SCIENTIFIC NOTES AND NEWS

THE annual meeting of the British Association for the Advancement of Science will be held next year in Aberdeen from September 5 to 12 under the presidency of Sir William Hardy, F.R.S. The following sectional presidents have been appointed: Section A (Mathematical and Physical Sciences), Professor H. M. Macdonald; B (Chemistry), Professor T. M. Lowry, C.B.E.; C (Geology), Professor W. T. Gordon; D (Zoology), Dr. E. S. Russell; E (Geography), Professor A. G. Ogilvie; F (Economic Science and Statistics), Professor H. M. Hallsworth, C.B.E.; G (Engineering), Professor F. G. Baily; H (Anthropology), Captain T. A. Joyce; I (Physiology), Professor H. E. Roaf; J (Psychology), Dr. Shepherd Dawson; K (Botany), Professor A. W. Borthwick; L (Educational Science), Mr. H. T. Tizard, C.B., F.R.S.; M (Agriculture), Professor J. A. S. Watson. The president of the Conference of Delegates of Corresponding Societies will be Colonel Sir Henry Lyons.

DR. JAMES BRYANT CONANT, president of Harvard University, received the degree of doctor of laws from the University of Chicago at the close of the one hundred and seventy-fourth convocation on December 19. The degree was conferred by President Robert M. Hutchins "in appreciation of Dr. Conant's eminent service to the science of chemistry and in recognition of his position of leadership in American education." Dr. Julius Stieglitz, professor emeritus of chemistry at the University of Chicago, presented Dr. Conant for the degree.

DR. WILLIAM H. WILMER will retire on July 1 from the directorship of the Wilmer Institute of Ophthalmology of the Johns Hopkins Hospital on reaching the age limit of seventy years. Dr. Wilmer expects to continue his research work and his private practise. The institute was founded in 1925 with an endowment of $3,000,000, largely the contributions of Dr. Wilmer's former patients.

IN honor of Dr. Frank Burr Mallory, professor of pathology, emeritus, in the Harvard Medical School, the Mallory Institute of Pathology has been organized at the Boston City Hospital. It was dedicated on Wednesday, December 13.

DR. GEORGE J. PEIRCE has retired from the chair of botany at Stanford University with the title of professor of botany, emeritus. Dr. Peirce has been connected with Stanford University since 1897, when he was appointed assistant professor of botany.

ON the occasion of his seventieth birthday, Dr. Arthur Dehon Little on December 15 was presented by his staff with a specially bound and inscribed volume of the Morse Collection of Japanese Potteries. The presentation was made by Mr. Roger C. Griffin, director of tests and a member of the Board of Directors of Arthur D. Little, Inc. Mr. Griffin is a son of Mr. Roger B. Griffin, Dr. Little's original partner when the organization was formed as Griffin and Little in 1886.

THE degree of doctor of science has been conferred by Georgetown University on Dr. James Robertson, director of the Nautical Almanac office of the U. S. Naval Observatory, in recognition of his work in theoretical astronomy.

THE William Lawrence Saunders Gold Medal of the American Institute of Mining and Metallurgical Engineers, for distinguished achievement in mining, has been awarded for the year 1934 to Pope Yeatman, consulting mining engineer of New York City.

THE presentation of the Perkin Medal of the Society of Chemical Industry to Professor Colin G. Fink, of Columbia University, will be made at a meeting to be held jointly with other chemical societies on January 5, at 7:30 P. M., at The Chemists' Club, New York City. Professor Harold Hibbert, of McGill University, will give a short talk on the subject of "The Medalist and His Accomplishments," and Professor Marston T. Bogert, of Columbia University, will make the presentation. Dr. Fink will present an address entitled "Chemistry and Art." A dinner preceding the meeting will be held at the club at 6 o'clock. All interested are invited to attend the meeting, even if not members of one of the cooperating societies.

Nature states that Dr. Ian W. Wark has been awarded the H. G. Smith Memorial Medal for 1933 by the Australian Chemical Institute. The medal is presented annually to the research worker who, in the opinion of the council, has contributed the most valuable additions to chemical science in Australia during the previous ten years. For the past four years, Dr. Wark has been investigating, for a group of mining companies, the theoretical basis of the flotation process for the concentration and separation of minerals. His work has also been recognized by the University of Melbourne, which awarded him both the Syme and Grimwade Prizes for 1933.

ACCORDING to *Nature,* Sir James Frazer has been offered a grant of £400 a year for three years by the Drapers' Company, as a mark of the company's recognition of his conspicuous contributions and distinguished services to science and to literature, for the purpose of providing himself with such expert secretarial assistance as will enable him to continue the scheme of work on which he has recently embarked

and which, by reason of his failing eyesight, he might otherwise be unable to complete.

PROFESSOR H. S. RAPER, Brakenbury professor of physiology in the University of Manchester, has been appointed a member of the British Medical Research Council in succession to Professor Edward Mellanby, who recently resigned his membership on accepting appointment as secretary of the council.

GOVERNOR HERBERT H. LEHMAN, of New York State, has asked Dean Carl E. Ladd, dean of the New York State College of Agriculture of Cornell University, to organize and to act as chairman of an Agricultural Advisory Commission. The governor announced that he had acted at a suggestion of the Farm Credit Administration that a State Farm Department conciliation committee be set up. The committee will in turn appoint county committees "to cooperate with the activities of the Federal Farm Credit Administration in the relief of farm debtors who are in distress and in danger of losing their farms."

PROFESSOR W. B. HERMS, head of the division of parasitology and entomology in the College of Agriculture at the University of California, has been appointed director of Pest Mosquito Control for the state of California, under the Civil Works Administration. For this work there will be employed 1,650 men and 34 supervisors. The project is being directed from the Bureau of Entomology of the U. S. Department of Agriculture, of which Lee A. Strong is chief.

DR. JACOB G. LIPMAN, dean of the college of agriculture of Rutgers University, has been appointed municipal director of emergency relief for the city of New Brunswick and the borough of Highland Park, N. J.

PROFESSOR MARSTON T. BOGERT, head of the department of organic chemistry at Columbia University, has been appointed a member of the Board of Directors of the Florida Research Institute, whose headquarters are at Eustis, Florida.

CHESTER C. DAVIS, who organized the Montana State Department of Agriculture, has succeeded George N. Peek as agricultural adjustment administrator of the Federal Government.

REPRESENTATIVES of the Rockefeller Foundation, Dr. Paul F. Russell, of the Field Staff of the International Health Division, and Dr. Victor G. Heiser, associate director, Professor W. W. Jameson, dean of the London School of Hygiene and Tropical Medicine, and Dr. Fitzgerald, dean of the Toronto Medical School, will arrive in Colombo on January 4 and will visit, among other places, Madras, Calcutta, Delhi and Bombay. The object of the tour is to study various public health problems in which the foundation is interested, and gain some first-hand knowledge of medical work in India.

DR. JOHN BEATTIE, for the last six years associate professor of anatomy at McGill University, who was recently appointed to succeed Sir Arthur Keith as conservator and director of research of the Royal College of Surgeons, London, sailed for England on December 14.

DR. HOWARD T. KARSNER, professor and director of the Institute of Pathology of the School of Medicine of Western Reserve University, delivered the Smith-Reed-Russell Lecture at the School of Medicine of George Washington University, Washington, D. C., on December 19. He spoke on "Rheumatic Heart Disease."

DR. J. PARSONS SCHAEFFER, professor of anatomy of the Jefferson Medical College, gave an address on December 14 before the Thomas C. Porter Scientific Society of Franklin and Marshall College, on "The History and Legal Aspects of Practical Anatomy."

DR. GEORGE F. REDDISH, chief bacteriologist of the Lambert Pharmacal Company, of St. Louis, addressed the Sigma Xi Club of the Massachusetts State College on December 14 on "Antiseptics and Disinfectants."

DR. ROBERT M. BURNS, assistant chemical director of the Bell Telephone Laboratories in New York, will speak at the Carnegie Institute of Technology, Pittsburgh, on January 26 on "The Corrosion of Metals."

DR. FREDERICK C. LEONARD, chairman of the department of astronomy of the University of California at Los Angeles and president of the Society for Research on Meteorites, gave an illustrated lecture on "Visitors from Cosmic Space" before the Astronomical Society of Pomona College on the evening of December 8.

THE Bradshaw Lecture of the Royal College of Surgeons was delivered by Professor A. H. Burgess on December 14 on "Electro-surgery."

IN January, 1934, Professor Reginald Aldworth Daly, Sturgis-Hooper professor of geology at Harvard University, will deliver a series of lectures on the Hepsa Ely Silliman Foundation at Yale University entitled "Planetary Changes in the Ice Age." Professor Daly will deliver eight lectures, as follows: "Ice-caps Past and Present," "Recession of the European Ice," "Recession of the North American Ice," "Mechanism of the Earth's Deformation and Recoil," "High Sea-levels of the Ice Age," "Low Sea-levels of the Ice Age," "Coral Reefs and the Ice Age," "Survey of the Field." The first lecture will be given at 4:15 P. M., in Strathcona Hall, on January 22. Succeeding lectures will come on January 23, 24, 25, 26, 29, 30 and 31.

IT is proposed to recognize, by some form of useful memorial, the distinguished work of Professor Sir Edward Sharpey Schafer, who recently retired from the chair of physiology at the University of Edinburgh. The suggestion that meets with most favor is the establishment of a lectureship to be called "The Sharpey Schafer Lectureship in Physiology." Under this lectureship one lecture would be given annually (or biennially) in Edinburgh by a distinguished physiologist to be selected by the Faculty of Medicine. For this purpose a capital sum of approximately one thousand pounds is required, and subscriptions to the fund, limited to a maximum of five guineas each, are invited. The appeal is signed by the following: William Johnston Thomson, Lord Provost, City of Edinburgh; Sir Thomas Henry Holland, vice-chancellor, University of Edinburgh; Sir John Rose Bradford, University College, London; Sir Henry Hallett Dale, director, National Institute for Medical Research, and secretary, Royal Society; John Wheeler Dowden, president, Royal College of Surgeons, Edinburgh; John Scott Haldane, fellow, New College, Oxford; Sir William Bate Hardy, director of food investigation, department of scientific and industrial research; Sir Frederick Gowland Hopkins, president, Royal Society and British Association; Sir Thomas Hudson Beare, dean of the Faculty of Science, University of Edinburgh; The Honorable Lord Sands, vice-president, Royal Society, Edinburgh; Sir Charles Scott Sherrington, professor of physiology, University of Oxford; Sydney Alfred Smith, dean of the Faculty of Medicine, University of Edinburgh; Robert Thin, president, Royal College of Physicians, Edinburgh, and Arthur Logan Turner, president, Graduates' Association, University of Edinburgh.

THE *Journal* of the American Medical Association reports that the eightieth birthday, November 26, of Dr. Karl Sudhoff, professor emeritus of the history of medicine, University of Leipzig, was commemorated, November 27, by members of the Johns Hopkins Medical History Club, in the lecture hall of the Welch Medical Library, Baltimore. Papers on the life and work of Dr. Sudhoff were read by Drs. Henry E. Sigerist, professor of the history of medicine, the Johns Hopkins University Medical School; Fielding H. Garrison, librarian of the Welch Medical Library and lecturer in the history of medicine; John R. Oliver, associate in the history of medicine, and Owsei Temkin, associate in the history of medicine. An exhibit of the work of Dr. Sudhoff was on display. Dr. Sudhoff was director of the Institute of Medicine at the University of Leipzig from 1905 until his retirement in 1925, when he was succeeded by Dr. Sigerist. He practised in Germany more than thirty years, was a Prussian sanitary councilor for four years, and was the first president of the German Society for the History of Medicine. He is known as a translator of Arabian and Egyptian hieroglyphics and ancient Hebrew texts. Dr. Sudhoff delivered an address at the dedication of the Institute of the History of Medicine at the Johns Hopkins University in 1929.

ACCORDING to *Nature* the annual conference of the Geographical Association will be held at the London School of Economics from January 3 to 6. The presidential address will be delivered by Professor P. M. Roxby, Rankin professor of geography in the University of Liverpool, on "China as an Entity—the Comparison with Europe." Lectures will be delivered by Professor J. D. Greene, Dr. J. H. Hutton, Professor G. C. Allen, Professor J. Coatman, Commander L. C. Bernacchi, Dr. S. W. Wooldridge, D. L. Linton and Professor Julian Huxley. Two discussions have also been arranged: for teachers in primary schools, on "The Place and Problems of Local Geography," to be opened by Mr. J. C. E. Rogers; for secondary schools, on "Suggestions for a First School Certificate Geography Syllabus," to be opened by Mr. J. A. Mortlock.

THE next annual convention of the American Association of Physical Anthropologists will be held in New York in the early part of May. It is being planned that the meeting should run concurrently with that of the American Society of Mammalogists, a joint session with that society having been proposed for papers dealing with Primates.

THE nineteenth annual meeting of the American Association of Petroleum Geologists will be held at the Baker Hotel at Dallas, Texas, March 22, 23, 24, 1934.

AT the recent annual meeting of the Royal Society, London, the council reported that the policy of appointing Yarrow research professors has been eminently successful, but that the financial position of the Yarrow Fund is such that no appointment of a successor to Professor A. Fowler on his retirement should be made until the income of the fund justifies the reconsideration of the appointment of a third Yarrow professor; and that any surplus available should be added to the Yarrow Reserve Fund with the view of aiding any special research for which money is urgently required.

THE plane and all the equipment used by Colonel and Mrs. Charles A. Lindbergh on their recent 30,000-mile survey flight, in which they crossed both the North and South Atlantic and visited twenty-one countries, has been presented by them to the American Museum of Natural History. The plane is the

same in which the Lindberghs established a new transcontinental record in April, 1930, and in which they flew to the Far East the following year. Until the proposed Geographical Hall is built the plane and its equipment will be installed in the Hall of Ocean Life.

The New York Times writes that on December 22 Rear Admiral Richard E. Byrd, "halting the southerly drive of his flagship along the 150th meridian, when the pack accumulating ahead seemingly threatened to bar further progress, ordered the ship to retreat a little to find open water, put his giant seaplane over the side and renewed the southern assault by air. Before he turned back the flight carried him to Latitude 70 degrees south, surpassing by 350 miles the record southing attained by Captain Cook on this meridian in 1773. The area of vision within the range of the plane, together with the corridor already opened by the flagship after it, too, had broken past Cook's track, brought to approximately 30,000 square miles the total amount of unexplored sea opened up by the expedition in its first operations."

DISCUSSION

NAMES FOR THE HYDROGEN ISOTOPES

IN a recent issue of SCIENCE, Professor R. W. Wood has suggested that the heavy isotope of hydrogen be named bar-hydrogen and suggests the symbol $\overline{H}$. He also further suggests that the compounds containing the heavy isotope be referred to as $\overline{B}$enzol, $\overline{A}$mmonia, and so forth. It is interesting that we considered exactly this name and symbol before we published the suggestion of the name deuterium for the heavy isotope, and protium for the light isotope. One difficulty with many of these names which has been overlooked by Professor Wood is that there are not two varieties of water, two of ammonia, two of benzene, and so forth, but there are three waters, four ammonias and thirteen benzenes. No matter what name is finally given to the heavy isotope, there will be no simple way of naming these complicated compounds. In fact, if there were only two waters, two ammonias, and so forth, the names "light water," "heavy water," "light ammonia" and "heavy ammonia" would be very satisfactory indeed.

The real difficulties arise when we try to name such compounds as H^1H^2, $NH^1H^2_2$, $NH^1_2H^2$, $C_6H^1_2H^2_4$, and so forth. Using the names suggested by us, these would be called protium-deuterium, mono-protium di-deuterium nitride, di-protium mono-deuterium nitride and tetra-deutero benzene, respectively. If we use the name bar-hydrogen, it will be necessary to devise similar rather complicated names for these compounds, and we really think, from the standpoint of simplicity, there is very little advantage to be given to one set of names over another.

Professor Wood objects to the treatment of the heavy isotope of hydrogen as a distinct element, but from our conversations with a number of organic chemists where this problem is the most serious, it appears almost necessary to name some of these compounds as though the deuterium were a foreign element. Thus the compound $CH^1_3H^2$ might be called deutero methane, just as the compound CH^1_3Cl may be called chloro methane. This method of naming does not place the two isotopes of hydrogen on the same footing, but regards the second isotope of hydrogen as a foreign element, but this will be true regardless of the name of the second isotope. Moreover, the name bar-hydro as a combining term for naming such compounds would probably be confused with the term hydro in common use. Perhaps the term bar-hydro would be contracted to bar or baro, in which case the combining term would be that which would naturally be derived from the name barogen, another name considered by us and frowned upon by our friends on whom we practised it. Because of these difficulties, we do not believe that there is any great advantage in Professor Wood's suggestion of bar-hydrogen over that of deuterium as a name for the isotope, and in fact feel that the name deuterium is better.

The question of a symbol for the heavy isotope is a troublesome one, and Professor Wood's suggestion has certain advantages. We may say that we have found it convenient to refer to the symbols of the compounds such as those written above, by agreeing to refer to the superscript first and the subscript second. Thus the compound $NH^1_2H^2_1$ can be read N, H, one, two, H, two, one. We have considered other suggestions for symbols, as, for example, the use of D for deuterium, but we have found that the formuda ND_3 for the ammonia containing the heavy isotope and similar formulae for other compounds do not appeal to us. After all, the heavy isotope of hydrogen is also hydrogen. Such a symbol as this has the disadvantage of making the heavy isotope of hydrogen a distinct element. We still think that the symbols H^1 and H^2 are the best choice because they fit into the general scheme of symbols for other isotopes. Recent work of Lewis indicates that the oxygen isotopes may be separated by distillation in appreciable quantities. What system of bars can possibly be devised to refer to the nine varieties of water? Little confusion will