

West Indies, died on November 3, at the age of sixty-five years.

Nature reports the death of Sir John Dewrance, past president of the British Institution of Mechanical Engineers, on October 7, aged seventy-nine years; of Sir Ashley Mackintosh, emeritus professor of medicine in the University of Aberdeen, on October 14, aged sixty-nine years, and of Sir John Moore, past president of the Royal Academy of Medicine in Ireland and president of the Royal College of Physicians of Ireland, on October 13, aged ninety-one years.

A CORRESPONDENT writes: On September 12, 1937, the ashes of Dr. David White and his wife, Mary White, were buried in the little cemetery on the edge of the Grand Canyon (near Yavapai Museum), in the Grand Canyon National Park. This was done in accordance with the wishes of Mrs. White, and the mission was carried out by Miss Taisia Stadnichenko, who for a number of years was Dr. White's research associate and close friend of the family. No more appropriate place could have been chosen as a last resting place for this great scientist, who enriched the geological literature with his contributions, for, aside from

the splendor of its setting, it was, as Mrs. White appropriately wrote, "close to an area where Dr. White spent several years of work which were perhaps the climax of his almost half a century of labors in his chosen field, and which he counted as richest of his many years of field experience." The ceremonies held at the grave, and attended by a group of friends, included a brief burial service, and appreciative remarks on Dr. White's career and personality, by Heinrich Ries. Dr. White's library has been acquired by the Museum of Northern Arizona at Flagstaff, Ariz., where it is being catalogued and well taken care of.

A FINAL tribute was paid on October 25 to Lord Rutherford by his burial in Westminster Abbey. His ashes were placed in "Science corner," where Newton, Faraday, Darwin and Kelvin are buried. Virtually every institution of learning in Great Britain sent delegations, and groups of scientific men from all parts of the world were represented. The pallbearers included Lord Dawson, president of the Royal College of Physicians; Sir William Bragg, president of the Royal Society, and Sir Edward Poulton, retiring president of the British Association for the Advancement of Science.

SCIENTIFIC NOTES AND NEWS

THE eighty-sixth birthday of Dr. Leonhard Stejneger, head curator at the U. S. National Museum, was celebrated at a dinner given in his honor at the Cosmos Club on October 30. Many letters of congratulation were received from abroad. Wilhelm Morgenstierne, Norwegian Minister to the United States, spoke of Dr. Stejneger's youth; Dr. Alexander Wetmore paid tribute to him as an ornithologist; Professor Albert H. Wright, as a herpetologist; Dr. William M. Mann, as a zoogeographer; Dr. C. W. Stiles, as a nomenclaturist, and Dr. A. K. Fisher, as a man. Dr. Charles G. Abbot, secretary of the Smithsonian Institution, presided, and Dr. Stejneger responded briefly. A presentation by R. P. Tolman, director of the National Collection of Fine Arts, of an original etching of the Smithsonian Building was made at the dinner. In recognition of his scientific work, Dr. Stejneger, who is long past the usual retiring age, has been retained in his present post by presidential order.

DR. F. LAMSON-Scribner, who retired as agrostologist of the U. S. Department of Agriculture in 1922, recently received a visit from D. E. Juan, a native of the Philippine Islands, to express the sentiment of the farmers of the Philippine Islands. As their first director of agriculture, Dr. Lamson-Scribner, now eighty-six years old, introduced into the islands more than thirty-five years ago modern methods of soil till-

ing and crop harvesting. He was responsible for the establishment of experimental stations throughout the islands. Mr. Juan presented to Dr. Lamson-Scribner a testimonial with the inscription "The Filipino farmers owe you a debt of gratitude."

DR. REINALDO DOS SANTOS, professor of urology at the University of Lisbon, has been awarded the Matas medal of the Tulane University School of Medicine for the advancement of vascular surgery. The medal will be presented on November 26.

IN recognition of his expedition to French Indo-China, and of the zoological collections resulting from it, the Board of Trustees of the Field Museum of Chicago at a meeting held on October 18 added the name of Dr. Wilfred H. Osgood, chief curator of the department of zoology, to the list of the "Museum's Contributors."

DR. HANS DRIESCH, professor of philosophy at the University of Leipzig, celebrated his seventieth birthday on October 28.

DR. ELLIOTT P. JOSLIN, clinical professor of medicine in the Harvard Medical School, was installed as president at the recent St. Louis meeting of the Interstate Postgraduate Medical Association.

AT the New York meeting of the Society of Auto-

motive Engineers, C. W. Spicer, of Toledo, Ohio, was elected president.

THE REV. MICHAEL J. AHERN, S.J., of Weston College, Massachusetts, has been elected chairman of the Northeastern Section of the American Chemical Society, to succeed Dr. Hervey J. Skinner, of Boston.

THE work of reorganization which he was asked to undertake having been completed, Dr. Willard E. Hotchkiss, who since 1933 has been president of the Armour Institute of Technology, Chicago, retired on October 12.

DR. CURRIER McEWEN, secretary and assistant dean of New York University College of Medicine since 1932, has been appointed dean to succeed the late Dr. John Wyckoff.

PROFESSOR HENRY C. ANDERSON, chairman of the department of mechanical engineering of the University of Michigan, has been made dean of the College of Engineering to succeed Dr. Herbert C. Sadler, who has retired from the deanship and has been appointed to the Alexander Ziwet distinguished professorship of engineering.

DR. HAROLD MESTRE, professor of biophysics at Bard College, Columbia University, has been appointed dean of the college to succeed Professor Donald G. Tewksbury, who has resigned.

PROFESSOR ROSWELL P. ANGIER, chairman of the department of psychology at Yale University, has been appointed associate dean of the Graduate School.

DR. PAUL B. PEARSON, of the University of Wisconsin, has been appointed professor in charge of animal nutrition at the Agricultural and Mechanical Engineering College of Texas.

PROFESSOR DONALD G. PATERSON, of the department of psychology of the University of Minnesota, was named representative in the Division of Anthropology and Psychology of the National Research Council at the recent meeting in Minneapolis of the American Psychological Association, of which he is secretary.

THE REV. ALEXANDRE VACHON, professor of chemistry at Laval University, has been appointed technical counsellor to the Research Fisheries Council of North America. The council is engaged in research work in North Atlantic waters in connection with the fisheries matters pertaining to Canada, in the United States and Newfoundland.

ALBERT JAMES KOOP, who has been keeper of the Department of Metal Work of the Victoria and Albert Museum, London, since 1926, retired on October 14.

AN expedition sponsored by the Museum of Natural Science of Syracuse University and led by Dr. Sidman

P. Poole, associate professor of geography, will spend the first two months of 1938 in exploring the Maya country in northern Yucatan in order to make a geographic reconnaissance of the environmental relationships which underlay the New Mayan empire. Dr. Poole was geographer in 1930-31 to the first Andean expedition of the university and served in a similar capacity to the Syracuse expedition through the Gaspé peninsula. The party will include Frederick Foster, manager of the university bookstore, who will serve as chief photographer, and Mr. Joseph Koslowski, graduate of the College of Fine Arts, who will serve as artist.

DR. EMMANUEL DIAS, of the Instituto Oswaldo Cruz, Rio de Janeiro, and Dr. Amilear Vianna Martins, of the Instituto Ezequiel Dias, Bello Horizonte, Brazil, have visited the United States under the auspices of the Brazilian Government in order to learn the methods used in Rocky Mountain spotted fever prophylaxis. They spent five weeks at Hamilton, Mont., with Dr. R. R. Parker, director of the Rocky Mountain Laboratory, U. S. Public Health Service, where they familiarized themselves with the methods of tick-rearing and vaccine manufacturing. They also visited Dr. M. Ruiz Castañeda and Dr. E. Cervera in Mexico City, and Dr. Hans Zinsser and Dr. S. B. Wolbach in Boston, and spent a few days at the Rockefeller Institute, New York City. The Instituto Ezequiel Dias is planning to build an adequate laboratory where vaccine for spotted fever will be produced with the local tick, *Amblyomma cajennense*, carrier of the disease.

DR. ALFRED BIELSCHOWSKY, director of the Dartmouth Eye Institute, has left for a six weeks' lecture tour abroad. He plans to give two lectures at Copenhagen, before the Danish Ophthalmological Society and the Copenhagen Medical Society, two lectures before the Ophthalmological Society at Lund and two lectures before the Swedish Ophthalmological Society and the Swedish Medical Society at Stockholm.

DR. HARLOW SHAPLEY gave, on November 10, a lecture under the auspices of the Harvard Club at St. Louis on "Exploring Star Galaxies from a South African Kopje (hill)."

DR. DAVID B. DILL, associate professor of industrial physiology at Harvard University, gave in October a Lowell Institute series of eight lectures on "Life in High Temperatures and in Great Heights."

THE forty-second Hanna Lecture of the Academy of Medicine, Cleveland, will be delivered by Dr. Corneille Heymans, professor of pharmacology at the University of Ghent, on "The Control of Vasomotor Tone Blood Supply and Blood Pressure."

DR. WILLIAM E. GYE, director of the Imperial Can-

cer Research Foundation of London, spoke on November 10 before the Yale Medical School on "Tumors Transmissible with Viruses."

Nature reports that the first Radford Mather Lecture of the British Association was given by the late Right Hon. J. Ramsay MacDonald on October 22. His address was entitled "Science and the Community." The Norman Lockyer Lecture, on "Origins of Town Life in Britain," will be given by Dr. R. E. Mortimer Wheeler on November 24.

THE Academy of Medicine of Washington, D. C., will hold its fall dinner meeting on November 17. The program will be devoted to a "Symposium on Sulfanilamide." Dr. E. K. Marshall, of the Johns Hopkins Medical School; Dr. Sanford M. Rosenthal, of the National Institute of Health, and Dr. Frederick A. Reuter, of George Washington University Medical School, will be the speakers.

DR. FRANK B. JEWETT, president of the Bell Telephone Laboratories, New York City, was the principal speaker at a preview on November 5 held at the Rockefeller Center, New York City, of new exhibits at the New York Museum of Science and Industry. These included "The Story of Man" and "The Romance of Radium." The unveiling of a portrait of the late Henry R. Towne, who conceived the idea of the museum in 1924 and was one of its principal founders, was a part of the preview program. Other speakers were Dr. Haven Emerson, Dr. Louis I. Dublin, John H. Towne, son of the founder, and W. Gibson Carey, Jr.

THE American Society of Tropical Medicine will hold its thirty-third annual meeting at New Orleans from November 30 to December 3. The second Charles Franklin Craig Lecture on Tropical Medicine will be delivered by Dr. George W. McCoy, medical director of the U. S. Public Health Service, who will speak on "The History of Leprosy in the United States." Dr. Herbert C. Clark, director of the Gorgas Memorial Laboratory of Panama, will give the presidential address at the annual luncheon. He will speak on "Development of International Transportation and Its Effect on the Practice of Medicine."

THE annual fall meeting of the Pennsylvania Conference of College Physics Teachers was held at Pennsylvania State College on October 29 and 30. Representatives were present from thirty-six colleges, including fourteen from state teachers colleges. The total registration, exclusive of those from Pennsylvania State College, was one hundred and thirteen. Dr. F. K. Richtmyer, dean of the Graduate School of Cornell University, spoke on Friday evening on "Bricks, Mortar and Meter Sticks." Papers read and discussed

on Friday afternoon included one each on "Training and Qualifications of Teachers of the Physical Sciences," "Education and Certification of Science Teachers," "Undergraduate Curricula in Engineering Physics" and the "Teaching of Physics in Teachers Colleges." The Saturday morning session was devoted to a panel discussion on the "Teaching of Physics and the Training of High-School Physics Teachers." Among those taking part in the program were Dr. Charles C. Bidwell, of Lehigh University; Dr. Thomas D. Cope, of the University of Pennsylvania; Dr. S. R. Powers, of Columbia University; Dr. J. K. Bowman, supervisor of secondary teacher education, Pennsylvania Department of Public Instruction, and Dr. Wheeler P. Davey, of the Pennsylvania State College.

THE fifth International Congress for Experimental Cytology will be held in Zurich, from August 7 to 12, immediately before the sixteenth International Physiological Congress and the International Veterinarian Congress to be held in the same place. The seven scientific sessions will be devoted entirely to symposia on the following subjects: epithelium in cultures and in the organism; structure of chromosomes; mechanism of mitosis; cancer cells and normal cells; experimental cytology and the study of viruses; ultrastructure of protoplasm and its products, and chemistry of the cell. On no occasion will the congress be divided into sections. Two afternoons will be devoted to demonstrations. Those wishing to take part in the symposia should submit their papers (with a summary not exceeding two hundred words) to Professor W. von Möllendorff, 9 Plattenstrasse, Zurich, before April 15. Copies of these papers will be distributed to members of the congress before the meetings. Further information may be obtained from Professor von Möllendorff, or from Dr. Harald Okkels, Institute for Pathological Anatomy, University of Copenhagen.

THE *Journal* of the American Medical Association reports that the *Queen of Bermuda* will sail from New York on January 15 for the seventh cruise congress of the Pan American Medical Association and will return on January 31. There will be five days of scientific meetings in Havana and stops will also be made at Port au Prince, Haiti; Trujillo City, San Domingo, and San Juan, Puerto Rico. All the countries to be visited have extended official invitations to the association to be their guests, and plans for entertainment are being made, according to the announcement. Chairmen of the sections of the association, which will hold meetings on shipboard as well as in Havana and in the other ports, have been announced as follows: Tropical medicine, Col. Charles F. Craig, New Orleans; Thoracic section, Dr. Jay Arthur Myers, Minneapolis; General medicine, Dr. Howard R. Hart-

man, Rochester, Minn.; Public health, Dr. Claude W. Munger, New York; Gynecology and obstetrics, Dr. Henry Dawson Furniss, New York; Orthopedic surgery, Dr. John Royal Moore, Philadelphia; general surgery, Dr. William D. Haggard, Nashville, Tenn.; Otorhinolaryngology, Dr. William E. Sauer, St. Louis; Cancer, Dr. James Ewing, New York; Radiology, Dr. Edwin C. Ernst, St. Louis; Urology, Dr. Elmer Hess, Erie, Pa.; Neurology, neurosurgery and psychiatry, Dr. Foster Kennedy, New York; Ophthalmology, Dr. Webb W. Weeks, New York; Dermatology and syphilology, Dr. Elmore B. Tauber, Cincinnati; Pediatrics, Dr. Orville E. Barbour, Peoria, Ill.; Physical medicine, Dr. William Bierman, New York; Industrial medicine and surgery, Dr. John B. Lauricella, New York; Dentistry, Alfred Walker, D.D.S., New York. Dr. Alberto Inclan, Havana, is president

of the association, and Dr. Joseph J. Eller, New York, is director general.

THE United States Civil Service Commission announces open competitive examinations for which applications should be on file on November 29, for the position of associate meteorologist in the U. S. Weather Bureau, at a salary of \$3,200 a year and of assistant meteorologist at \$2,600 a year. To become eligible applicants must qualify in at least one of the following optional branches and must state in their applications the branch, or branches, desired: radio-meteorography, air mass analysis, general and synoptic meteorology, physical and dynamical meteorology, statistical meteorology, any other well-defined specialized branch of modern meteorology. Further information can be obtained from the commission at Washington.

DISCUSSION

"GERM TRACK" AND "GERM TRACT"

UNFORTUNATE confusion exists in the use of the words "germ track" and "germ tract." If these expressions mean anything, they mean different things. A track is a path—a figurative one in this instance, down through time. A tract is a region, and could more or less properly refer to part of an embryo or of an individual in any stage. Neither one can by any legitimate stretch of language be used for the other.

"Germ track" was presumably first used in connection with the work of Weismann, as the English equivalent of his Keimbahn, of which it is a correct translation. It means the continuity of the germ-plasm through a line of descent, as contrasted with the intermittent or broken series formed by the somata produced in successive generations. How "germ track" got its start would be difficult to ascertain. It may just possibly have originated as have the other biological expressions involving the questioned word, such as respiratory tract or optic tract. A plausible suggestion, however, is that it arose as a blunder resulting from a conversation or lecture in which the listener misunderstood the word and mistook the idea. Such an error might be confirmed by the other biological uses of the word tract, in the sense of a region. Having a familiar sound, and in these other places a legitimate use, the word tract could easily have been propagated so long as the original idea of a path was dissociated from it.

So far as the author is aware, the expression "germ track" is not being used in any other sense than genetic continuity. "Germ tract," on the contrary, is used in both senses. In one recent publication the words "germ tract" are followed by parentheses enclos-

ing six other terms, which are presumably regarded as synonymous with or substantially equivalent to them. Two of these terms refer to continuity in descent, three of them to a region, while one is non-committal. Still another confusion has been discovered in conversation, though not in print, when the germ track was held to be the path followed by the germ cells in migrating from their point of "origin" to their ultimate location; in some animals such a track would be from the intestinal lining, through the mesentery, to the site of the gonads on the coelomic walls. This error is an isolated one, however, and not so likely to be repeated.

How best to eliminate the confusion into which the word "tract" has here fallen is suggested by the fact that it is not a very suitable name for the thing to which it is applied. "Tract" in its geometric sense means something drawn out, an area or an elongated form. Most of the biological uses of the word conform at least roughly to that idea, as feather tract, alimentary tract, etc. When it refers to something which has a considerable third dimension, there is often the excuse that anatomists have studied this object in sections where to the eye it is an area. The group of germ cells, or the region of an egg in which germ cells will be produced, is not aptly described by a word emphasizing extent. While one dimension of the germ mass may be less than the others, it is not often so much less as to suggest a surface. One would scarcely choose the word "tract" to describe such a mass, were it not for the fact that it had been used before. If, as is suggested above, the first use of "tract" in that sense was a simple error, prior usage is not a good reason for continuing it. Moreover, there are so many words which correctly describe the germinal region