northern Guatemala. The site is being explored and partially restored by the museum archeologists in cooperation with the Guatemalan government. The most important single discovery this year was that of the oldest known dated stone monument of the lowland Maya tribes. Clearly legible inscriptions on the weathered and fragmentary piece give a date which, by one correlation of the Mayan and Christian calendars, corresponds to A.D. 32 and, by another correlation, to A.D. 292. Regardless of which of these dates is used, the stela is 36 years older than the archeologically famous Stela 9, discovered at Uaxactun, Guatemala, in 1916 by the Carnegie Institution of Washington, D.C., and 28 years older than the jade plaque, known as the Leyden Plate, which was found near Puerto Barrios, Guatemala, in 1864. Archeologists have theorized, on stylistic grounds, that the Leyden Plate, although it was not found at Tikal, was produced there, because of its resemblance to other stone carvings from the same city.

## Automatic Weather Station

A new automatic "weather bureau" that can be set up anywhere in the world as a complete, unattended observatory supplying key data to a central office has been designed and built for the U.S. Army.

The weather station, a steel cubicle 7 by 7 by 8 feet and weighing less than a ton, is equipped to report by teletype code, in 15 seconds, its identification; the air temperature, from minus 40° to plus 120°F; the dew point temperature; the wind direction and velocity; and the barometric pressure and rainfall. It can also be equipped with radiation monitoring and warning instruments.

The new unit is a compact, transportable, automatic meteorological station, designed to operate unattended and automatically, taking observations and reporting data over wire or radio facilities to any central location, either on demand or at prescribed intervals, as desired. There is no limit to the number of stations that may be combined to form a world-wide weather observation network.

The new equipment, by eliminating the need for human supervision, makes possible a major expansion of worldwide meteorological observation and forecasting at minimum cost and eliminates the need for personnel to be stationed in remote locations.

### **News Briefs**

The Public Health Service reported in June on the levels of radioactivity in milk collected during March from 12 sampling stations across the country. According to the report, the averages for all radioisotopes in the milk samples remained below the levels which the National Committee on Radiation Protection and Measurements currently suggests as permissible for the general population.

The milk-sampling network is part of the service's program of measurement of radioactivity in air, water, and food. Milk was chosen for the initial study of specific isotopes in foods because it is the easiest of all foods to sample and is produced throughout the year in all sections of the country.

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The world's largest installation for distilling fresh water from sea water has recently been completed, at a cost of \$10,600,000. The plant is located on the island of Aruba in the Netherlands West Indies, off the coast of Venezuela. Electricity is produced by a by-product of the water distillation plant, at a cost of less than 3 mills per kilowatt hour, it was reported.

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Devices which generate electric power directly from heat, without the use of boilers and spinning generators, were described at a meeting of the American Society of Mechanical Engineers in St. Louis last month. One such device, called a fuel cell, would burn conventional fuels to produce a flow of usable current. The other, called a thermionic converter, might use heat from a nuclear reactor or from the rays of the sun.

In a fuel cell, a fuel such as hydrogen, coal, or carbon monoxide reacts with oxygen from the air. Instead of heat, this reaction generates electricity directly. In its simplest form, a thermionic converter consists of a vacuum tube in which one piece of wire is heated until it gives off electrons, while another, colder, piece collects the electrons and feeds them to an outside circuit.

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The Marine Biological Association of India was founded in January, with S. Jones as president. The association expects to issue a journal half-yearly. Membership is open to all interested, Correspondence may be addressed to the Secretary, Marine Biological Association of India, Marine Fisheries P.O., Mandapam Camp, South India.

## Scientists in the News

Sir HARRY MELVILLE, secretary of Department of Scientific and Industrial Research, London, will arrive in the United States on 24 August. He will visit Washington (25–28 August); Kingsport, Tenn.; Ottawa, Canada. On 2 September he will attend the Faraday Society meeting in Kingston, Ontario, Canada.

B. J. RENDLE, principal scientific officer, Forest Products Research Laboratory, Princes Risborough, Aylesbury, England, will arrive on 19 July. He will attend the Northeastern Forest Tree Improvement Conference, Burlington, Vt., 18–19 August, and the ninth International Botanical Congress, Montreal, Canada, in August. His itinerary includes Connecticut; New York; Wisconsin; Vancouver, B.C.; Ottawa; and Chalk River, Ont.

HENRY L. BOCKUS, professor and chairman of the department of medicine at the University of Pennsylvania Graduate School of Medicine for 30 years, retired on 1 July. Former graduate students presented a portrait of Bockus to the university at the first annual meeting of the Bockus International Alumni Society of Gastroenterology, which was organized last year in his honor. At the group's first banquet, attended by 180 physicians from the United States, Europe, Africa, the Near and Far East, and Latin America, Bockus was given a specially designed map of the world that showed the location of the 325 gastroenterologist alumni of his program.

EDWARD C. WENTE, scientific staff member of Bell Telephone Laboratories until his retirement in 1954, and pioneer inventor of important devices for the motion picture, recording, broadcasting, and television industries, has been awarded the Gold Medal of the Acoustical Society of America.

LILLIAN M. GILBRETH, engineer and former chairman of the department of personnel relations at Newark College of Engineering, has received the Allan R. Cullimore Medal. The medal was established last year in memory of Dr. Cullimore, NCE's first president.

MURRAY KORNFELD, founder and executive director of the American College of Chest Physicians, received the college's Gold Medal during its recent 25th anniversary meeting in Atlantic City, N.J. The first layman to receive the medal, Kornfeld was honored for "having devoted 32 years of his life as a leader in furthering the specialty of diseases of the chest."

ANTON B. BURG, professor of chemistry at the University of Southern California, will give a 1-hour lecture at the 17th Congress of Pure and Applied Chemistry, in Munich, Germany, next September. His subject will be "Chemical Behavior and Bonding of Boron-Hydride Derivatives."

GERTRUDE M. COX, director of the Consolidated University of North Carolina's Institute of Statistics, at North Carolina State College, has been named the 1959 winner of the Oliver Max Gardner Award for having made "the greatest contribution to the welfare of the human race" during the current academic year.

EMERY I. VALKO, professor of chemistry in the Lowell Technological Institute's division of chemistry, has received the 1959 Olney Medal of the American Association of Textile Chemists and Colorists.

A. M. SCHLEHUBER, professor of agronomy at Oklahoma State University, will be on sabbatical leave at the Technical Institute, Munich, Germany, during the academic year 1959–60. He will lecture on plant breeding.

S. E. A. McCALLAN, plant pathologist at the Boyce Thompson Institute for Plant Research, Yonkers, N.Y., and a staff member for 30 years, has been appointed secretary of the institute. He succeeds JOHN M. ARTHUR, who will retire after 38 years of service.

ALFRED A. H. KEIL, physicist and chief scientist of the Underwater Explosions Research Division at the Norfolk Naval Shipyard, has been appointed technical director of the Structural Mechanics Laboratory at the Navy's David Taylor Model Basin, Washington, D.C.

<sup>20</sup> BRUCE L. DOUGLAS, chairman of the editorial board of the American Dental Society of Anesthesiology and diplomate of the American Board of Oral Surgery, is going to Japan for a year to teach oral surgery and anesthesiology at Okayama University Medical School. JOHN S. KARLING, head of the department of biological sciences, director of the Ross Biological Reserve, and professor of botany at Purdue University, was named Distinguished Professor during the university's recent commencement exercises. He will occupy the John Wright chair of biological sciences and devote himself to teaching and research in the development, physiology, and systematics of fungi.

DOUGLAS D. BOND, professor of psychiatry at Western Reserve University and director of the division in the university hospitals, has been appointed dean of the School of Medicine. He succeeds JOSEPH T. WEARN, who has been appointed to the newly created post of vice president for medical affairs.

RONALD C. VICKERY, formerly with the Stanford Research Institute, has been named senior research scientist of the Research Chemicals Division of the Nuclear Corporation, Burbank, Calif. Vickery is a specialist in rare earth elements.

JOHN H. GARLOCK, clinical professor of surgery at the College of Physicians and Surgeons of Columbia University, has been named a governor of the Hebrew University, Israel.

RUDOLF E. A. THUN, physicist, has received the Commanding General's Medal for Technological Achievement, one of the highest awards that can be conferred upon an employee at the U.S. Army Engineer Research and Development Laboratories, Ford Belvoir, Va.

DALE H. SIELING, dean of the University of Massachusetts College of Agriculture, has been appointed scientific director of the U.S. Army Quartermaster Research and Engineering Command, Natick, Mass.

FRED R. JONES, who retired in 1958 as head of the agricultural engineering department at the Agricultural and Mechanical College of Texas, received the John Deere Gold Medal of the American Society of Agricultural Engineers at its special awards program at Cornell University on 25 June.

FLOYD W. DUFFEE, chairman of the agricultural engineering department at the University of Wisconsin, received the society's Cyrus Hall McCormick Gold Medal on the same occasion.

# **Recent Deaths**

JOHN P. DEAN, Ithaca, N.Y.; 45; associate professor of sociology and anthropology at Cornell University; 31 May.

CHARLES F. DEISS, Indianapolis, Ind.; 56; chairman of the Indiana University department of geology and Indiana state geologist; formerly taught at Montana State University; 13 June.

HARVEY L. FULLER, Atlantic City, N.J.; 44; specialist in internal medicine and staff member at Sinai Hospital and the University of Maryland Hospital; conducted research on heparin, a drug that dissolves fatty deposits in the body that contribute to narrowing of arteries; 9 June.

RALPH K. GHORMLEY, Rochester, Minn.; 66; orthopedic surgery consultant to the U.S. Veterans Administration; head of orthopedic surgery at the Mayo Clinic, 1938–55; coauthor of *Diagnosis in Joint Diseases*; 6 June.

LUDLOW GRISCOM, Mass.; 68; research ornithologist, research curator, and editor at the Harvard Museum of Comparative Zoology from 1927 until his retirement in 1955; assistant curator in ornithology at the American Museum of Natural History, 1921–27; president of the American Ornithologists Union in 1956; author of Birds of Martha's Vineyard; 28 May.

MORTON C. KAHN, New York; 63; explorer, bacteriologist, and public health specialist; chief bacteriologist at St. Vincent's Hospital since 1955; associate professor of public health and preventive medicine at Cornell University Medical College, 1934–55; former head of the department of parasitology of the New York Hospital; recently had been conducting experiments on the resistant staphylococcus bacteria; made field trips to Costa Rica, Honduras, the Gold Coast, and British and Dutch Guiana; 6 June.

WILLIAM H. W. KNIPE, Katonah, N.Y.; 78; practiced gynecology and obstetrics from 1906 until his retirement last April; studied the techniques of twilight sleep in Germany, and introduced it in this country in 1914; 28 May.

ADOLF WINDAUS, Goettingen, Germany; 82; professor of applied medical chemistry of the University of Goettingen from 1915 until his retirement in 1944; received the Nobel Prize in 1928 for research which demonstrated that the substance ergosterol could be converted to vitamin D; 9 June.