

samples obtained will, upon analysis, give information about the concentration of such trace elements as copper, lead, nickel, zinc, and chromium in deep-sea muds as well as material for radiocarbon dating and for study of the bottom-dwelling fauna.

■ A patent has recently been issued to Donald F. Jones, Connecticut Agricultural Experiment Station, and Paul C. Mangelsdorf, Harvard University, for a genetic process that eliminates or greatly reduces hand removal of tassels in the production of hybrid seed corn. In the hand process, which at the peak of the season requires the labor of more than 125,000 people, tassels are removed from the seed-producing corn in order to assure pollination from another inbred line of corn in adjacent fields.

In the genetic process, the seed-producing line of corn has bred into it a cytoplasmic gene for male sterility. Accordingly, it does not produce pollen and does not have to have its tassels removed. To produce double-cross hybrid seed, the process is more complicated. Hand removal of tassels may be used at one stage, or a dominant gene for restoration of male fertility may be introduced into one of the stocks to be crossed to the product of the first male-sterile cross.

The patent, thought to be the first in the United States for the control of an industrial process by genetic means, has been assigned to the Research Corporation, a non-profit foundation that administers patents that originate in college or university research. The foundation disburses the royalties from its patents in the form of research grants.

■ Experiments by the U.S. Department of Agriculture on the control of sagebrush by the herbicide 2,4-D have been carried on for the past 10 years on range lands in the Lassen and Modoc National Forests of northern California. The sprays could be effectively applied by ground rig, airplane, or helicopter. Where sagebrush was sparse, application of 2,4-D was more economical than plowing or burning. Following treatment, kill of sagebrush in large-scale tests ranged from 88.5 percent to 99 percent. With deferment of grazing for 1 year and good grazing management thereafter, native grasses and reseeded species will become established, and the return of sagebrush will be delayed.

■ The National Geographic Society-*Calypso* expedition will try to obtain photographs from the deepest levels ever attained at two sites: in the deep of about 18,500 feet 350 miles off the Liberian coast, and in the Romanche trench, which lies some 500 miles west of the

first site and reaches a depth of about 25,000 feet. The society has sponsored the work of the French oceanographic vessel, the *Calypso*, captained by Jacques-Yves Costeau, for the past 4 years. In the present expedition, a new 100-pound camera invented by Harold E. Edgerton of Massachusetts Institute of Technology will be lowered on a 0.25-inch nylon line 28,000 feet long. The camera is equipped with electric lights and a position indicator that will determine distance from the bottom by reflected sound waves.

### Scientists in the News

LEONARD M. GOLDMAN, nuclear physicist and for the past 4 years a member of the staff at Princeton University, has been appointed research associate at the General Electric Research Laboratory, Schenectady, N. Y.

MARSHALL W. JENNISON, professor of bacteriology in the department of plant sciences at Syracuse University, has been named chairman of that department.

GORDON E. GIBBS has been appointed professor and chairman of the department of pediatrics at the University of Nebraska College of Medicine. His special interests are in cystic fibrosis of the pancreas, juvenile diabetes, pediatric gastroenterology, and pediatric endocrinology and metabolic diseases.

MILTON LEVY has been appointed chairman of the department of biochemistry and CHESTER W. HAMPEL has been appointed chairman of the department of physiology and biophysics at New York University.

MERL M. MUSSELMAN has been appointed chairman of the department of surgery at the University of Nebraska College of Medicine.

ARNOLD COURT, former chief climatologist of the Office of the Quartermaster General, Department of the Army, has joined the staff of the California Forest and Range Experiment Station of the U.S. Forest Service in Berkeley, Calif., as meteorological adviser. He will participate in a new 5-year cooperative research project that is being carried out by the Forest Service and the state of California to determine how timber in the Sierra Nevada should be harvested to provide the best possible yield of water from the winter snow pack.

RICHARD W. WALLEN, associate professor of psychology at Western Re-

serve University, has accepted appointment as senior associate for Creelman Associates, Cleveland, Ohio, consultants in the management sciences.

ROBERT GLASER, former program director at the American Institute for Research, Pittsburgh, has been appointed associate professor of psychology at the University of Pittsburgh.

WILLIAM S. BENNINGHOFF, chief of the U.S. Geological Survey's Alaska Terrain and Permafrost Section, has been appointed associate professor of botany to head the program of ecology at the University of Michigan's department of botany. He succeeds PIERRE DANSEREAU, who is now dean of faculties at the University of Montreal.

MARTIN L. STONE has been appointed professor and director of the department of obstetrics and gynecology at New York Medical College, where he has been a faculty member since 1949.

JOHN OSBORNE, professor of prosthetics at the University of Birmingham, England, has been named visiting professor of dental materials at Northwestern University Dental School.

### Recent Deaths

GEORGE P. DIXON, Alexandria, Va.; 67; communications engineer; executive vice president of the Armed Forces Communications and Electronics Association; 9 July.

HARRY J. EPSTEIN, Philadelphia, Pa.; 54; associate professor of medicine at Hahnemann Medical College; 9 July.

EARL H. MORRIS, Boulder, Colo.; 66; research associate in archeology for the Carnegie Institution of Washington since 1924; lecturer in anthropology at the University of Colorado; 24 June.

WILLIAM WELKER, Oak Park, Ill.; 75; retired head of the biochemistry department of the University of Illinois College of Medicine; 7 July.

### Education

■ A new national organization will seek more effective training for teachers and students in basic subjects, especially English, mathematics, science, history, and foreign languages. Incorporated in the District of Columbia, the group will be known as the Council for Basic Education.

Starting with a nation-wide membership of 110 prominent laymen, educators, editors, writers, and industrialists, the council plans to expand its individual