telephone conversation that followed, between Sir Ernest at the one end, and Professor Eve, Sir Arthur Currie and Sir Robert Falconer in turn at the other. Only ten years previously it had been considered a remarkable event when, also under the direction of Professor Eve, an artist sang at Montreal to an audience of the Royal Society at Ottawa, 110 miles away, and the reception over this short distance was much less perfect.

## BRITISH HONORS

From the list of honors conferred on King George's birthday, Nature selects the following names of scientific workers and others associated with scientific activities: Baron: The Right Hon. Noel Edward Buxton, minister of agriculture and fisheries. Baronets: Mr. Basil Mott, past president of the Institution of Civil Engineers, and Mr. F. H. Royce, founder, director and chief engineer of Rolls Royce, Limited. Order of Merit: Professor S. Alexander, in recognition of his eminent position as a British philosopher and for his services as a writer and teacher. Knights: Dr. E. Brown, secretary of the National Poultry Council of England and Wales; Major T. H. Crozier, chief inspector of explosives, Home Office; Professor A. S. Eddington, Plumian professor of astronomy in the University of Cambridge; Professor Leonard E. Hill, director of the department of applied physiology, National Institute of Medical Research; Dr. G. A. K. Marshall, director of the Imperial Bureau of Entomology; Professor J. Arthur Thomson, Regius professor of natural history in the University of Aberdeen; Mr. H. W. A. Watson, lately chief conservator of forests, Burma; Mr. H. Wright, chairman of the executive committee of the governing body, Imperial College of Science and Technology, South Kensington. K.B.E.: Sir Philip Hartog, chairman of the education committee, Indian Statutory Commission. C.B.E.: Dr. E. W. Smith, honorary technical adviser to the area gas supply committee, Board of Trade. O.B.E.: Mr. T. P. W. Barty, lecturer in civil engineering, Gordon College, Khartoum, and municipal engineer, Khartoum; Mr. J. A. B. Horsley, electrical inspector of mines, Board of Trade; Professor W. M. Roberts, professor of mathematics, Royal Military Academy, Woolwich; Dr. F. B. Young, principal scientific officer, Admiralty Research Laboratory. M.B.E.: Mr. J. Haworth, general manager of the sewage disposal department and chief chemist and water examiner, Sheffield Corporation; Mr. H. W. Jack, economic botanist, Agricultural Department, Straits Settlements and Federated Malay States; Mr. H. G. D. Rooke, lately chief locust officer, Ministry of Irrigation and Agriculture, Iraq; Dr. A. Winstanley, junior inspector of mines, Board of Trade. C.I.E.: Mr. F. F. R. Channer, lately chief conservator of forests, United Provinces; Lieutenant-Colonel H. R. Dutton, lately principal, Prince of Wales' Medical College, Patna, and superintendent of the Patna Medical College Hospital, Bihar and Orissa; Mr. L. Mason, lately chief forest officer, Andamans; Mr. R. R. Simpson, chief inspector of mines in India. C.V.O.: Mr. Evelyn C. Shaw, secretary since 1910 to the Royal Commissioners of the Exhibition of 1851. I.S.O.: Mr. D. Keiller, head laboratory assistant, Imperial Institute of Veterinary Research, Muktesar, United Provinces.

## SCIENTIFIC NOTES AND NEWS

YALE UNIVERSITY conferred on June 18 the doctorate of science on Dr. Edwin Grant Conklin, professor of zoology at Princeton University, and on Professor Charles Schuchert, professor of paleontology and historical geology at Yale University and curator emeritus of paleontology in the Peabody Museum

The doctorate of science was conferred at the commencement of the University of Pennsylvania on Alexander von Lichtenberg, professor of urology at the University of Berlin, and on Edward E. Allen, director of the Perkins Institution, Watertown, Massachusetts.

THE degree of doctor of laws has been conferred by the University of Indiana on Dr. V. M. Slipher and Dr. C. O. Lampland, of the Lowell Observatory at Flagstaff, Arizona. Dr. Charles Sheard, of the Mayo Foundation at Rochester, Minnesota, received the honorary degree of doctor of science at the commencement exercises of St. Lawrence University.

Mr. Orville Wright, Dayton, Ohio, co-inventor of the airplane, was awarded the honorary degree of doctor of science by the Ohio State University at the annual commencement.

At the commencement exercises on June 10, the University of Arkansas conferred the degree of doctor of laws on Dr. Charles W. Webb, chief surgeon of the Clifton Springs, New York, Sanitarium and Hospital and president of the New York State Society of Surgeons.

Dr. Chas. B. Davenport, of the Carnegie Institution of Washington, has been elected an honorary member of the Vienna Anthropological Society.

The Lucien Howe medal was presented to Dr. J. N. Adams, of Brooklyn, for distinguished research in the field of blind areas of the eye at the commencement exercises of the University of Buffalo.

Worcester Polytechnic Institute, at its commencement exercises on June 13, conferred the honorary degree of doctor of engineering on four of its graduates and upon the commencement speaker, Brigadier General Robert Irwin Rees, assistant vice-president of the American Telephone and Telegraph Company. The alumni who received the degrees are Harry Phillips Davis, vice-president of the Westinghouse Electric and Manufacturing Company; Henry Jones Fuller, partner in the Wall Street banking house of Alfred and Co.; Samuel Sumner Edmands, director of the School of Science and Technology at the Pratt Institute, Brooklyn, and Harrison P. Eddy, senior member of Metcalf and Eddy, consulting engineers, Boston.

REAR ADMIRAL RICHARD E. BYRD will receive from President Hoover on June 20 a special gold medal of the National Geographic Society awarded for his distinguished contributions to the knowledge of Antarctica. On this occasion Admiral Byrd will make the first report on the research work of the expedition, and the motion pictures will have their first showing. The medal, especially designed, as Admiral Byrd already possesses the society's Hubbard Gold Medal, bears the inscription: "Richard Evelyn Byrd, rear admiral, U. S. N. He made distinguished contributions to knowledge of Antarctica, and was first to reach the geographical South Pole by air, November 29, 1929."

The American Geographical Society has awarded the Charles P. Daly Medal for 1930 to Lauge Koch, of Copenhagen, for his explorations in northern and eastern Greenland and his interpretations of the physical geography of that country. The David Livingstone Centenary Medal for 1930 has been awarded to José M. Sobral, director-general of the Argentine Bureau of Mines and Geology. Under Dr. Sobral's administration his bureau has for many years been productively engaged in a program of mapping and geographical and geological studies, especially in the Andean section of the country.

The Royal Aeronautical Society, London, held a dinner on May 30 after the delivery of the eighteenth Wilbur Wright Memorial Lecture by Mr. H. R. Ricardo. The presentation of a silver box suitably inscribed was made to Sir Richard Glazebrook to commemorate the twenty-first anniversary of the founding of the advisory committee for aeronautics, Sir Richard Glazebrook having been chairman of that committee since its foundation in 1909. Lieutenant-Colonel J. T. C. Moore-Brabazon was also pre-

sented with a small gift from the president and fellow-members of the council inscribed "To commemorate the twenty-first anniversary of his flight on the second of May, 1909—the first flight in a power-driven aeroplane piloted by a British subject in the British Isles." At the lecture which preceded the dinner the silver medal of the Royal Aeronautical Society was presented to Mr. F. H. Royce for his conspicuous work in the design and development of aircraft engines.

THE committee on scientific research of the American Medical Association has made a grant of \$1,500 to Dr. Robert Hegner, of the School of Hygiene and Public Health of the Johns Hopkins University, to aid him and his colleagues in the study of the host-parasite relations between man and his parasitic protozoa.

Professor John C. Slater, of Harvard University, is to be the new head of the department of physics at the Massachusetts Institute of Technology, succeeding Professor Charles L. Norton, who will in the future devote his full time to the direction of the division of industrial cooperation and research. This plan has the complete approval of the Harvard physicists as opening the way to increased cooperation between the physics departments of the two institutions. A conference of the Harvard physicists with Professor Slater and President-elect Compton was recently held, at which preliminary plans were made for such coordinated efforts. A new laboratory for research in physics and chemistry at the institute will probably be ready within a year and a half.

Dr. James Angus Doull, of the School of Hygiene and Public Health of the Johns Hopkins University, has been appointed professor of hygiene and public health at the School of Medicine of Western Reserve University, to succeed Dr. Roger G. Perkins, who is retiring at the end of the present year. Other appointments at the School of Medicine are: Dr. Donald E. Gregg, of the University of Rochester, instructor in physiology; Dr. H. A. Blair, of Princeton University, instructor in biophysics, and Dr. Ramon F. Hanzal, instructor in pathological chemistry. Dr. James W. Mull has been promoted from research fellow in biochemistry to be senior instructor in charge of biochemical research in obstetrics.

Dr. Alfred C. Redfield has been advanced to a professorship of physiology in the Harvard Medical School.

Dr. A. Lincoln Dryden, Jr., has been appointed associate in ecology at Bryn Mawr College for the coming year.

Mr. DAVID B. REGER, of Morgantown, West Vir-

ginia, has resigned his position as associate geologist of the West Virginia Geological Survey, effective August 31.

Dr. J. J. WILLAMAN, chief of the chemistry division of the New York Agricultural Experiment Station, will resign on October 1 to accept a position as biochemist with the Rohm and Haas Company of Philadelphia.

Dr. E. V. Abbott has resigned as plant pathologist of the Agricultural Experiment Station, Lima, Peru, to accept an appointment with the Bureau of Plant Industry of the U. S. Department of Agriculture. Mr. Ralph H. Gray has resigned as horticulturist of the station, and is returning to the United States to enter commercial work.

Dr. George Allan Works has resigned from the presidency of the Connecticut Agricultural College at Storrs and is returning to the University of Chicago. It is reported in an Associated Press dispatch that he was dissatisfied with the attitude of the state toward the college, as his policies called for the development of the academic aspects of the institution, while the state sought to develop it as an agricultural college.

At the anniversary general meeting of the Royal Geographical Society, to be held on June 23, Colonel Sir Charles Close will resign the presidency of the society, and the council proposes as his successor Admiral Sir William Goodenough. It is also proposed to add Dr. Hamilton Rice to the list of vice-presidents. Brigadier Jack, one of the honorary secretaries, is to give up that post, and it is proposed to elect in his stead Dr. T. G. Longstaff.

Dr. George K. Burgess, director of the Bureau of Standards, was elected president of the National Conference on Weights and Measures at the concluding session of the twenty-third national conference recently held in Washington, D. C. Other officers elected were: Howard S. Jarrett, of West Virginia, first vice-president; Albert B. Smith, of Pennsylvania, second vice-president; F. S. Koolbrook, of the Bureau of Standards, secretary, and George F. Austin, Jr., of Detroit, treasurer.

Dr. W. G. CROCKETT, professor of pharmacy in the school of pharmacy of the Medical College of Virginia, has been elected chairman of the Virginia section of the American Chemical Society and a member of the revision committee of the United States Pharmacopoeia.

Dean Charles W. Johnson and Professor Henry A. Langenhan, of the University of Washington's College of Pharmacy, have been named to the U. S. Pharmacopoeial Revision Committee. Dean John-

son's term will be for ten years. At the recent convention of the American Association of Colleges of Pharmacy, held in Baltimore, Professor Langenhan was elected vice-president. Dean Johnson was president of the group in 1927.

Dr. W. S. Leathers, professor of preventive medicine and dean of the Vanderbilt Medical School, has been elected a member of the board of scientific directors of the International Health Division of the Rockefeller Foundation.

MISS ALICE C. EVANS and Dr. Sara E. Branham, bacteriologists in the National Institute of Health (The Hygienic Laboratory), have been appointed delegates from the U. S. Public Health Service to the first International Microbiological Congress which meets in Paris from July 20 to 25.

Mr. J. H. Fleming, of Toronto, honorary curator of birds in the National Museum of Canada, and vice-president of the American Ornithologists' Union, attended the recent International Ornithological Congress at Amsterdam, as representative of the National Museum and the Government of Canada. Mr. Fleming is returning from Europe on July 1.

Dr. C. E. Hellmayr, associate curator of birds at the Field Museum, has gone to Europe on an ornithological research mission for the Field Museum. He has taken a number of rare bird specimens collected by the Crane Pacific Expedition, the Marshall Field South American Expedition, and others for comparison with type specimens in museums of Great Britain, France, Germany and other countries.

Mr. J. R. Van Pellt, curator in charge of the division of geology and the mineral industries in the Chicago Museum of Science and Industry, returned from Europe recently following a two months' study of European technical museums. The new seven million dollar building for the museum is now in course of construction, and much of Mr. Van Pelt's time was devoted to the study of recent developments in museum buildings.

MR. WILLIAM R. BARBOUR, forester of the Tropical Plant Research Foundation, has returned to Washington after spending six months in Venezuela, Colombia and Nicaragua, making a survey of the timber resources of those countries. This year's work completes a three-year study of the Caribbean regions, made by the Tropical Plant Research Foundation with the cooperation of the Charles Lathrop Pack Forestry Trust, to determine the location and relative abundance of the woods of the tropics which might serve to replace or supplement hardwoods of the temperate zone. In connection with this survey, logs of fifteen species of Venezuelan woods have been sent to the University of Michigan to be given

thorough and practical tests to determine their suitability for use as substitutes for domestic hardwoods.

Professor Howard E. Simpson, of the department of geology of the University of North Dakota, delivered the address at the annual dinner of the North Dakota Academy of Science at Fargo on May 9, the State College Chapter of the American Association of University Professors acting as hosts. The subject of the address was "The Geological Story of the La Brea Tar Pits Retold."

The George Alexander Gibson Memorial Lecture was delivered at the Royal College of Physicians of Edinburgh on May 27 and 28 by Dr. William Sydney Thayer, emeritus professor of medicine of the Johns Hopkins University. Professor Thayer spoke on "Endocarditis."

THE Halley Lecture was delivered at Oxford on May 30 by Professor A. S. Eddington, who took as his subject "The Rotation of the Galaxy."

The New Hampshire Academy of Science met at Henniker, New Hampshire, for its annual meeting on June 6 and 7. Officers for the year were elected as follows: President, Dr. Charles H. Dolloff, superintendent of the New Hampshire State Hospital: vicepresident, Professor James W. Goldthwait, Dartmouth College; secretary-treasurer, Professor George W. White, University of New Hampshire; chairman Publication Committee, Mr. Frank H. Foster, Claremont, New Hampshire. The address of the retiring president, Mr. G. L. Cave, of the Brown Company, was on "Robert Calef, An Early American Scientist."

The Tenth International Conference of Chemistry will take place at Liège on September 14 to 20. The following agencies, committees and commissions will meet in the course of this conference: Council of the Union; General Assembly of the Union; Committee on Chemical Elements; Committee for the Reform of Inorganic Chemical Nomenclature; Committee for the Reform of Organic Chemical Nomenclature; Committee for the Reform of Biological Chemical Nomenclature; International Bureau of Physico-Chemical Standards; Committee on Thermo-Chemical Data; Committee on Tables of Constants, and the Committee on Physico-Chemical Symbols.

The Royal College of Physicians of Edinburgh proposes to celebrate on St. Andrew's Day, 1931, the two hundred and fiftieth anniversary of its foundation.

The University of Chicago has received anonymous gifts amounting to about \$2,000,000 to build new laboratories for the departments of bacteriology and anatomy.

THE Medical College of Virginia, Richmond, has

received grants of \$120,000, \$40,000 from the Julius Rosenwald Fund and \$80,000 from the General Education Board for the construction of a dormitory and educational unit for the school of nursing of the St. Philip Hospital. This is an institution for Negroes, owned and operated by the college.

THE returns of the British Registrar-General for the first quarter of 1930 show that the birth-rate was 16.2 per 1,000 population, the death-rate was 13.5 per 1,000, while the infant death-rate was 77 per 1,000 registered live births. The birth-rate is the lowest recorded in any first quarter since the establishment of civil registration, except that of the first quarter of 1919, when, owing to the war, the rate fell to 15.7 per 1,000. The infant death-rate is the lowest ever recorded in any first quarter, being 16 per 1,000 below the average of the 10 preceding first quarters and 3 per 1,000 below that of the first quarter of 1928, the lowest reached in any earlier first quarter. The natural increase of population by excess of births over deaths was 26,725, as against a natural decrease in 1929 of 44,112. This difference is explained by the fact that influenza was not epidemic in the early months of this year.

THE purchase of a 32,555-acre tract in South Carolina and of 5,180 acres in Colorado as migratory bird refuges has been approved by the Migratory Bird Conservation Commission, acting on the recommendation of the Bureau of Biological Survey of the Department of Agriculture. These areas will constitute the first bird refuges to be acquired by purchase under the migratory bird conservation act of Feb. 18, 1929, by which Congress authorized the expenditure over a 10-year period of nearly \$8,000,000 for surveys and acquisition of lands for migratory bird refuges. The actual acquisition of the two areas will proceed immediately after July 1, 1930, when funds appropriated under the act become available to the department. The average price for these lands authorized by the commission is \$1.13 an acre. The unit to be acquired in South Carolina is in the Cape Romain region, Charleston County, on the Atlantic seaboard; the other is in the San Luis Lake region, Alamosa County, Colo. Specialists of the Biological Survey have examined and appraised both areas from the standpoint of food resources for wild fowl and from other angles and have found them to be ideal refuges.

Under a special appropriation of \$100,000 provided by Congress in the First Deficiency Act, the Bureau of Entomology will conduct special trapping experiments and extend its investigational work against the oriental fruit moth. Of this item, \$80,-

000 provides for large-scale experiments with bait traps, to be carried on in two fruit sections, an area including 500 acres of peaches to be baited in each section. It is hoped that these experiments will answer the question which has long existed as to whether the use of bait traps over a wide area would give better results in the control of the oriental fruit moth than when a limited area of only a few acres is baited, in which case the surrounding unbaited area is in comparison very large. W. P. Yetter, Jr., has been placed in charge of the bait work. In addition to the maintenance of bait traps over large areas, important detailed experimental work is also

contemplated. The localities selected for the work to be conducted during the season of 1930 are Cornelia, Georgia, and Vincennes, Indiana. The remaining \$20,000 of this money is to be used to strengthen the work with parasites and insecticides and for a study of the ecology of the oriental fruit moth. The work with parasites and ecology is to be headquartered at Moorestown, N. J., under general supervision of L. B. Smith, and will constitute an enlargement of work already being conducted by Dr. H. W. Allen. The insecticide studies will be conducted at Vincennes, Ind., under the direction of Dr. F. H. Lathrop.

## DISCUSSION

## THE INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE AGAIN

The proposal suggested by the Smithsonian Institution to revive the publication of the International Catalogue of Scientific Literature on a very modest but well-considered budget is a challenge to all scientists and librarians, and to all trust agencies which are spending good money for the promotion of research.

It is suggested that a revolving fund of \$75,000 and one thousand library subscriptions of \$50 for seventeen volumes will insure the enterprise. Whether or not this is enough is a detail. If this catalogue or something like it is an indispensable tool for research, as many first-class scientists seem to think, then any necessary amount should and probably can be had. If the catalogue is not needed, too much money is now being spent on it. Why waste more?

The Smithsonian raises this question plainly. Why ask the American government to continue to appropriate six or seven thousand dollars a year in the procrastinated hope of a resurrection, if the project is better dead? If it is needed, why procrastinate?

By putting the question the institution has deserved the thanks of all concerned. It is to be hoped that it will not let the matter rest until it has a square answer from all responsible parties. The history of the enterprise for ten years has been one of evasion, with preferential attention to other matters. Meantime a valuable asset of 2,500,000 manuscript titles, costing at least a million dollars, has lain unused and unusable, and another quarter of a million dollars more or less has been spent on half a million more titles, while marking time for responsible agencies to make up their minds or debtor nations to balance their budgets.

To a thrifty librarian the fact of these accumulated assets, together with the fact that the catalogue is a going concern with fifty to one hundred thousand dollars possible annual income, is the crux of the matter. The question raised by the Smithsonian is not the question of presenting a new project to be justified, financed and initiated, but whether perfectly good machinery worth at least \$3,000,000 is to be scrapped, in an enterprise bound to be revived sometime, as Professor Armstrong, of the Royal Society, prophesies and as many scientific bibliographers in many countries are on record as believing.

It is at this point that the overture of the Smithsonian becomes a matter of practical business concern both to the research trust endowments and to the libraries. The research endowments are bombarded with bibliographical projects of varying method and degrees of merit. They aid or support a good many projects. They are deeply concerned as trust organizations to put their money where it will do the most good. Other things being equal they prefer to put it where one dollar will do the work of four. This seems to be a spot where one million, perhaps a quarter of a million, will do the work of four millions. If its usefulness merely averages with these other projects the endowments are likely to feel that its claims come first. It is here they can give the most bibliographical service with the least money. proposition touches the libraries in a very similar way. If and when the matter is revived it will depend for financing, if not on the endowments, then on library subscriptions. If this machine is scrapped, when a new one is started either a \$3,000,000 endowment must be had from promoters of research or a quadruple price charged to libraries.

This leads straight to the crucial question of whether the international catalogue is in fact a primary, essential or indispensable tool in such sense that it is bound to be revived sometime. It no doubt seems a futile and mortifying matter to those who have been deeply engaged in the problem for thirty years that they should have to rejustify and refight a