Hotel headquarters for both groups will be the Statler Hotel, Park Square at Arlington Street, Boston. All rooms have baths; single rooms, \$3.50 up; double rooms, \$5.00 up; double room with twin beds, \$6.00 up. Reservations for rooms should be made early by members, directly with the hotel, and not through the secretaries or the local committee. Lists of other hotels will be published in an early issue of SCIENCE, in the preliminary announcement of the American Association for the Advancement of Science. It is expected that the usual arrangements for obtaining reduced railroad fares on the certificate plan will be made by the American Association for the Advancement of Science and announced in SCIENCE.

Members of Section F who desire to present papers should write at once to Dr. William H. Cole, Secretary, American Society of Zoologists, Rutgers University, New Brunswick, New Jersey, for transmission blanks, which are to be filled out and must accompany titles and abstracts. When completely filled out the transmission blank will give all the information needed by the secretary for placing the paper properly on the program and will indicate all the special facilities needed for the adequate presentation of the paper or the exhibit. All titles and abstracts must be in duplicate and must be in the office of the secretary not later than November 10, 1933. Titles received after this date can not be placed on the program, and titles unaccompanied by abstracts and transmission blanks will not be considered or accepted. The rules of the American Society of Zoologists will be followed in arranging the program and conducting the sessions: Members are limited to a maximum of 15 minutes which may be used to read papers or to introduce papers to be read by non-members.

Titles and abstracts should be sent as early as pos-

sible to the Secretary of the American Society of Zoologists (Dr. William H. Cole, Rutgers University, New Brunswick, New Jersey) rather than to the secretary of the section.

UNIVERSITY OF MICHIGAN

George R. LA RUE

RECENT DEATHS

DR. HERBERT E. SMITH, professor of chemistry and head of the medical school of Yale University from 1885 to 1910, died on October 9, at the age of seventy-six years.

DR. MARSHALL PERLEY CRAM, professor of chemistry and mineralogy and Josiah Little professor of natural science at Bowdoin College, died on October 10 at the age of fifty-one years.

DR. LEON S. MERRILL, dean of the College of Agriculture of the University of Maine, died on September 3.

FARLEY OSGOOD, electrical engineer, formerly vicepresident and general manager of the Public Service Electric Company, Newark, New Jersey, died on October 6. He was fifty-nine years old. Mr. Osgood was president of the American Institute of Electrical Engineers in 1924–25 and was a well-known lecturer on electrical subjects.

DR. J. WALDO SMITH, consulting civil engineer, responsible for the construction of many engineering projects including the Catskill water supply system of New York City, died on October 14 at the age of seventy-two years.

THE death at the age of fifty-eight years is announced of Dr. Herbert Lapworth, the English engineer and geologist, who was a son of Professor Charles Lapworth.

SCIENTIFIC NOTES AND NEWS

THE University of Toronto on October 13 at a special convention held in connection with the reopening of the Royal Ontario Museum conferred on Dr. Charles Greeley Abbot, secretary of the Smithsonian Institution, the degree of doctor of laws.

THE honorary degree of doctor of laws was conferred on October 14 at a special convention of Notre Dame University, South Bend, Indiana, on Senator Guglielmo Marconi.

THE Sedgwick Memorial Medal of the American Public Health Association has been awarded to Dr. Milton J. Rosenau, professor of preventive medicine and hygiene at the Harvard Medical School.

DR. EVANDER F. KELLY, secretary of the American

Pharmaceutical Association, received the Remington Medal awarded by the New York branch of the association at a meeting at Columbia University on October 12. The medal is given annually for distinguished work in the field of pharmacy.

DR. EBEN J. CAREY, who was recently appointed dean of the School of Medicine at Marquette University, and Dr. Chevalier Jackson, professor of bronchoscopy and esophagoscopy at the School of Medicine at Temple University, Philadelphia, were awarded the annual gold medals for research of the Radiological Society of North America at the recent meeting in Chicago. The award to Dr. Carey was in recognition of his x-ray study of bone growth and to Dr. Jackson for his work in removing foreign bodies from the trachea and lungs with the aid of x-rays. THE William Mackenzie Medal of the Royal Faculty of Physicians and Surgeons, Glasgow, was awarded on October 13 to Professor Jules Gonin, of Lausanne, in recognition of his valuable contributions to ophthalmology, especially those bearing on the treatment of detachment of the retina. Professor Gonin delivered the William Mackenzie Memorial Lecture on "The Evolution of Ideas Concerning Retinal Detachment within the Last Five Years."

WASHINGTON UNIVERSITY plans to make the original apparatus used by Dr. Arthur H. Compton in his study of the Compton effect, which is still in use in the laboratory, the nucleus of a group of exhibits illustrating "classical experiments." They will be in the new physics building, for which two anonymous donors gave \$700,000 this summer.

DR. FREDERICK G. Novy, professor of bacteriology at the University of Michigan since 1891, has been appointed by the Board of Regents dean of the Medical School. Since 1930, when Dr. Hugh Cabot resigned this office to go to the University of Minnesota, the affairs of the Medical School have been administered by an executive committee of five members with Dr. Novy as chairman.

FRED J. LEWIS, professor of civil engineering at Vanderbilt University, has been appointed dean of the School of Engineering.

DR. A. G. POHLMAN, formerly dean of the School of Medicine at the University of South Dakota, was recently appointed head of the department of anatomy at Creighton University, Nebraska.

DR. TOWNES RANDOLPH LEIGH, head of the department of chemistry at the University of Florida, has been appointed dean of the College of Arts and Sciences. The College of Pharmacy, of which he was formerly dean, has been placed as a school under the administration of the College of Arts and Sciences.

DR. JOHN R. MURLIN, professor of physiology and director of the department of vital economics at the University of Rochester, has been given a grant by the Committee on Scientific Research of the American Medical Association to investigate the effects of the male hormone on the energy metabolism of human subjects.

DR. B. P. GERASIMOVIC, professor at the University of Kharkov, has been appointed director of the Pulkovo Observatory near Leningrad.

DR. H. K. GRAHAM HODGSON, honorary radiologist to King's College Hospital, London, has been appointed physician-in-charge of the new department of x-ray diagnosis at the Middlesex Hospital, the development of which has been made possible by a gift of $\pounds 25,000$ from W. H. Collins.

J. P. BUSHE-Fox, inspector of ancient monuments for England, has been appointed chief inspector of ancient monuments in succession to Sir Charles Peers, who has retired on attaining the age limit.

PROFESSOR JAMES FRANCK, formerly of the University of Göttingen, will be the joint guest of the departments of physics of Harvard University and the Massachusetts Institute of Technology during the month of December. Professor Hermann Otto Szasz, formerly of the University of Frankfurt, has arrived at the institute, where he will be visiting professor of mathematics during the coming year, working principally in collaboration with Professor Wiener.

DR. HEINZ WERNER, formerly professor and head of the department of experimental and genetic psychology in the University of Hamburg, has been appointed lecturer in psychology at the University of Michigan. This appointment has been made possible through grants from the Emergency Committee in Aid of Displaced German Scholars and from the Rockefeller Foundation. Professor Werner, a native of Vienna, specializes in child psychology and the psychology of music and esthetics.

PROFESSOR OTTO STERN, who resigned recently as the head of the Laboratory of Experimental Physics at the University of Hamburg, arrived in New York on October 9 on his way to take up his work at the University of Pittsburgh. He is accompanied by Professor J. Estermann, who for years has been his co-worker in Hamburg.

PROFESSOR LUDWIG HALBERSTADTER, cancer specialist, formerly with the University of Berlin, now in Palestine, has been appointed director of the Institute of Radiology connected with the hospital established in Jerusalem by Hadassah, the Women's Zionist Organization of America.

A GROUP of Manchester citizens has raised a fund to offer a temporary home to dismissed German scholars and several research fellowships at the University of Manchester have been founded for the purpose. The appointments are in no case for more than two years, and they will involve no burden on the general funds of the university. The research fellows may help in the teaching, particularly of advanced students, but they are under no obligation to do so, and the field of employment open to British graduates will not be narrowed by their presence. The following appointments have so far been made: Mathematics, Dr. R. Barr, Halle; physics, Dr. Rudolf Peierls, Leipzig; physiology, Dr. Walther Deutsch, Dusseldorf; psychology, Professor David Katz, Rostock.

AT the annual business meeting of the University of Virginia chapter of Sigma Xi on October 5 the following officers were elected: Dr. Carl C. Speidel, president; Dr. J. W. Beams, vice-president; Dr. Edwin M. Betts, secretary and treasurer.

AT the last annual convocation of the American College of Dentists the following officers were elected for 1933-34: *President*, Bissell B. Palmer, New York; *Vice-president*, J. Ben Robinson, Baltimore; *Treasurer*, Harold S. Smith, Chicago; *Secretary*, Albert L. Midgley, Providence; *Assistant Secretary*, William J. Gies, New York; *Regent* (five years), John E. Gurley, San Francisco.

THE Silliman Memorial Lectures were opened at Yale University on October 11 by Dr. Hans Spemann, director of the Zoological Institute of the University of Freiburg. His general subject is "Embryology."

THE first lecture on the Smith-Reed-Russell series at the School of Medicine, George Washington University, was delivered by Professor George Barger, of the School of Medicine of Edinburgh, on October 3. Professor Barger spoke on "Ergot and Ergotism." On the afternoon of the same day he held a seminar on "Newer Developments Concerning Hormones."

DR. FRANK SCHLESINGER, director of the Yale Observatory, gave an address on October 17 before the Rittenhouse Astronomical Society, Philadelphia, on "The Prediction of Eclipses."

DR. MARSTON T. BOGERT, professor of organic chemistry at Columbia University, was the principal speaker at a meeting of the New England Association of Chemistry Teachers on October 14. His subject was "The Chemistry of Vitamin A."

DR. KIRTLEY F. MATHER, professor of geology at Harvard University, recently gave a lecture at Tufts College on "The Origin of Life from the Standpoint of the Geologist."

THE sixty-third annual meeting of the American Fisheries Association was held at the Ohio State University from September 18 to 20, under the presidency of Dr. H. S. Davis, of the Bureau of Fisheries.

DR. FRANK LAMSON-SCRIBNER has given to the University of Maine, of which he is an alumnus, a collection of over 600 pamphlets, bulletins and books, including several rare volumes. These are all related to agriculture, especially to botany. Many have historical value in addition to usefulness for class work.

TURNING in of \$35,000 to the state's general fund from the accumulated surplus of the orthopedic hospital at the University of Wisconsin was approved by the executive committee of the university board of regents recently. The hospital is the only one of its kind in the state. The surplus in the hospital's revolving funds resulted despite recent decreases in its charges, and the regents decided that the money should be turned in to the state's general fund for use elsewhere in the state's service.

A GRADUATE HOUSE for graduate students has been opened at the Massachusetts Institute of Technology this fall. Seventy-six of the 475 graduate students at the institute are living in this house. These seventysix come from forty different colleges and universities and include students from four foreign countries. Next year it is planned to increase the accommodations to care for about 200 men. The master is Dr. Avery Ashdown, of the department of chemistry, and the house committee consists of Richard Fossett (electrical engineering), David Langmuir (physics) and Henry Rahmel (electrical engineering).

PREVIOUS awards from the Elizabeth Thompson Science Fund have been reported in SCIENCE. March 15, 1932, and earlier. Since the last report the following awards have been made at the meeting of May 25, 1933: No. 315 to G. H. Smith, Indianapolis, Indiana, \$64 to purchase a water immersion objective and paired compensating oculars for use in the microchemical study of the embryonic leaf; No. 316 to E. A. Culler, University of Illinois, \$300 for the feeding and care of dogs to be used in experiments on the effects of x-rays and of the destruction of limited parts of the intra-cochlear sensitive tissue on auditory acuity; No. 317 to Herman Schlundt, University of Missouri, \$300 to defray extra traveling expenses incurred by O. B. Muench, of Las Vegas, New Mexico, and J. E. Wildish, of Kansas City, in working in Dr. Schlundt's laboratory during the summer of 1933. Professor Wildish to study the ratio of protactinium to radium on thorium minerals; Dr. Muench to analyze a monazite for its freedom from uranium. The trustees of the Elizabeth Thompson Science Fund meet ordinarily during the last ten days of the months of February, May and November. Applications for grants should be sent well in advance of the meeting to the secretary of the fund, Dr. A. C. Redfield, 20 Divinity Ave., Cambridge, Massachusetts.

THE following courses of lectures have been arranged at the Franklin Institute, Philadelphia: October 18, Dr. V. K. Zworykin, engineering department, research division, RCA Victor Company, Camden, New Jersey, "Television"; October 26, Dr. Gustavus J. Esselen, president, Gustavus J. Esselen, Incorporated, chemical research and development, Boston, "Before Papyrus—Beyond Rayon"; November 9, Dr. Edward Sampson, professor of geology, Princeton University, "Mineral Commerce and International Commerce"; November 15, H. B. Meller, air pollution investigation, Mellon Institute of Industrial Research, "Clean Air an Achievable Asset"; November 23, "The Historic Franklin Institute," final meeting in the old building, program reminiscent of history and service of the institute; December 7, Dr. Paul E. Sabine, director of acoustical research, Riverbank Laboratories, Geneva, Illinois, "Acoustics and Architecture"; December 14, S. W. Ferris, senior research chemist, The Atlantic Refining Company, Philadelphia, "Petroleum Refining by Means of Selective Solvents"; December 20, Dr. George S. Crampton, Graduate School of Medicine, University of Pennsylvania, "Ophthalmic Lenses with Special Reference to the Modern Type of Bifocals."

ON September 29, the new department of preventive medicine at the University of Bristol, England, was opened by the Minister of Health, Sir Hilton Young. The department is housed in Canynge Hall, and under an agreement between the university and the city the preventive medicine work of the city will be carried out by the department. The medical officer of health for the city, Dr. R. H. Parry, has been appointed honorary professor of preventive medicine in the university, and Dr. I. Walker Hall, formerly professor of pathology, is director of the new laboratory. Canynge Hall will also accommodate the department of pathology, with Dr. Hadfield as professor, and the departments of medicine, surgery and obstetrics.

THE office of the Iowa Geological Survey, of which Dr. George F. Kay is director, has been moved from the State Capitol at Des Moines to the geology building of the State University of Iowa at Iowa City, Iowa.

THE American College of Dentists has presented to Columbia University a fund of approximately \$2,000 to provide secretarial assistance for Dr. William J. Gies, so that he may be enabled in 1933–34 to continue his work as editor of the *Journal of Dental Research* and as secretary of the International Association for Dental Research, and to cooperate with the American College of Dentists in the promotion of education and research in dentistry.

PROFESSOR C. H. BAXTER, of the Michigan College of Mining and Technology, Houghton, has been asked by the American Institute of Mining and Metallurgical Engineers to aid in providing the U. S. Geological

Survey with nearly 400 topographical and civil engineers and geologists. The survey has been allotted funds by the administrator of the Federal Emergency Administration of Public Works to carry out activities in (1) topographic mapping, (2) stream gaging and construction engineering, (3) underground water survey and (4) conservation of natural resources by plugging or conditioning abandoned wells, protecting mine shafts and openings and suppressing coal fires. The personnel requirements for this work will be approximately: (1) Three hundred technical men competent to do topographic mapping, transit traverse and control and levelling. All these, however, will not be employed at once, since so many projects are in high mountainous areas where work can not be undertaken this late in the year because of early snows, and because many projects are in the northern part of the United States where it is difficult to work in the winter. The southern projects should be undertaken as soon as practicable and crews run all winter. (2) Sixty-seven engineers with construction experience and qualified to supervise and direct the building of structures. (3) Twenty geologists with experience on ground-water problems.

Museum News reports that the Newark Museum, New Jersey, is now planning a campaign to raise \$20,000, needed in order to obtain a conditional grant of equal amount from the Carnegie Corporation of New York. On the success of this campaign depends the opening this year of the Educational Department of the museum, which it was decided to close on account of reduced city appropriations. This department has been supplying large quantities of material to the schools of the city. A year ago the city made cuts in its appropriations for all city-supported organizations, including the museum. The museum's original appropriation was \$150,000. This was reduced last year to \$100,000 and this year to \$50,000. After the first allotment this year the city added \$15.-000 to the museum appropriation by taking it from the Public Library, so that the total museum appropriation is \$65,000. If the museum can earn the grant by raising the added \$20,000 it will be on about the same basis as it was last year.

DISCUSSION

MORE ABOUT THE SPIRAL HABIT

UNDER the title, "Twisted Trees and the Spiral Habit," I recently published¹ evidence of considerable variety indicating that spiral movement and development among organisms are expressions of a widespread tendency which is protoplasmic in origin. Barely had the manuscript left my hands than I

¹ Science, January 13, 1933.

realized that I had failed to carry that part of my discussion dealing with twisted trees to the individual wood cell rather than stopping at the cotton fiber. I had in mind at the time the work of Scarth.² Before taking this up, I should like to turn for a moment to other examples of the spiral habit which have been brought to my attention as a result of the first account.

² Trans. Roy. Soc. Can., Sec. V, 269, 1929.