

- November 3—*Turbulent motion in fluids*, Dr. T. von Karman, of Aachen, Germany.  
 November 5—*Heat transfer in moving fluids*, Dr. T. von Karman.  
 November 12—*The stagger-decalage biplane*, A. A. Merrill.  
 November 19—*A compound interferometer for fine structure work*, Dr. W. V. Houston.  
 December 3—*Red stars and their astrophysical significance*, Dr. P. W. Merrill.  
 December 10—*Mira Ceti*, Professor A. H. Joy.

The lectures on evolution, given under the auspices of Sigma Xi, were:

- November 4—*Evolution of life on the earth*, Dr. Chester Stock.  
 November 18—*Evolution of life on the earth*, Dr. Chester Stock.  
 December 2—*Evolution of the birds*, Dr. Loye H. Miller.

CHAS. E. ST. JOHN

#### DINNER IN HONOR OF DR. ERWIN F. SMITH

DR. ERWIN FRANK SMITH, senior pathologist in charge of the pathological laboratory of the Bureau of Plant Industry, a pioneer in the study of the bacterial diseases of plants, was the guest of honor at the annual dinner of the American Phytopathological Society in Philadelphia on December 29. Mrs. Smith shared the honor with him.

In introductory remarks, the president of the society, Dr. I. E. Melhus, professor of plant pathology at Iowa State College, congratulated Dr. Smith upon his extensive contributions to science. Dr. Melhus then called upon Dr. L. R. Jones, chairman of the department of plant pathology of the University of Wisconsin, to speak on Dr. Smith's services to plant pathology. Dr. Jones was followed by Dr. William H. Welch, pathologist of the Johns Hopkins University, who spoke on Dr. Smith's contributions to human and animal pathology. Dr. F. V. Rand, formerly of the Bureau of Plant Industry and now with the publication, *Biological Abstracts*, then, after appropriate remarks, presented to Dr. Smith, in the name of the society, a brochure, in which were engrossed abstracts of the addresses that had just been made, followed by the autographs of the members present.

Dr. Jones said in part:

For leadership in the early study of peach yellows, most stimulating example of dogged work upon a baffling problem, with prophetic assurance that knowledge of tobacco mosaic and aster yellow was pertinent to the solution. For leadership in pioneer studies of bacterial plant pathogens, with classic publications, exacting models for all who followed. For assembled contributions to knowledge of bacteria in relation to disease in plants. For epochal researches in crown-gall. For sympathetic counsel to eager young scientists, from far and near. For

thus exemplifying the Pasteurian characteristics—clear vision, instant action, intuitive judgment, precise method, tireless endeavor, sympathetic patience, self-sacrificing devotion in service through science. For these things we delight to honor you—pioneer, prophet, exemplar, dean of our science.

Dr. Welch said:

I rejoice in this opportunity to speak in behalf of my fellow workers and colleagues and to bear tribute to the importance and significance to human and animal pathology of your studies devoted primarily to plant diseases. No one in our day has done more to bring these two great divisions of pathology into close relation to their mutual advantage. The field which you have cultivated so successfully, and with which your name will always be associated—the relation of parasitic organisms, especially of bacteria, to the diseases of plants—is one of the broadest biological interest. Above all, your studies of tumors of plants, which you have demonstrated to be of bacterial origin, have brought you into the field of ontology in its broadest aspects. Here you take your place in national and international congresses and associations devoted to cancer research or to medicine in general, and here your work is recognized as of the greatest interest and importance. While your name is associated especially with the championship of the parasitic theory of the origin of tumors, your studies of the mechanism of tumor formation, of problems of histogenesis, of formative stimuli and inhibitions of growth, and other kindred subjects, are scarcely of less importance. It would lead far to tell of the whole debt which medicine and pathology owe to you, but I can not forego mentioning the service which you have rendered in making the life and work of Pasteur readily accessible and familiar to students of medicine and the general public.

#### SCIENTIFIC NOTES AND NEWS

THE gold medal of the Royal Astronomical Society has been awarded to Professor Frank Schlesinger, of Yale University Observatory, for his work on stellar parallax and astronomical photography.

THE Astronomical Society of the Pacific has awarded the Bruce gold medal "for distinguished services to astronomy" to Dr. Herbert Hall Turner, Savilian professor of astronomy at Oxford University. The award was announced at the annual meeting of the society held on January 29. At this meeting Dr. Paul W. Merrill was elected president of the society for the year 1927.

THE Geographical Society of Chicago has awarded its gold medal to Dr. Isaiah Bowman, director of the American Geographical Society, for "eminent service in the promotion of geography in America." Dr. Bowman addressed the society on February 8, on which occasion the medal was presented.

DR. ALBERT F. BLAKESLEE, of the Carnegie Institu-

tion of Washington, department of genetics, Cold Spring Harbor, N. Y., has been elected a corresponding member of the Biological Society of Paris and an honorary member of the Society of Naturalists of Moscow.

PROFESSOR FRANK P. UNDERHILL, of the department of pharmacology and toxicology at Yale University, has been elected a member of the Kaiserlich Deutsche Academie der Naturforscher zu Halle.

DR. MORRIS FISHBEIN, editor of the *Journal* of the American Medical Association, has been appointed a corresponding member of the Association de la Presse Médicale Belge.

THE Symington prize for anatomy of the Queen's University, Belfast, has, on the advice of the council of the Anatomical Society of Great Britain and Ireland, been awarded to Dr. H. Woollard, of the University of London.

DR. ALEXANDRE BRUNO, Paris, formerly of New York, has been awarded the Clarendon prize by the Academy of Medicine of Paris, for his book entitled "Contre Tuberculose."

A MEETING in honor of Robert T. Hill was held by the Branner Club of Los Angeles on January 14, to commemorate the fortieth anniversary of his first paper on the Comanche of Texas, which was read before the Philosophical Society of Washington. Dr. T. Wayland Vaughan, one of Dr. Hill's early assistants, gave a talk on their geological work and some of their experiences during the frontier days of Texas, and Judge F. G. Finlayson spoke on "Dr. Hill as a Man." Dr. Ralph Arnold read several letters from distinguished geologists in various parts of the world who were unable to attend the meeting. F. B. Lippincott and Professors James Wolfe and James Hyde spoke of their appreciation of Dr. Hill. Dr. Frederick P. Vickery presided. Dr. Hill gave a brief reminiscence of his experiences during the early days of Texas, his studies at Cornell, and of his work with the United States Geological Survey.

THE freshman class of the University of Cincinnati College of Medicine recently gave a dinner to celebrate the birthday of Dr. Oscar V. Batson, assistant professor of anatomy.

DR. E. DE GOLYER, petroleum geologist, has been elected president of the American Institute of Mining and Metallurgical Engineers. The institute will hold a meeting in New York City from February 14 to 17.

BANCROFT GHERARDI, vice-president and chief engineer of the American Telephone and Telegraph Company, has been nominated for the office of president of the American Institute of Electrical Engineers.

THE United States Coast and Geodetic Survey has announced its regular bi-yearly transfer of engineer officers in the Philippine Islands: Lieutenants W. F. Malnate, J. A. McCormick and L. C. Wilder go to Manila for a two-year period of service, and Lieutenants O. W. Swainson, R. R. Moore, J. A. Bond and H. A. Paton will return to the United States.

L. H. ALMY has resigned from the U. S. Bureau of Chemistry to carry on research for the H. J. Heinz Company at the headquarters plant in Pittsburgh. A new laboratory for control and research was completed in December.

DR. ELLERY H. HARVEY has been made chief chemist of Montgomery Ward and Company, Chicago.

ROY E. CLAUSEN, associate professor of genetics in the College of Agriculture, University of California, has been invited to make a survey of the European institutions that are engaged in research in genetics for the International Education Board. At the present time, Professor Clausen is at the University of Stockholm, pursuing his study of genetics in the botanical institute of that institution.

PROFESSOR WESLEY R. COE, of the department of zoology at Yale University, who is on sabbatical leave for the current year, is at present engaged on investigations on the invertebrate fauna of the Pacific Coast, with headquarters at the Scripps Institution of Oceanography in California.

DR. E. S. MOORE, professor of economic geology in the University of Toronto, assisted by Mr. J. E. Maynard, is making a special study of the precipitation of iron and silica under natural conditions, by aid of a grant from the National Research Council of Canada.

DR. L. C. DUNN, of the Storrs Agricultural Experiment Station, sailed for Europe on January 8, to spend his sabbatical year in the animal breeding research department of the University of Edinburgh. During his absence, Dr. Dunn will act as representative of the American Genetic Association at the Fifth Annual Genetic Congress, to be held in Berlin next September.

DR. T. D. A. COCKERELL, professor of zoology at the University of Colorado, expects to sail for England next June and thence go to Russia and Siberia; later back to Russia; in October to England, and about November 1 to India and Siam, and about February 1 to Australia and New Zealand by way of South Sea Islands. He will return to Boulder about September 1, 1928.

P. H. DORSETT, agricultural explorer for the United States Department of Agriculture, recently returned to the United States after two and a half years of

searching in China and the tropical islands of Sumatra, Java and Ceylon for plants that may be useful in American agriculture. With the assistance of his son, J. H. Dorsett, he has brought back a large selection of seeds, plants, scions, bulbs, tubers and cuttings.

DR. C. H. MYERS, of the department of plant breeding of Cornell University, addressed the staff of this station on January 21, on his experiences in China while on sabbatical leave during the past year. Dr. Myers spent nine months at Nanking University aiding in the establishment of teaching and research enterprises in plant breeding at that institution. The work was sponsored by the University of Nanking, Cornell University and the International Educational Board.

DR. OSCAR KLOTZ, professor of pathology at the University of Toronto, returned recently from Nigeria, where he has been for the last six months. Dr. Klotz has been investigating the cause of yellow fever under the auspices of the International Health Board.

THE physics department of the University of California announces that Professor A. Joffé, of the Physical Technical Roentgen Institute of Leningrad, Russia, will deliver a course of lectures during the spring semester entitled "The Physics of Crystals." Professor Joffé will be in residence until the end of the semester and will also direct graduate research along these lines.

DR. EDWIN SCHRÖDINGER, professor of theoretical physics at the University of Zurich, gave a series of lectures at the University of Wisconsin during January which dealt with the theories of properties of matter and with the quantum theory of atomic structure.

DR. JOHANNES WALTHER, of the University of Halle, Speyer visiting professor of geology at the Johns Hopkins University, will arrive at the university this month.

DR. BERNARD GLUECK, psychiatrist, who has recently returned from a year and a half spent abroad, where he has been associated with the European psychiatrists, is to give a course on "The Applications of Psychoanalysis" at the New School for Social Research, during the coming spring term.

DR. FRANCIS G. BENEDICT, director of the laboratory of nutrition of the Carnegie Institution, recently gave an illustrated lecture at the Scientific Institute for Alimentary Hygiene in Paris on "Recent Research on Metabolism in Man and Animals."

THE series of Beaumont lectures of the Wayne County Medical Society, Detroit, were given on January 24 and 25 by Dr. Charles R. Stockard, of Cornell

University Medical School. Dr. Stockard's subjects were: "The Internal Secretion Problem," "Internal Secretions and Growth" and "The Biology of the Gonads."

THE presidential address before the Pathological Society of Philadelphia was delivered on January 11 by Dr. Eugene L. Opie on "The Cytology of the Pancreas and Its Relation to the Endocrine Function of the Gland."

DR. VICTOR G. HEISER, director for the East, International Health Board of the Rockefeller Foundation, New York, read a paper on "The Health Work of the League of Nations" at a meeting of the American Philosophical Society, Philadelphia, on February 4.

DR. GEORGE W. MOREY, of the Geophysical Laboratory, Washington, D. C., lectured before the Franklin Institute on January 27 on "The Chemical Basis of Glass Technology." Dr. B. S. Hopkins, professor of chemistry in the University of Illinois, addressed the institute on February 10 on "Illinium."

DR. H. S. LIDDELL, of Cornell University, gave a lecture on "Conditioned Reflexes" before the medical school of the University of Buffalo on January 7.

AT a meeting of the Philosophical Society of Washington on February 5, Dr. N. H. Heck spoke on "Observations while passing through an Unusual Water-spout Formation on the Pacific Ocean," and Dr. W. J. Humphreys on "The Tornado."

ON January 22, Professor C. R. Young, of the University of Toronto, delivered an address to the Royal Canadian Institute on the subject "How Great Bridges are Built." On January 29, Dr. A. H. Leim, assistant director of the Atlantic Biological Station, St. Andrews, N. B., delivered an address to the institute on "The Scientific Exploration of the Sea."

MORE than two hundred students, friends and associates of the late Dr. John H. Howland, former professor of pediatrics at the Johns Hopkins Medical School, attended services held in his memory on January 29 in the Civil Engineering Building at Homewood. Addresses were made by Dr. William H. Welch, Dr. Simon Flexner, Dr. William G. MacCallum and Dr. Graham Lusk. Dr. Frank J. Goodnow presided.

FRIENDS and former students are establishing a scholarship fund at Clark University in memory of the late Dr. Edmund C. Sanford, who was professor of psychology at Clark University.

THE Serbian government has awarded the cross of the Royal Order of St. Sava, posthumously, to the late Dr. Ernest P. Magruder, who lost his life in the typhus epidemic in Serbia following the World War.

Dr. Magruder was clinical professor of surgery at Georgetown University Medical School.

FRIENDS of the late T. S. P. Strangeways, who was lecturer in pathology at the University of Cambridge, are forming a memorial fund of which the primary object will be the provision of scholarships for his five sons.

DR. GEORGE BYRON GORDON, director of the University of Pennsylvania Museum and formerly assistant professor of anthropology in the university, died on January 30. Dr. Gordon was fifty-six years old.

CLIFFORD R. PETTIS, superintendent of New York State forests for twenty-seven years and well known authority on reforestation, died on January 30, aged fifty-three years.

THE death is announced, at the age of seventy-four years, of Dr. E. H. Rennie, who had been for more than forty years professor of chemistry in Adelaide University, Australia.

HATON DE LA GOUPILLIERE, formerly director of the School of Mines at the University of Paris, died recently at the age of ninety-seven years.

THE first annual conclave of the American Institute of Chemists will be held at Yale University in New Haven, Conn., on March 28, 1927. A program of unique character is being arranged by a special committee representing the institute and will consist of an afternoon symposium devoted to the subject of "Chemists Contracts," to be discussed by experts prominent in their respective fields. A subscription dinner will be given at six o'clock, and in the evening at eight-fifteen o'clock a public meeting will be held in Woolsey Hall under the joint auspices of the institute and Yale University and to be addressed by a speaker of national prominence. This evening address will be broadcasted through station WTIC of the Traveler's Insurance Company of Hartford, Conn. The sessions of the symposium and the evening lecture are both open to the public. Announcements of the completed conclave program will be published when final arrangements have been made. The forenoon of March 28 will be kept open for trips to points of interest in New Haven and for visiting the buildings and exhibits of Yale University. The afternoon conference of the conclave will be held in the large lecture hall of Sterling Chemistry Laboratory and will be in session from one-thirty to five o'clock. All communications regarding the conclave should be addressed to the Secretary of the American Institute of Chemists, 80 Washington Street, New York City.

THE forty-third session of the American Association of Anatomists will be held in Nashville, Tenn., at the

school of medicine, Vanderbilt University, on Thursday, April 14, Friday, April 15, and Saturday, April 16.

THE Association of Asphalt Paving Technologists held its fourth regular annual meeting in Chicago on January 13, under the presidency of Hugh W. Skidmore, of the Chicago Paving Laboratory. The morning session was given over to a discussion of reports of technical committees and the afternoon to business and election of officers. The present officers were unanimously reelected for another year and three permanent committees were authorized and chairmen selected. The constitution was amended, making the chairmen of standing committees members of the board of directors.

THE next German Congress of Natural Science and Medicine will be held at Hamburg in 1928 under the presidency of Professor von Eiselsberg, of Vienna. The number of members has increased from 2,500 to 6,000 in the last two years.

*Nature* states that at the fourth annual meeting of British zoologists in the rooms of the Zoological Society on January 8, it was proposed by Professor Stanley Gardiner, and carried unanimously, "That this meeting represents to the trustees of the British Museum the desirability of equipping zoological expeditions for the purpose of obtaining as full a record as possible of the past and present fauna."

By authority of the Governor General of Canada in Council, dated January 5, 1927, the museum branch of the Department of Mines at Ottawa has been designated the "National Museum of Canada." The museum was started as part of the Geological and Natural History Survey of Canada in 1843 and was later known as the Museum of the Geological Survey of Canada. On moving into the new "Victoria Memorial Museum" building in 1910 the museum became generally known as the Victoria Memorial Museum, under the auspices of the Geological Survey. In 1921 the museum was created a separate branch of the Department of Mines, where it still remains under the new official designation.

THE Davenport Academy of Sciences, organized in 1867 and well known in the scientific world for more than half a century, has by an amendment to its articles of incorporation changed its name to Davenport Public Museum. It was felt that the new name is more in accord with the development of the institution. It is no longer a group of scientific men nor is its field limited to science. As an enlarged public museum it will cover natural history and archeology as fully as it did, and will cover as well the ancient and modern cultures and civilizations, art and history, with all the activities proper to an active museum of

to-day. The change of name is to be the beginning of the carrying out of a program of gradual expansion adopted by the trustees, looking forward to the still greater museum assured for the future when the full benefits of the Putnam trust fund become available. Among the first things to be done will be the resumption of publication and of certain other activities necessarily suspended on account of conditions during and following the war. Dr. George E. Decker is president of the museum and W. H. Kimball, secretary. Edward K. Putnam is acting director and J. H. Paarmann, curator.

AN anti-evolution bill has been introduced into the Arkansas legislature which provides: "that it shall be unlawful for any teacher in any of the universities, normals and all other public schools of the State of Arkansas, which are supported in whole or in part by the funds raised by general or special taxes levied upon the property of the people of the state, for school purposes, to teach any theory that denies the story of the divine creation of man as taught in the Bible, and to teach instead that man descended from a lower order of animals, or any other source other than divine creation." Any person violating any of the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in any sum not less than two hundred dollars, nor more than one thousand dollars, and in addition thereto shall have his license to teach in any of the schools of this state revoked, and each day said section is violated shall constitute a separate offense.

LUDLOW GRISCOM, assistant curator of birds, American Museum of Natural History, sailed on February 3 on an expedition to Panama. He intends to examine the Caribbean rain forest region in Panama and contrast it with conditions prevailing in the same type of forest further north in Central America and also with the gallery forests of the Pacific slope of Panama. It is expected that the expedition will charter a boat to explore the Pearl Islands in the Bay of Panama, paying special attention to the water bird colonies known to exist there. Mr. Griseom will be accompanied by Mrs. Griseom, who will secure slide and motion pictures of the birds. Mr. Maunsell S. Crosby, a member of the American Ornithological Union, is going as volunteer assistant, and Mr. Paul F. Covel, of the museum department of preparation, as taxidermist. The expedition plans to remain some seven weeks in the field.

THE first of a series of explorations into the interior of Australia is soon to be made by the National Research Council of Australia and the University of Sydney, aided by the Rockefeller Foundation. An expedition will shortly enter the little explored areas

of central Australia in an effort to study the nomadic aborigine inhabitants. At a later time visits will be made to the islands of Papua, New Guinea and other mandated territories of the Commonwealth.

THE division of mammals of the U. S. National Museum recently received as an exchange from the Zoological Museum of the Academy of Sciences, St. Petersburg, Russia, a small but interesting shipment of mammals. Although it contained only 17 specimens, 3 of these represented, at various ages, a rare genus of ground squirrel (*Spermophilopsis*) hitherto unrepresented in the collection, together with 7 species and subspecies of various other small mammals new to the collection.

AT the twenty-fifth annual banquet of the Academy of Medicine of Toledo and Lucas County, Toledo, on January 7, Dr. William W. Alderdyce was elected president; Dr. Elmer I. McKesson, president-elect, and Dr. Thomas H. Brown, secretary. According to the *Journal* of the American Medical Association, Dr. James A. Duncan, chairman of the committee on endowment, suggested that a fund of \$300,000 be raised for research by the academy, and announced that he had provided in his will for a bequest of \$50,000 toward that purpose.

DR. HERMANN HILLE has donated \$1,000 to the University of Chicago for a fellowship in the department of physiology for the year 1926-27, to be known as the Hille fellowship in physiology, and has guaranteed further sums not to exceed \$500 as an expense fund in connection with the fellowship.

THE board of estimate of the City of New York has voted the sum of \$50,000 to be used for reconditioning the Smith mansion in Brower Park for an annex to the Brooklyn Children's Museum. This will give the museum additional space equal to the size of the present building, and the plot of ground, which measures 250 by 250 feet, is of sufficient size to permit of the erection of an auditorium when funds are available.

ACCORDING to the *Journal* of the American Medical Association the president has transmitted a request to congress that an appropriation be made of \$5,000 for the payment of expenses of five delegates from the United States to the Congress of Military Medicine and Pharmacy to be held in Warsaw, Poland, this year. The request is made that three of these delegates shall represent, respectively, the medical service of the war and navy departments, and the U. S. Public Health Service. The request was initiated by the government of France through a resolution adopted at the third International Congress of Military Medicine and Pharmacy held in Paris in 1925.

THE Industrial Alcohol Manufacturers Association has founded an Industrial Fellowship in the Mellon Institute of Industrial Research of the University of Pittsburgh, for the purpose of studying denaturants, in order to find an ideal one, if possible. This would be a substance possessing such properties and physiological action that it would render ethyl alcohol undrinkable, but could not be separated in any way from the alcohol and would not injure it for technical uses.

### UNIVERSITY AND EDUCATIONAL NOTES

MASSACHUSETTS INSTITUTE OF TECHNOLOGY has received a grant of \$230,000 for an aeronautical engineering building made by the trustees of the Daniel Guggenheim Fund for the Promotion of Aeronautics. The gift will provide a building to house the present personnel and equipment and marks the first step in a program of expansion which, with new apparatus and additional room, will give the institute unexcelled facilities for instruction and research in aeronautics.

A GIFT of \$11,450 has been made to the Harvard Medical School to be known as the Henry Ehrlich Memorial Fund, the income to be used for the assistance of needy or worthy students.

PRESIDENT JOHN A. COUSENS has announced that the proposal to move the Tufts Medical School from Boston to Medford has received the approval of the college trustees and is now before the alumni for action.

A GIFT of £74,000 from the International Education Board, New York, to the University of Edinburgh is to be applied toward the cost of a new department of zoology, which is to be created at the King's buildings of the university. Of the total sum £38,000 is for buildings, £10,000 for equipment and £26,000 for endowment.

THE University of St. Andrews, Dundee, will benefit to the extent of £25,000 under the will of the late William Gibson, Dundee. This sum becomes payable on the death of the testator's two sisters, and is to be used to build and equip a laboratory for study and research in pathology and bacteriology.

DR. OWEN L. SHINN, professor of applied chemistry at the University of Pennsylvania, has been appointed director *pro tempore* of the John Harrison laboratory of chemistry at the university. This appointment follows the action of the university's trustees in acceding to the request of Dr. Walter T. Taggart, present director of the laboratory, to be relieved of administrative duties.

AT Cornell University, Professor W. A. Hurwitz has been made chairman of the department of mathematics.

DR. E. W. TSCHUDI, formerly of the Nela Research Laboratory, Cleveland, Ohio, has been appointed head of the department of physics at Winthrop College, S. C.

DR. JOSEPH CHANDLER, formerly associate professor of chemistry at Boston University School of Medicine, has been appointed associate professor of chemistry at Hahnemann Medical College, Philadelphia.

DR. F. C. HARRISON has resigned as principal of Macdonald College to devote his entire time to research and the training of graduate students. Dr. W. H. Brittain, professor of entomology at the Nova Scotia Agricultural College and provincial entomologist for Nova Scotia, has been appointed professor of entomology in the college.

DR. EGON SCHWEIDLER has been appointed professor of experimental physics at the University of Vienna.

### QUOTATIONS

#### CHILE AND THE CHEMISTS

CHILE faces an economic crisis. She must decide whether to reduce or even abolish her nitrate export tax, from which she has long derived 40 per cent. of her revenue and out of which she has built ports, railways and other permanent improvements. Her nitrate production has declined from 377,000 long tons (in terms of pure nitrogen) in 1925 to 290,000 in 1926. According to *The Wall Street Journal*, the shares of five great nitrate companies have fallen on the London Stock Exchange from an aggregate quoted value of £3,578,000 on January 1, 1926, to £1,634,000 on December 31, 1926.

It might be concluded that Chile's nitrate beds are rapidly nearing exhaustion. But turn to a report of the Inspector General of Nitrate Deposits for 1923. There we are assured that Chile's saltpeter resources could supply the world with the raw material of fertilizers and explosives for at least two centuries, even at the annually increasing rate of consumption that prevailed until recently. But *The Wall Street Journal* calls attention to the increased production of "synthetic nitrogen." That explains everything. It is our irrepressible and resourceful friend, the research chemist, who is responsible for Chile's plight. For a generation he has been struggling with that obstinate gas, nitrogen, to make it assume a substantial and usable form. He built electric furnaces, burnt the oxygen out of the air, and in this way obtained a cer-