

Sciences. Vol. 4. Biologically Oriented Fields: Their Place in Psychology and in Biological Science—Sigmund Koch, Ed.—*McGraw*, 731 p., illus., \$12.50.

REPORT OF THE COMMITTEE ON ENVIRONMENTAL HEALTH PROBLEMS to the Surgeon General—Paul M. Gross, Chmn—*PHS (GPO)*, 288 p., paper, \$1. Review of programs and recommendations on toxicology, air pollution, food protection, occupational health, radiological health and water pollution.

THE SCIENCES AND THE ARTS: A New Alliance—Harold Gomes Cassidy—*Harper*, 182 p., illus., \$4.75. Yale Professor of Chemistry examines some complementary aspects of the arts and sciences.

THE SCIENTIFIC RENAISSANCE, 1450-1630—Marie Boas—*Harper*, 380 p., illus., \$6. Describes the early stages of the scientific revolution which opened the physical universe to cumulative explorations.

SMOKING AND HEALTH: Summary and Report of The Royal College of Physicians of London on Smoking in Relation to Cancer of the Lung and Other Diseases—*Pittman*, 70 p., paper, \$1. See story, *SNL* March 24, 1962, p. 181.

THE STORY OF A NATURAL HISTORY EXPEDITION—Russell Francis Peterson—*Doubleday*, 56 p., illus. by author, \$2.95. Pictures a museum search for rare animals in New Guinea, for young readers.

SUCCESSFUL MINERAL COLLECTING AND PROSPECTING—Richard M. Pearl—*New Am. Lib.*, 164 p., illus., paper, \$2.95. Well-illustrated guide for prospector and hobbyist.

THE THINKING MACHINE—John Pfeiffer—*Lippincott*, 242 p., illus., \$5.95. Story of the electronic computers that run factories, figure bank balances, place long-distance phone calls, analyze cancer cells and brain waves, and translate languages.

A TREASURY OF WORLD SCIENCE—Dagobert D. Runes, introd. by Wernher von Braun—*Philosophical Lib.*, 978 p., illus., \$15. Anthology of samples from the lucid writings of pioneering scientists, from Agricola to Volta and from Archimedes to Niels Bohr.

TREE GROWTH—Theodore T. Kozlowski, Ed.—*Ronald*, 442 p., illus., \$12. Reference work on the main aspects of the nature, control and measurement of the growth of trees.

WINTER TWIGS—Helen M. Gilkey and Patricia L. Packard—*Ore. State Univ. Press*, 109 p., illus. by authors, \$2.50. Wintertime key to deciduous trees and shrubs of northwestern Oregon and western Washington.

THE WORLD OF ICE—James L. Dyson—*Knopf*, 305 p., photographs, maps, \$6.95. Geologist describes the world of permafrost, glaciers, icebergs, climate changes, and man's explorations.

• *Science News Letter*, 81:268 April 28, 1962

GENERAL SCIENCE

97% of Fair Participants Plan Science Careers

► YOUNG PEOPLE soon to exhibit their outstanding science projects at the 13th National Science Fair-International to an extent of 97% are planning their futures in science. Only two percent look forward to careers in fields outside of science, while one percent have made no choice at all, based on the first 200 of an expected 400 entries.

The medical sciences attract the largest number. Almost a quarter, 24%, of the teen-aged finalists plan to enter medicine. Engineering attracts 14%, biological sciences 13%, and physics 12%.

Future teachers among the finalists who plan to combine teaching with their professional specialties account for 9%.

Chemistry and mathematics each will claim 7% of the total, while unspecified fields of science and research are in the futures of 11% of the young scientists.

The National Science Fair-International is conducted by SCIENCE SERVICE, Washington, D. C. This year the event is being held May 2-5 in connection with the Seattle World's Fair.

• *Science News Letter*, 81:269 April 28, 1962

In the Beginning—DNA

(Continued from p. 263)

tricity at first, or even now. We believe the genetic code may eventually help cure hereditary defects and make cancer less mysterious."

"If we can find out how genes are activated and deactivated," he said, "we can know how cells differ from each other. We can find out why the cancer cell is different from the normal cell, and in the far future this knowledge may be used to cure thousands of people who have cancer."

"Within a year we should be able to use synthetic genes. Many problems remain, but most of them have been solved. We have evidence that the genetic code is partially universal. The similarities are strong."

At Sloan-Kettering Institute, New York, Dr. Ellen Borenfreund, who with Dr. Aaron Bendich first isolated DNA in a chemically intact form from human and other mammalian sperm, reported that their work is in very early research stages.

"We have not even been able to get the nucleic acid into the egg yet," she said.

Searching questions remain before experiments with the living organisms can attain the results dreamed about. There are skeptics such as Dr. Erwin Chargaff, professor of biochemistry at Columbia University, who challenge the prevailing view that a chain of biologic information universally exists.

But the fairy tale picture painted by some geneticists and biologists who forecast future achievements because of present accomplishments is no more fantastic than the developments following the Curies' discovery of radium.

Dr. Thomas M. Rivers of the National Foundation says the fact that we have reached the point where we can study life in terms of molecules is a marker in history that is likely to bear more weightily on human destiny than the hydrogen bomb or rockets in space.

When man can manipulate the nucleic acid in the cells of intact living bodies, Dr. Rivers believes, he can determine to some degree, yet immeasurable, what kind of human beings will inhabit the earth.

• *Science News Letter*, 81:263 April 28, 1962

Bee colonies die within 24 hours when no water is available and air temperatures exceed 100 degrees Fahrenheit.

The U.S. Department of Agriculture has established a Boll Weevil Research Laboratory at State College, Miss., to develop improved methods of *boll-weevil* control.

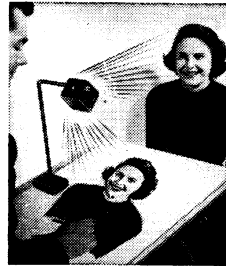
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With artificial satellites already launched and space travel almost a reality, astronomy has become today's fastest growing hobby. Exploring the skies with a telescope is a relaxing diversion for father and son alike. UNITRON's handbook contains full-page illustrated articles on astronomy, observing, telescopes and accessories. It is of interest to both beginners and advanced amateurs.

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