The fellowships are founded in honor of Dr. Frank B. Jewett, president of the National Academy of Sciences, vice-president of the company, in charge of development and research, who has reached the retirement age. They provide an annual honorarium of \$3,000 to the holder and \$1,500 to the institution at which the recipient elects to do research.

Seven members of the scientific staff of the Bell Telephone Laboratories will form a committee of award. The fellowships will enable the recipients to devote themselves to research in pure science for a year or two following receipt of their doctorates and will be awarded for demonstrated research ability and the fundamental importance of the problems proposed. They will be given to those who have obtained the doctorate within the preceding year, or who are expected to receive that degree not later than the beginning of the next fellowship term, which starts each July 1.

Selection for a fellowship award and its acceptance will involve no implication or commitment on the part of Bell Telephone Laboratories or on the part of the recipient as to later employment in the laboratories.

SCIENTIFIC NOTES AND NEWS

A DINNER was given on September 14 by the Section on Chemistry at the Cleveland meeting of the American Association for the Advancement of Science in honor of Dr. Hugh S. Taylor, chairman of the department of chemistry at Princeton University, retiring vice-president of the section.

DR. JOHN M. FOGG, JR., professor of botany and dean of the College of Arts and Sciences of the University of Pennsylvania, who was recently elected viceprovost of the university, will be the guest of honor and speaker on the evening of October 20 at the opening of the 1944–45 season of the Academy of Natural Sciences of Philadelphia. He will make an address entitled "The Greatest Expedition in the World," which will be followed by a reception and an exhibition of rare books on botany and travel in the library of the academy.

THE Medal for the Advancement of Research of the American Society for Metals, "awarded annually to the executive who has consistently sponsored metallurgical developments and by his foresight has helped to advance the arts and sciences relating to metals," will be presented at the annual dinner on October 19 at Cleveland to Robert Crooks Stanley, chairman and president of the International Nickel Company of Canada, Ltd., in recognition of "his pioneering leadership in the field of metals research."

THE American Society of Plant Physiologists has awarded the Charles Reid Barnes Life Membership to Dr. George William Scarth, MacDonald professor of botany at McGill University, and the bi-annual Stephen Hales Award to Dr. Ray Fields Dawson, assistant professor of botany at Princeton University.

REAR ADMIRAL RICHARD E. BYRD, who has been on active duty since the beginning of the war, has been cited by Secretary Forrestal for "outstanding performance of duty on two special missions in the Pacific war zone." AN order from the headquarters of General Joseph W. Stilwell, commander of all U. S. Army Forces in the China-Burma-India theater, reads: "The bronze star is awarded to Major Joseph M. Ruggieri, U. S. Army, for meritorious services from April 4 to April 19, 1944." Major Ruggieri has since been promoted to the rank of lieutenant colonel. Before the war he was head of the science department and instructor in chemistry of the Board of Education, Woodbridge, N. J.

THE Rocky Mountain Biological Laboratory at its seventeenth annual meeting elected the following officers: *President of the Corporation*, Dr. A. O. Weese, professor of zoology, University of Oklahoma; *Vice-president*, Dr. B. D. Barclay, professor of botany, University of Tulsa; *Director of the Laboratory*, Dr. John C. Johnson, professor of biology, Pennsylvania State Teachers College, Edinboro; *Secretary*, Dr. George L. Cross, president of the University of Oklahoma, formerly professor of botany; *Treasurer*, Dr. J. Teague Self; reelected for a fourth term of five years a member of the Board of Trustees, Dr. A. Richards. Plans were made at the meeting to expand the work of the laboratory as soon as the war is over.

PROFESSOR CHARLES A. ELLWOOD, since 1930 professor of sociology in Duke University, after teaching university classes in sociology for forty-five years, will retire next June. Previously he had been for thirty years professor in the department of sociology of the University of Missouri. Professor Howard E. Jensen, who has been associated with Professor Ellwood at Duke University since 1931, has been appointed chairman of the department.

DR. ARTHUR C. COPE, associate professor of chemistry at Columbia University, has been appointed professor in charge of the division of organic chemistry of the department of chemistry of the Massachusetts Institute of Technology. Dr. Cope, who has undertaken important war work, will be on leave of absence for the duration of the war.

NEIL P. BAILEY has been appointed head of the department of mechanical engineering at the Rensselaer Polytechnic Institute. He succeeds Edwin A. Fessenden, who will retire on October 31 after forty years of college teaching.

DR. CLINTON V. MACCOY, assistant professor of zoology at the Massachusetts State College, has been appointed to a similar position at Wheaton College.

DR. JAMES M. ORTEN has been promoted to an associate professorship of physiological chemistry at the College of Medicine of Wayne University. Dr. W. M. Cahill has resigned as assistant professor.

DR. S. J. WATSON, director in charge of the Jealott's Hill Agricultural Research Station of Imperial Chemical Industries, Ltd., has been appointed professor of agriculture in the University of Edinburgh and principal of the College of Agriculture of Edinburgh and the East of Scotland. He succeeds Professor Ernest Shearrer, who retires after eighteen years of service.

DR. SETH B. BENSON, assistant curator of mammals in the Museum of Vertebrate Zoology of the University of California, has been named curator of mammals and assistant professor of zoology.

RAYMOND BARRATT, assistant in research in the department of botany of the University of New Hampshire, has resigned to accept a similar position in the department of botany and plant pathology of the Connecticut Agricultural Experiment Station at New Haven.

ALTA GUSAR has been appointed curator of the Boas Memorial Collection in the library of Northwestern University. The collection consists of books and prints that made up the working library of the late Dr. Franz Boas, professor emeritus of anthropology of Columbia University.

DR. NORMAN F. CHILDERS, assistant professor of horticulture at the Ohio State University and associate in horticulture at the Ohio Agricultural Experiment Station, has taken up his work as assistant director and head of plant research at the U. S. Department of Agriculture Experiment Station at Mayaguez, Puerto Rico. David G. White, botanist with the Firestone Plantations Company, joined the staff as assistant horticulturist in July.

DR. J. HOLMES MARTIN, head of the poultry department of Purdue University, has a year's leave of absence to act as director of animal breeding research and consulting geneticist for the DeKalb Agricultural Association, Inc., Illinois. Dr. E. E. Schnetzler, assistant chief, will be acting head of the department during Dr. Martin's absence. MAJOR GENERAL GEORGE C. DUNHAM, assistant coordinator of inter-American affairs, is visiting Managua, Nicaragua, to assist in the inauguration of the new public health building, erected with funds provided by the United States and by the Government of Nicaragua.

MAJOR ALFRED GOLDEN, M.C., of Madison, Wis., who has been on duty for the past four years at the Army Medical Museum, has been transferred to the Division of Health and Sanitation, Office of the Coordinator of Inter-American Affairs. Major Golden will be assigned to duty in Latin America to study the pathology of certain tropical diseases.

Dr. HOWARD A. MEYERHOFF, professor of geology and geography at Smith College, who has been on leave during 1943-44 to teach army and navy personnel in the Foreign Areas Studies at Yale University, has returned to the college.

A CABLE from Guatemala to *The New York Times* states that Dr. Carlos Estevez, formerly director general of sanitation of Guatemala, has joined the Pan-American Sanitary Bureau for a study of filariasis. His headquarters will be in Mexico.

THE Edward de Mille Campbell Memorial Lecture of the American Society for Metals, following the annual meeting of the society at Cleveland, will be delivered by Dr. G. R. Fitterer, professor and head of the department of metallurgical engineering of the University of Pittsburgh, on the morning of October 18.

THE Seventh Annual Louis Gross Memorial Lecture will be delivered on October 25 at the Jewish General Hospital, Montreal, by Dr. Leo Loewe, of New York, whose subject will be "Further Observations on the Combined Use of Penicillin and Heparin in the Treatment of Subacute Bacterial Endocarditis."

SIR HAROLD WHITTINGHAM, British Air Marshal, gave on September 21 at the Royal Institute of Public Health and Hygiene, London, an illustrated address entitled "Aviation's Contribution to Preventive Medicine."

THE executive committee of the division of medical sciences of the National Research Council has voted unanimously to admit the American Society of Tropical Medicine to membership in the division.

THE International Congress of Philosophy convened on September 24 at Port-au-Prince, Haiti. It was the first such congress to meet in the Americas. The general subject chosen for the conference was "Les Problèmes de la Connaissance." Sixty specific subjects were listed for discussion, including Conscience and Knowledge, Materialism and Knowledge, Descartes and Knowledge, and Science, the foundation of world unity. In spite of war conditions, representatives from France, England, Canada, the United States, Cuba, Mexico, Brazil, Peru and a number of other South American republics were present. Professor Jacques Maritain was the honored guest. The undertaking was the idea and work of Dr. Camille Lherisson.

A CONFERENCE on Parental Influence on the Incidence of Human Cancer was held from September 21 to 25 at the Roscoe B. Jackson Memorial Laboratory at Bar Harbor, Me., of which Dr. C. C. Little is director. This conference was made possible by the Rockefeller Foundation and Mrs. Albert Lasker.

THE Conference of Professors of Preventive Medicine will hold its second annual meeting on October 2 at the Hotel Pennsylvania, New York City. The morning session will open at 10:30 and the afternoon session at 2:30. Dr. W. G. Smillie, of Cornell University Medical College, will act as chairman, and Dr. L. W. Parr, of George Washington University, as secretary of the conference. The following subjects will be discussed: (1) Integration of the Teaching of Preventive Medicine with Clinical Teaching. Discussion to be opened by Dr. Jacques P. Gray, Medical College of Virginia. (2) Teaching of Industrial Hygiene in the Department of Public Health and Preventive Medicine. Discussion to be opened by Dr. Dwight O'Hara, Tufts Medical College. (3) Use of Teaching Films in Preventive Medicine and Public Health. Discussion to be opened by Dr. W. W. Peter, Yale University Medical School. (4) Teaching of Social and Economic Factors in the Department of Preventive Medicine. Discussion to be opened by Dr. Fred L. Moore, Long Island Medical College. (5) Teaching of Tropical and Parasitical Diseases in the Department of Preventive Medicine. Discussion to be opened by Dr. Henry E. Meleney, New York University College of Medicine. The leaders of the discussions will present their remarks in a 15-minute period, to be followed by a general discussion of each subject from the floor. At the conclusion of the afternoon program the report of the nominating committee will be received and such other business transacted as may be indicated. The conference will be open to all members and guests of the American Public Health Association.

A CONFERENCE on New Developments in Wood Products will be held at the New York State College of Forestry of Syracuse University on October 6 and 7. Dr. William P. Tolley, chancellor of the university, will make the address of welcome. Addresses at the dinner to be held on the evening of October 6 will be given by Dr. Joseph S. Illick, acting dean of the college, whose address is entitled "Looking Ahead in Forest Education" and by George W. Trayer, chief of the Division of Forest Products of the U. S. Forest Service, who will speak on "New Wood Products in Our Future Economy."

AT the third biennial National Chemical Exposition and the National Industrial Chemical Conference that will be held in Chicago in November, there will be a joint luncheon at the Palmer House on November 15, with members of the Chicago Association of Commerce and the Chicago Section of the American Chemical Society taking part. A discussion of "New Research Developments in Industry" will be given by Dr. Roy C. Newton, of Swift and Company; J. K. Roberts, of the Standard Oil Company of Indiana, and Dr. Ernest H. Volwiler, of the Abbott Laboratories.

THE thirty-third National Safety Congress and Exposition will be held at Chicago on October 3, 4 and 5 under the presidency of Colonel John Stilwell, vicepresident of the Consolidated Edison Company of New York.

THE New York Academy of Medicine announces the availability of the Louis Livingston Seaman Fund for the furtherance of research in bacteriology and sanitary science. One thousand dollars is available for assignment in 1944. This fund was made possible by the terms of the will of the late Dr. Louis Livingston Seaman, and is administered by a committee of the academy under the following conditions and regulations: (1) The committee will receive applications either from institutions or individuals up to November 1. Communications should be addressed to Dr. Wilson G. Smillie, chairman of the Louis Livingston Seaman Fund, 1300 York Avenue, New York 21, New York. (2) The fund will be expended only in grants in aid for investigation or scholarships for research in bacteriology or sanitary science. Expenditures may be made for the securing of technical help, for aid in publishing original work and for the purchase of necessary books or apparatus.

THE Ordnance Distinguished Service Award has been conferred on the American Society for Metals in recognition of its activities in speeding war production through metals education and training work. The award, a scroll bearing the traditional seal of the Ordnance Department, will be presented during the Metal Congress and War Conference Display at the annual dinner of the society on October 19 at the Hotel Statler, Cleveland. Cooperating with the American Society for Metals will be the American Welding Society and the Iron and Steel Division and the Institute of Metals of the American Institute of Mining and Metallurgical Engineers; the American Industrial X-Ray and Radium Society, and the Society for Experimental Stress Analysis, as well as some three hundred and fifty manufacturers who will participate in the display.

THE Long Island College of Medicine announces its third intensive postgraduate course in industrial medicine to be given at the college from October 16 to November 3. The course will be conducted by leading physicians in industrial practice, authorities in allied fields and members of the faculty of the college. The main objective is to give those physicians engaged in or who may enter industrial medicine the opportunity to orientate themselves more fully to the field. Although arranged primarily for graduate physicians, others interested in industrial health may apply for admission. All inquiries should be addressed to Dr. Thomas D. Dublin, Department of Preventive Medicine and Community Health, 248 Baltic Street, Brooklyn 2, New York.

The British Medical Journal reports that an Academy of Medical Sciences has been founded in the U.S.S.R. The academy, whose members to start with will number fifty-six, is to be set up under the People's Commissariat of Health, and will have three departments: (1) medical biology; (2) hygiene, microbiology and epidemiology; and (3) clinical medicine. Each of these will be composed of several scientific institutes, twenty-five in all, many of which will be, in effect, an extension of the appropriate section of the All-Union Institute of Experimental Medicine which is being merged with the academy. An organizing bureau has been set up under the chairmanship of the People's Commissar for Health of the U.S.S.R.

It is stated in *Science and Culture*, Calcutta, that the Government of India plans to publish an Indian Pharmacopoeia. It has asked the Drugs Technical Advisory Board to prepare the material for a list of drugs in use in India and to recommend standards and tests with which to establish their uniformity, identity and purity. These drugs, although not included in the British Pharmacopoeia, are said to be of sufficient medicinal value to justify their inclusion in an official pharmacopoeia. The list, when approved, will be known as the Indian Pharmacopoeial List and will constitute the official Indian Supplement to the British Pharmacopoeia. A committee, of which Sir R. N. Chopra is chairman, has been set up to examine the material for the list and report to the board.

DISCUSSION

WAS THERE ICE AT COQUIMBO?

I THINK there was. I can not imagine anything else that could have carried rocks of such dimensions out to sea. Yet they now lie embedded in a coquina of subtropical shells. The rocks suggest a glacial epoch, but the fauna could not have lived in cold waters. The facts are these.

In latitude 30 degrees, south, the town of Coquimbo, Chile, stands upon a rocky ridge between the Pacific and Coquimbo Bay and spreads out on wave-cut terraces. Eastward, across the bay, the land rises steeply in a succession of terraces, cut upon strata of Pliocene and Recent age. It is clear that during Pliocene and Recent time the coast subsided and received deposits of the sediments that consisted in great part of the very abundant shells. The subsidence continued until the fronts of alluvial cones that are now about 475 feet above sea were at sea level. At some date during Recent time the movement was reversed, the land rose, and as it did so the Pacific carved terraces upon the horizontal strata. As the waves cut the terraces they mingled fossils of Pliocene age with shells of the current date and laid a trap for the unwary paleontologist.

The locality is classic ground. Darwin, who ex-

amined the terraces with characteristic thoroughness more than a hundred years ago, while the *Beagle* lay in the harbor, noted particularly the evidence of uplift. He described six levels or terraces and concluded that the rise had been a gradual one. He collected fossils, which were described by Sowerby and D'Orbigny as of Pliocene and Recent age. The German geologist, G. Steinman, also collected here and his fossils were studied by W. Möricke with the same result. But in neither case is there any account of the horizons from which the various species came. Darwin alone records that he found shells of species now living in adjacent waters as high as 242 feet above sea. I visited the region in 1923, when following up the tracks of the great earthquake of November 10, 1922, and with a thought of my Tertiary-minded colleagues at Stanford I collected from several levels up to the top of a bluff, 136 feet above sea, and also at Coquimbo from the coquina of a terrace 230 to 250 feet above sea. My collections were examined by my young friend, Eric Jordan, whose tragic death cut short the promise of a brilliant career, and he identified the suite of 31 species as Pliocene throughout. None of them could have lived in waters any colder than the present.