pelican A356, 1956. 252 pp. illus. 85¢.

Woolley, L. *Digging Up the Past*. Pelican A4, 1937. 121 pp. illus. 85¢.

Woolley, L. *A Forgotten Kingdom*. Pelican A261, 1953. 191 pp. illus. 75¢.

Astronomy

- Armitage, A. *The World of Copernicus*. Mentor MD65, 1951. 165 pp. illus. 50¢.
- Bernhard, H. J.; Bennett, D. A.; and Rice, H. S. *New Handbook of the Heavens*. Mentor MD114, 1954. 272 pp. illus. 50¢.
- Degani, M. H. *Astronomy Made Simple*. Made Simple, 1955. 192 pp. illus. \$1.
- Drake, S. *Discoveries and Opinions of Galileo*. Anchor A94, 1957. 302 pp. \$1.25.
- Dreyer, J. L. E. *A History of Astronomy from Thales to Kepler*. Dover S79, 1953. 438 pp. \$1.98.
- Gamow, G. *The Birth and Death of the Sun*. Mentor MD120, 1952. 219 pp. illus. 50¢.
- Gamow, G. *The Creation of the Universe*. Compass C7, 1956. 147 pp. illus. \$1.25.
- Hausman, L. A. *Astronomy Handbook*. Fawcett 314, 1956. 144 pp. illus. 75¢.
- Hoyle, F. *Frontiers of Astronomy*. Mentor MD200, 1957. 317 pp. illus. 50¢.
- Hoyle, F. *The Nature of the Universe*. Mentor M125, 1955. 128 pp. illus. 35¢.
- Johnson, G., and Adler, I. *Discover the Stars*. Sentinel 17, 1957. 146 pp. illus. 75¢.
- Jones, H. S. *Life on Other Worlds*. Mentor MD144, 1956. 160 pp. illus. 50¢.
- Mattersdorf, L. *A Key to the Heavens*. Premier s27, 1956. 159 pp. illus. 35¢.
- Reichenbach, H. *From Copernicus to Einstein*. Wisdom Library, 1942. 93 pp. illus. 95¢.
- Scientific American*, Editors of. *The New Astronomy*. Simon and Schuster, 1955. 243 pp. illus. \$1.
- Smart, W. M. *The Origin of the Earth*. Pelican A339, 1955. 224 pp. illus. 65¢.

Biological Sciences

- Abercrombie, M.; Hickman, C. J.; Johnson, M. L. *A Dictionary of Biology*. Penguin R3, 1954. 250 pp. 65¢.
- Alexander, G. *Biology*. College Outline 4, 1954. 253 pp. illus. \$1.25.
- Alexander, P. *Atomic Radiation and Life*. Pelican A399, 1957. 239 pp. illus. 85¢.
- Berrill, N. J. *The Living Tide*. Premier s26, 1956. 239 pp. 35¢.
- Berrill, N. J. *Sex and the Nature of Things*. Cardinal C169, 1955. 222 pp. illus. 35¢.
- Bryan, A. H., and Bryan, C. G. *Bacteriology*. College Outline 3, 1956. 422 pp. illus. \$2.50.
- Carson, R. L. *Under the Sea Wind*. Mentor M128, 1955. 157 pp. 35¢.
- Darwin, C. *The Origin of Species*. Ungar, 1956. 134 pp. 95¢.
- Dunn, L. C., and Dobzhansky, T. *Heredity, Race, and Society*. Mentor MD74, 1952. 144 pp. 50¢.
- Field, M.; Durden, J. V.; Smith, F. P. *Cine-Biology*. Pelican A85, 1941. 135 pp. illus. 65¢.

- Fox, H. M. *The Personality of Animals*. Pelican A78, 1952. 154 pp. illus. 50¢.
- Hanauer, E. R. *Biology Made Simple*. Made Simple, 1956. 192 pp. illus. \$1.00.
- Huxley, J. *Evolution in Action*. Mentor MD204, 1957. 141 pp. illus. 50¢.
- Johnson, G., and Bleifeld, M. *Hunting with the Microscope*. Sentinel 23, 1956. 134 pp. illus. 95¢.
- Johnson, M. L.; Abercrombie, M.; Fogg, G. E. *New Biology*. Penguin, illus. (Issued triennially, 65¢ per copy.)
- Kalmus, H., and Crump, L. M. *Genetics*. Pelican A179, 1948. 171 pp. illus. 50¢.
- Langdon-Davies, J. *Seeds of Life*. Signet Key Ks345, 1957. 144 pp. 35¢.
- Nicol, H. *Microbes and Us*. Pelican A326, 1955. 272 pp. 65¢.
- Oparin, A. I. *Origin of Life*. Dover Publications S213, 1953. 270 pp. \$1.75.
- Romer, A. S. *Man and the Vertebrates* (Vols. I and II). Pelican A303, A304, 1954. 437 pp. (in all). illus. 85¢ each.
- Schrodinger, E. *What Is Life? And Other Scientific Essays*. Anchor A88, 1956. 263 pp. 95¢.
- Scientific American*, Editors of. *The Physics and Chemistry of Life*. Simon and Schuster, 1955. 270 pp. illus. \$1.
- Sherrington, C. *Man on His Nature*. Anchor A15, 1955. 316 pp. illus. 95¢.
- Simpson, G. G. *The Meaning of Evolution*. Mentor M66, 1951. 192 pp. illus. 35¢.
- Smith, K. M. *Beyond the Microscope*. Pelican A119, 1957. 154 pp. illus. 85¢.
- Storer, J. H. *The Web of Life*. Signet Key Ks333, 1956. 128 pp. illus. 35¢.
- Worth, C. B., and Enders, R. K. *The Nature of Living Things*. Signet Key Ks326, 1955. 198 pp. illus. 35¢.

Botany

- Field, M.; Durden, J. V.; Smith, F. P. *See How They Grow*. Pelican A242, 1952. 169 pp. illus. 85¢.
- Fuller, H. J. *General Botany*. College Outline 33, 1955. 196 pp. illus. \$1.
- Gottscho, S. *The Pocket Guide to the Wildflowers*. Pocket Books 788, 1951. 192 pp. illus. 35¢.
- Hubbard, C. E. *Grasses*. Pelican A295, 1954. 428 pp. illus. 85¢.
- Stefferd, A. *How To Know the Wild Flowers*. Mentor M48, 1950. 144 pp. illus. 35¢.

Chemistry

- Alexander, W., and Street, A. *Metals in the Service of Man*. Pelican A125, 1954. 235 pp. illus. 85¢.
- Couzens, E. G., and Yarsley, V. E. *Plastics in the Service of Man*. Pelican A272, 1956. 315 pp. illus. 85¢.
- Frey, P. R. *Chemistry Problems*. College Outline 46, 1953. 163 pp. illus. \$1.25.
- Hess, F. C. *Chemistry Made Simple*. Made Simple M3, 1955. 192 pp. illus. \$1.00.

- Holmyard, E. J. *Alchemy*. Pelican A348, 1957. 281 pp. illus. 85¢.
- Hutton, K. *Chemistry: The Conquest of Materials*. Pelican A353, 1957. 228 pp. illus. 85¢.
- King, W. B. *Chemistry: Elementary for College Students*. Littlefield 12, 1957. 216 pp. illus. \$1.50.
- Williams, T. I. *The Chemical Industry*. Pelican A282, 1953. 192 pp. 50¢.

Earth Sciences

- Adams, F. D. *The Birth and Development of the Geological Sciences*. Dover T5, 1954. 506 pp. illus. \$2.00.
- Fearnside, W. G., and Bulman, O. M. B. *Geology in the Service of Man*. Pelican A128, 1950. 217 pp. illus. 50¢.
- Field, R. M. *Geology*. College Outline 13, 1955. 211 pp. illus. \$1.25.
- Fisher, R. M. *How to Know and Predict the Weather*. Mentor M84, 1953. 167 pp. illus. 35¢.
- Fuerst, R. E. *The Typhoon-Hurricane Story*. Tuttle, 1956. 172 pp. illus. \$1.50.
- Gamow, G. *Biography of the Earth*. Mentor MD138, 1948. 194 pp. illus. 50¢.
- Himus, G. W. *A Dictionary of Geology*. Penguin R8, 1954. 153 pp. illus. 50¢.
- Jones, W. R. *Minerals in Industry*. Pelican A123, 1955. 238 pp. illus. 50¢.
- Pearl, R. M. *How To Know the Minerals and Rocks*. Signet Key KD346, 1957. 192 pp. illus. 50¢.
- Pearl, R. M. *Rocks and Minerals*. Barnes & Noble 260, 1956. 275 pp. illus. \$1.95.
- Rapport, S., and Wright, H. *The Crust of the Earth*. Signet Key Ks330, 1955. 224 pp. illus. 35¢.
- Sloane, E. *How You Can Forecast the Weather*. Premier s42, 1957. 150 pp. illus. 35¢.
- Verrill, A. H. *The Strange Story of Our Earth*. Premier s24, 1956. 157 pp. illus. 35¢.

Engineering

- Clarke, A. C. *The Exploration of Space*. Cardinal C135, 1954. 210 pp. illus. 35¢.
- Goodman, L. L. *Man and Automation*. Pelican A401, 1957. 286 pp. 85¢.
- Goodwin, H. L. *The Science Book of Space Travel*. Cardinal C207, 1956. 213 pp. illus. 35¢.
- Leonard, J. N. *Flight into Space*. Signet Key Ks317, 1954. 190 pp. 35¢.
- Ruppelt, E. J. *The Report on Unidentified Flying Objects*. Ace D200, 1956. 318 pp. 35¢.
- Scientific American*, Editors of. *Atomic Power*. Simon and Schuster, 1955. 180 pp. illus. \$1.
- Scientific American*, Editors of. *Automatic Control*. Simon and Schuster, 1955. 148 pp. illus. \$1.
- Tunnard, C., and Reed, H. H. *American Skyline*. Mentor MD175, 1956. 224 pp. illus. 50¢.

Geography—Travel

- Carson, R. L. *The Sea around Us*. Mentor M100, 1954. 169 pp. illus. 35¢.
 Heyerdahl, T. *Kon-Tiki*. Permabooks M4062, 1953. 240 pp. illus. 35¢.
 Moore, W. G. *A Dictionary of Geography*. Penguin R2, 1952. 191 pp. illus. 50¢.

Mathematics

- Abbott, E. A. *Flatland*. Dover T1, 1952. 103 pp. illus. \$1.
 Arkin, H., and Colton, R. R. *Statistical Methods*. College Outline 27, 1956. 273 pp. illus. \$1.75.
 Arkin, H., and Colton, R. R. *Tables for Statisticians*. College Outline 75, 1950. 152 pp. \$1.25.
 Bigsbee, E. M. *Five-Place Mathematical Tables*. Littlefield 8, 1952. 186 pp. \$1.00.
 Bishop, C. C. *Slide Rule: How To Use It*. Barnes & Noble 254, 1955. 149 pp. illus. \$1.25.
 Bonola, R. *Non-Euclidean Geometry*. Dover S27, 1955. 389 pp. illus. \$1.95.
 Dantzig, T. *Number, the Language of Science*. Anchor A67, 1954. 345 pp. illus. 95¢.
 Descartes, R. (tr. Smith, D. E., and Latham, M. L.). *Geometry*. Dover S68, 1954. 243 pp. illus. \$1.50.
 Horblit, M., and Nielsen, K. L. *Plane Geometry Problems*. College Outline 63, 1947. 197 pp. illus. \$1.25.
 Klaf, A. A. *Trigonometry Refresher for Technical Men*. Dover T371, 1956. 629 pp. illus. \$2.00.
 Kojima, T. *The Japanese Abacus: Its Use and Theory*. Tuttle, 1954. 102 pp. illus. \$1.25.
 Kraitichik, M. *Mathematical Recreations*. Dover T163, 1953. 330 pp. illus. \$1.65.
 Maxwell, J. C. *Matter and Motion*. Dover S188, 1952. 163 pp. \$1.25.
 McDowell, C. H. *A Short Dictionary of Mathematics*. Wisdom Library, 1957. 64 pp. illus. \$1.45.
 Moore, G. E. *Algebra*. College Outline 38, 1951. 230 pp. \$1.50.
 Moroney, M. J. *Facts From Figures*. Pelican A236, 1956. 472 pp. illus. 95¢.
 Mott-Smith, G. *Mathematical Puzzles*. Dover T198, 1954. 248 pp. illus. \$1.
 Myers, J. H. *Statistical Presentation*. Littlefield, 1950. 68 pp. illus. 75¢.
 Nielsen, K. L. *Logarithmic and Trigonometric Tables*. College Outline 44, 1943. 155 pp. 95¢.
 Nielsen, K. L., and Vanlonkhuyzen, J. H. *Plane and Spherical Trigonometry*. College Outline 44, 1954. 314 pp. \$1.50.
 Oaklev, C. O. *Analytic Geometry*. College Outline 68, 1954. 246 pp. illus. \$1.25.
 Oakley, C. O. *The Calculus*. College Outline 48, 1944. 221 pp. illus. \$1.50.
 Petersen, G. M., and Graesser, R. F. *Calculus, Differential and Integral*. Littlefield, 1956. 321 pp. illus. \$1.75.

- Polya, G. *How To Solve It*. Anchor A93, 1957. 253 pp. 95¢.
 Russell, B. A. W. *Foundations of Geometry*. Dover S233, 1956. 201 pp. \$1.50.
 Sawyer, W. W. *Mathematician's Delight*. Pelican A121, 1943. 238 pp. illus. 65¢.
 Sawyer, W. W. *Prelude to Mathematics*. Pelican A327, 1955. 214 pp. illus. 65¢.
 Schaaf, W. L. *Mathematics for Everyday Use*. Barnes & Noble 212, 1942. 363 pp. illus. \$1.35.
 Slaby, S. M. *Descriptive Geometry*. College Outline 101, 1956. 351 pp. illus. \$2.25.
 Sperling, A., and Stuart, M. *Mathematics Made Simple*. Made Simple M1, 1944. 192 pp. illus. \$1.00.
 Sticker, H. *How To Calculate Quickly*. Dover T295, 1955. 256 pp. \$1.00.
 Struik, Dirk J. *A Concise History of Mathematics*. Dover S255, 1948. 299 pp. illus. \$1.75.
 Young, J. W. A. *Monographs on Topics of Modern Mathematics*. Dover S289, 1955. 416 pp. illus. \$1.95.

Medicine

- Burnet, F. M. *Viruses and Man*. Pelican A265, 1955. 203 pp. illus. 65¢.
 Clapesattle, H. *The Doctors Mayo*. Cardinal GC 30, 1956. 484 pp. 50¢.
 Clark-Kennedy, A. E. *Human Disease*. Pelican A378, 1957. 267 pp. 85¢.
 Cooley, D. G. *The Science Book of Wonder Drugs*. Cardinal C132, 1954. 247 pp. 35¢.
 de Kruif, P. *Microbe Hunters*. Pocket Books 49, 1940. 350 pp. 25¢.
 Drew, J. *Man, Microbe, and Malady*. Pelican A73, 1940. 209 pp. illus. 50¢.
 Schweitzer, A. *Out of My Life and Thought*. Mentor M83, 1953. 213 pp. 50¢.

Physics

- Andrade, E. N. da C. *An Approach to Modern Physics*. Anchor A111, 1956. 266 pp. illus. 95¢.
 Barnett, L. *The Universe and Dr. Einstein*. Mentor M71, 1952. 140 pp. illus. 35¢.
 Bragg, W. *Concerning the Nature of Things*. Dover T31, 232 pp. illus. \$1.25.
 de Ville, E. *Electricity*. Pelican A323, 1955. 159 pp. illus. 65¢.
 Freeman, I. M. *Physics Made Simple*. Made Simple M5, 1954. 188 pp. illus. \$1.00.
 Galilei, G. (tr. Crew, H., and de Salvia, A.). *Dialogues Concerning Two New Sciences*. Dover. 294 pp. illus. \$1.65.
 Haber, H. *Our Friend the Atom*. Dell B104, 1956. 128 pp. illus. 35¢.
 Hertzberg, R. *Electronics Handbook*. Fawcett 319, 1956. 143 pp. illus. 75¢.
 Mach, E. *The Principles of Physical Optics*. Dover S178, 1953. 324 pp. illus. \$1.75.
Mechanix Illustrated, Editors of. *Electronics Guide*. Fawcett 347, 1957. 144 pp. illus. 75¢.

Minnaert, M. The Nature of Light and Colour in the Open Air. Dover T196, 1954. 362 pp. illus. \$1.95.

Newton, I. *Opticks*. Dover, 1952. 406 pp. illus. \$1.98.

Sutton, O. G. *The Science of Flight*. Pelican A209, 1955. 231 pp. illus. 85¢.

Upton, M. *Electronics for Everyone*. Signet Key KD351, 1957. 302 pp. illus. 50¢.

Van Valkenburgh, Nooger, and Neville, Inc. *Basic Electricity* (5 vols.). Rider 169-1 to 169-5, 1954. 579 pp. (inc.) illus. Vol. 1 (Introduction to electricity); Vol. 2 (DC circuits); Vol. 3 (Alternating current); Vol. 4 (AC circuits); Vol. 5 (DC & AC machinery). \$2.25 each.

Van Valkenburgh, Nooger, and Neville, Inc. *Basic Electronics* (5 vols.). Rider 170-1 to 170-5, 1955. 518 pp. (inc.) illus. Vol. 1 (Introduction to electronics); Vol. 2 (Amplifiers); Vol. 3 (Video, RF, and amplifiers); Vol. 4 (Transmitters); Vol. 5 (Receivers). \$2.25 each.

Young, V. J., and Jones, M. W. *Pictorial Microwave Dictionary*. Rider 188, 1956. 110 pp. illus. \$2.95.

Physiology—Human

- Abrahams, A. *The Human Machine*. Pelican A373, 1956. 200 pp. 85¢.
 Tokay, E. *Fundamentals of Physiology*. Barnes and Noble 221, 1956. 336 pp. illus. \$1.50.
 Walker, K. *Human Physiology*. Pelican A102, 1956. 191 pp. illus. 85¢.

Psychology

- Drever, J. *A Dictionary of Psychology*. Penguin R5, 1952. 315 pp. 85¢.
 Eysenck, H. J. *Sense and Nonsense in Psychology*. Pelican A385, 1957. 349 pp. 85¢.
 Eysenck, H. J. *Uses and Abuses of Psychology*. Pelican A281, 1953. 318 pp. illus. 85¢.
 Katz, D. *Animals and Men*. Pelican A279, 1953. 191 pp. illus. 50¢.
 Sperling, A. P. *Psychology Made Simple*. Made Simple M18, 1957. 192 pp. illus. \$1.

Science in General

- d'Abro, A. *The Evolution of Scientific Thought*. Dover, 1950. 481 pp. \$2.
 Barnett, L. *The Universe and Dr. Einstein*. Mentor M71, 1952. 140 pp. illus. 35¢.
 Bridgman, P. W. *The Nature of Physical Theory*. Dover S33. 138 pp. \$1.25.
 Brown, H. *The Challenge of Man's Future*. Compass C3, 1956. 290 pp. \$1.25.
 Brinton, C. *The Shaping of the Modern Mind*. Mentor MD173, 1953. 287 pp. 50¢.
 Calder, R. *Science in Our Lives*. Signet Key Ks320, 1955. 192 pp. 35¢.

Campbell, N. *What Is Science?* Dover S43, 1952. 186 pp. \$1.25.

Childe, V. G. *Man Makes Himself*. Mentor MD154, 1951. 192 pp. illus. 50¢.

Clow, A. and N. *Science News*. Penguin. illus. (Issued quarterly, \$2.75 per year: 65¢ per copy. Available nos.: 5-7, 15, 21-44.)

Conant, J. B. *Modern Science and Modern Man*. Anchor 10, 1953. 187 pp. 65¢.

Conant, J. B. *On Understanding Science*. Mentor M68, 1951. 144 pp. 35¢.

Engel, L. *New Worlds of Modern Science*. Dell B102, 1956. 383 pp. illus. 35¢.

Farrington, B. *Greek Science*. Pelican A142, 1953. 320 pp. illus. 65¢.

Gamow, G. *One, Two, Three . . . Infinity*. Mentor MD97, 1953. 318 pp. illus. 50¢.

Hall, A. R. *The Scientific Revolution, 1500-1800*. Beacon BP29, 1956. 390 pp. \$1.75.

Hatfield, H. S. *The Inventor and His World*. Pelican A178, 1948. 256 pp. 35¢.

Lucretius (tr. Latham, R. E.). *The Nature of the Universe*. Penguin L18, 1951. 256 pp. 65¢.

Malinowski, B. *Magic, Science, and Religion*. Anchor A23, 1948. 274 pp. 95¢.

Nicolson, M. *Science and Imagination*. Great Seal, 1956. 238 pp. \$1.75.

Poincaré, H. *Science and Hypothesis*. Dover S221, 1952. 244 pp. \$1.25.

Sullivan, J. W. N. *The Limitations of Science*. Mentor MD35, 1949. 192 pp. 50¢.

Uvarov, E. B., and Chapman, D. R. *A Dictionary of Science*. Penguin R1, 1951. 240 pp. 65¢.

Waddington, C. H. *The Scientific Attitude*. Pelican A84, 1948. 175 pp. illus. 35¢.

Whitehead, A. N. *The Aims of Education*. Mentor MD152, 1949. 166 pp. 50¢.

Whitehead, A. N. *Science and Philosophy*. Wisdom 12, 1948. 316 pp. \$1.65.

Whitehead, A. N. *Science and the Modern World*. Mentor MD162, 1948. 212 pp. 50¢.

Wiener, N. *The Human Use of Human Beings*. Anchor A34, 1954. 199 pp. 75¢.

Zoology

Alexander, G. *General Zoology*. College Outline 32, 1951. 290 pp. illus. \$1.50.

Bristowe, W. S. *Spiders*. Penguin K35, 1947. 57 pp. illus. 95¢.

Coombes, R. A. H. *Mountain Birds*. Penguin 67, 1952. 48 pp. illus. 95¢.

Crompton, J. *The Life of the Spider*. Mentor M105, 1951. 192 pp. illus. 35¢.

Cruickshank, A. *The Pocket Guide to the Birds*. Cardinal GC18, 1954. 216 pp. illus. 50¢.

Fisher, J. *Bird Recognition I*. Pelican A175, 1954. 191 pp. illus. 85¢.

Fisher, J. *Bird Recognition III*. Pelican A177, 1955. 159 pp. illus. 85¢.

Fisher, J. *Watching Birds*. Pelican A75, 1951. 188 pp. illus. 50¢.

Lack, D. *The Life of the Robin*. Pelican A266, 1953. 240 pp. illus. 65¢.

Lane, F. W. *Animal Wonder World*. Premier s44, 1957. 214 pp. 35¢.

Maeterlinck, M. *The Life of the Bee*. Mentor M111, 1954. 168 pp. 35¢.

Morley, D. W. *The Ant World*. Pelican A240, 1953. 190 pp. illus. 65¢.

Peterson, R. T. *How To Know the Birds*. Signet Key KD347, 1957. 168 pp. illus. 50¢.

Scientific American, Editors of. *Twentieth-Century Bestiary*. Simon and Schuster, 1955. 240 pp. \$1.

Tuberculosis

The annual report of the National Tuberculosis Association states that some 55 million people are infected with the tubercle bacillus, according to estimates based on skin sensitivity tests, and that the statistical odds are that approximately 5 percent of these, or 2.75 million people, will break down with active tuberculosis during their lifetimes if the development of active disease among the infected continues at the present rate.

The report, which has just been released, brings out that BCG, the most widely accepted vaccine against tuberculosis, cannot be employed to prevent these cases of tuberculosis because BCG is not given to people already infected with the tuberculosis germ. The report reiterates the recommendations of the NTA's medical section, the American Trudeau Society, that BCG be given to people not yet infected who are exposed to tuberculosis to an extraordinary degree, and emphasizes the importance of further research in the field of immunity to tuberculosis.

Lalor Faculty Awards in Biology

The Lalor Foundation has announced details of the 40 awards that it is offering to college and university faculty members for research in the biological sciences for the summer of 1958. Studies employing chemistry or physics may be carried on at any institution of the award holder's choice. The upper age limit for appointment is 40 years.

The awards will usually not exceed \$900 for a single man or woman, \$1100 for a married man working at his home institution, and \$1250 for a married man whose principal program is at another institution. Transportation and other expenses are not covered.

In recent years the foundation has maintained a number of postdoctorate summer fellowships at the Marine Biological Laboratory at Woods Hole, Mass. With the consolidation of these fellow-

ships into the present program, it is suggested that those interested in work at M.B.L., and eligible under the Lalor faculty summer award plan, should submit applications under this newer program. Completed applications must be received before 14 January 1958 by the Director of the Lalor Foundation, 4400 Lancaster Pike, Wilmington 5, Del.

ONR Astronomy Program

The Office of Naval Research has announced support for research in astronomy for the year June 1958-June 1959. Grant applications must be submitted by 15 December. Ten copies of each proposal will be required. They should include a full description of the project and a cost breakdown and should be addressed to the Chief of Naval Research, Department of the Navy, Washington 25, D.C., Attention: Code 410. Letters of recommendation will be helpful in appraising the proposals and should be sent by the writers directly to the above address.

Scientists in the News

ROBERT W. WISSLER, who first joined the University of Chicago faculty in 1941, has been named chairman of the university's department of pathology. He succeeds PAUL R. CANNON, who retired on 30 Sept. Wissler has conducted extensive research on immunity and how it is affected by diet and irradiation. He has also shown that animals can form antibodies to destroy cancerous tissue.

The American Heart Association's 1957 Howard W. Blakeslee awards for outstanding reporting in the field of heart and circulatory diseases are as follows.

LEONARD ENGEL, free-lance writer, for his series of five articles on cardiac surgery published by the North American Newspaper Alliance, 1-6 Dec. 1956.

WALTER BAZAR, for his series of six articles entitled "New Hope for Your Heart," reporting on progress in research and advances in the treatment of cardiovascular diseases, including heart surgery. This series was published in the *New York Journal-American* during the week of 16 Dec. 1956.

DON DUNHAM, for his spot news report on the first "stopped heart" operation, which involved the use of a drug to make the heart motionless during surgery while the patient's blood was circulated by means of a heart-lung machine. The operation was performed at the Cleveland Clinic. Dunham's news story was published on 16 Apr. 1956 in the *Cleveland Press*.

STEVEN M. SPENCER, for an article entitled, "They Repair Damaged