THE SCIENCE EXHIBIT AT THE CARNEGIE INSTITUTION

THE annual exhibition of the current researches of the Carnegie Institution was opened in Washington on December 11, on the occasion of the annual reception of the president and board of directors. The exhibits were opened to the public on the following three days.

By special arrangement with the Naval Research Laboratory and the Bureau of Standards, the radio stations of those places alternated in sending special messages or signals to a receiving station that had been set up in the exhibition room. By means of special apparatus, the radio waves were made visible and the change which takes place when messages were being received could be observed.

This exhibit is part of the demonstration of the work being done by the department of terrestrial magnetism. It is identified with a study of the highly electrified stratum of atmosphere supposed to exist above the surface of the earth.

Of no less interest to the layman were a number of exhibits from the department of embryology, by means of which the visitor saw various stages of the development of living chick embryos. These embryos ranged in age from the first beat of the heart up to a stage that would compare somewhat with the third month of human prenatal development. By means of powerful microscopes, visitors were permitted to watch the development progress.

Another section of the exhibit showed living cultures of tumor cells growing in a drop of plasma. Here, too, strong glasses made it possible for the visitor to watch the cells multiplying for their destructive careers. And close by was a demonstration of epithelioid cells and giant cells waging their war on tuberculosis cultures. All these subjects are under investigation at the department of embryology.

Other exhibits included researches in astronomy, archeology, Roman building construction, physics, seismology, plant physiology, ecology, nutrition, genetics, marine biology, history and diatom research. Instructors were in charge of all the exhibits to explain the meaning of each example to the visitors.

MINUTE ON THE DEATH OF LOUIS R. SULLIVAN

THE following minute was passed by the Galton Society at a meeting held in the American Museum of Natural History on October 28:

WHEREAS, The late Dr. Louis R. Sullivan was one of the most active members of the Galton Society, of which he was elected a fellow in 1918, soon after the foundation of the society; WHEREAS, He presented at its meetings the chief results of his important investigations upon the racial history of the Polynesians, the racial composition of the present mixed population of the Hawaiian Islands, the relationship of the Punin Ecuador skull and other topics of exceptional anthropological interests;

WHEREAS, At the time of his death Dr. Sullivan's most ably conducted and comprehensive studies were leading him to still more important conclusions concerning the classification, and evolutionary history of the races of mankind;

WHEREAS, The American Museum of Natural History has undertaken so far as possible not only to complete and publish the investigations upon which he labored almost to the day of his death, but also to carry on further researches along the lines planned by him;

WHEREAS, His good humor, his breadth and sympathy, as well as his keen and sensitive intelligence and other attractive personal qualities had inspired the devotion of his many colleagues and friends; therefore, be it

Resolved, That the members of the Galton Society hereby record their appreciation of the fruitful life and works of their late friend and colleague and their gratification that the investigations conducted by him are to be carried on along the lines he had planned; and be it further

Resolved, That a copy of this resolution be forwarded to the widow and family of our late friend and colleague in token of our deep sympathy for their loss.

> CHAS. B. DAVENPORT, Chairman WILLIAM K. GREGORY, Secretary

SCIENTIFIC NOTES AND NEWS

SCIENCE has printed extended preliminary announcements of the meeting of the American Association for the Advancement of Science and the national affiliated scientific societies to be held at Kansas City, from Monday, December 28, to Saturday, January 2. They promise a meeting of importance and wide interest. Every member who can do so should attend the meeting in his own interest and to do his part for the advancement and diffusion of science.

DR. JAMES F. NORRIS, professor of chemistry at the Massachusetts Institute of Technology, has been reelected president of the American Chemical Society.

CUMMINGS C. CHESNEY, manager and chief engineer of the Pittsfield works of the General Electric Co., has been nominated for president of the American Institute of Electrical Engineers.

DR. EDWIN G. CONKLIN, professor of zoology at Princeton University, has been granted a year's leave of absence to study research conditions in Japan, under the auspices of the Rockefeller Foundation. Dr. and Mrs. Conklin expect to sail from San Francisco on December 26.

DR. HARLOW SHAPLEY, Paine professor of practical astronomy at Harvard University and director of the Harvard Observatory, has been appointed visiting lecturer to the universities of Belgium by the C. R. B. Educational Foundation, established by the Commission for Relief in Belgium, and will visit the four Belgian universities next April and May.

DR. JOHN J. ABEL, professor of pharmacology in the Johns Hopkins University, has recently been notified that he has been elected a member of the Kaiserlich Deutsche Akademie der Naturforscher zu Halle, the oldest scientific society in Germany, having been founded in 1652.

THE honorary degree of doctor of laws has been conferred by the Sorbonne, Paris, upon Sir Ernest Rutherford, of the University of Cambridge; Dr. Hideyo Noguchi, of the Rockefeller Institute; Professor I. P. Pavlov, of Leningrad, and Professor M. Charles de la Vallee Poussin, of the University of Louvain.

DR. RICHARD WILLSTÄTTER, formerly professor of chemistry at Munich, has received an honorary degree from the University of Zürich.

At the annual general meeting of the Junior Institution of Engineers held on November 13 A. J. Simpson was elected chairman.

FRANK D. PAINE, professor of electrical engineering at Iowa State College, has been appointed assistant director of the committee on the relation of electricity to agriculture, with headquarters at Ames. A leave of absence for the period of a year has been granted to him by the Iowa State College.

DR. HENRY CHANDLER COWLES, of the University of Chicago, has been appointed a member of the Illinois State Board of Natural Resources and Conservation to succeed Dr. John M. Coulter, who is now at the Boyce Thompson Institute in Yonkers, N. Y.

AT Western Reserve University, Dr. John M. Ingersoll, professor of otolaryngology, and Dr. William H. Humiston, clinical professor of gynecology, have resigned. They have both been made professor emeritus in the university.

PROFESSOR J. AMBROSE FLEMING, the distinguished English electrical engineer, celebrated his seventysixth birthday on November 29.

DR. WILLIAM E. GYE has been awarded the annual fellowship established by London University for the graduate of that institution who has done the most toward the advancement of medical science in the past five years. The fellowship carries a stipend of about \$1,500.

DR. F. F. NORD recently arrived from Germany to take a position in the section of biochemistry of the Mayo Foundation, Rochester, Minnesota.

DR. JOHN ALDEN MASON has resigned his position at the American Museum of Natural History as assistant curator of Mexican archeology to take a position with the University Museum of Philadelphia where he becomes curator of the American section.

HARRY L. SHAPIRO, of Harvard University, has been appointed assistant curator of physical anthropology at the American Museum of Natural History.

DR. T. U. H. ELLINGER, of Chicago, has been appointed director of a department of live stock economics, recently established by the International Live Stock Exposition Association.

R. E. KARPER, superintendent of the Lubbock substation of the Texas agricultural experiment station system, has been made assistant director and agronomist at the main station, College Station, Texas.

DR. FRANCIS CARTER WOOD, director of the Crocker Institute of Cancer Research, at Columbia University, has gone to England to make an investigation of Dr. W. Blair Bell's method of lead treatment for the cure of cancer.

DR. JAMES P. CHAPIN, of the American Museum of Natural History, will head a museum expedition to East Central Africa to study the birds and fauna and to make collections for exhibition purposes. The members of the expedition will leave New York early in January and expect to start inland from the African coast about March 1.

DR. H. F. KERN, of the U. S. Bureau of Animal Industry, left on December 10, on a two years' furlough from the bureau, to accept a position as veterinarian to the San Salvador government.

DR. HENRIK LUNDEGARDH, director of the Ecological Station at Torekov, Sweden, is making a short stay at the New Jersey State Agricultural Experiment Station.

AMONG foreign scientific men who have visited the United States within the past few weeks are Dr. Hugo Weigold, director of the Provinzial Museum at Hanover, Germany; Dr. H. Boschma, of the University of Leyden; Dr. Stepan Soudek, assistant in the zoological institute of the College of Agriculture and Forestry at Brno, Czechoslovakia, and Dr. Brooke Nicholls, of Melbourne University.

DR. FREDERICK O. BOWER, until lately Regius pro-

fessor of botany in the University of Glasgow, concluded his lecture tour of the United States and Canada, with a series of three lectures at the Johns Hopkins University, the first week in December.

DR. NORBERT WIENER, assistant professor of mathematics at the Massachusetts Institute of Technology, has been invited to deliver a course of lectures at the University of Göttingen, Germany.

DR. J. B. COLLIP, professor of biochemistry in the University of Alberta, will deliver the fourth Harvey Society lecture at the New York Academy of Medicine on Saturday evening, January 2, at eight thirty. His subject will be "The Internal Secretion of the Parathyroid Glands."

DR. R. W. WOOD, professor of experimental physics at the Johns Hopkins University, lectured before the Franklin Institute, Philadelphia, on December 16, on the subject of "The Optical Excitation of Metallic Spectra."

DR. SIMON FLEXNER, director of the Rockefeller Institute for Medical Research, delivered the third Weir Mitchell oration on December 9 at the College of Physicians, of Philadelphia, on "The Advancement of Epidemiology through Experiment."

DR. GEORGE P. MERRILL, curator of geology and mineralogy at the United States National Museum, delivered a series of four lectures on "Meteorites" at Columbia University from November 17 to 20.

DR. ERWIN F. SMITH, plant pathologist for the United States Department of Agriculture, gave an address before a meeting of the Washington Academy of Sciences on December 17 on "Recent Views as to the Cause of Cancer."

AT a luncheon on December 5, at the University of Chicago, given by President Max Mason, Dr. William H. Mayo, Rochester, Minn., gave an address on "Chemistry in Medicine"; Dr. Arthur D. Little, Cambridge, formerly president of the American Chemical Society, an address on "Chemistry in Industry," and Dr. Julius Stieglitz, head of the department of chemistry at the University of Chicago, spoke on "Chemistry in the University."

THE joint annual meeting of the Newburgh and Poughkeepsie Medical Societies was held at Newburgh, N. Y., on November 17. Dr. Smith Ely Jelliffe, of New York, gave an address on psychoanalysis and organic disease.

DR. E. F. NORTHRUP, vice-president of the Ajax Electrothermic Corporation, lectured before the Franklin Institute on the subject of "Ironless Inductive Heating" on December 3.

DR. FRITZ LENZ, professor of race hygiene at the University of Munich, lectured during September at the Universities of Uppsala and Lund, Sweden.

PROFESSOR J. C. G. LEDINGHAM gave on December 9 the Harben lectures of the Royal Institute of Public Health, England, on the subject of the current problems in bacteriology and immunology and their bearing on public health effort.

THE ward at the Glasgow Infirmary, Scotland, in which Joseph Lister did his early work in antisepsis and which was dismantled a year ago, has been purchased by the firm of Burroughs Wellcome and reerected in London.

A BUST of Heinrich Hertz, discoverer of the high frequency waves bearing his name, has been presented by his daughter, Dr. Mathilde Hertz, to the Karlsruhe High School to commemorate his seventeen years of teaching in the school. The occasion was the celebration of the centennial of his birth.

PROFESSOR H. A. GOSSARD, president of the American Association of Economic Entomologists and chief of the Department of Entomology at the Ohio Agricultural Experiment Station, died by suicide on December 18. Professor Gossard was fifty-seven years of age and had been in ill health.

DR. NATHAN E. BRILL, professor of clinical medicine at the Columbia University College of Physicians and Surgeons, died on December 14, at the age of sixty-five years.

DR. JOHN LEWIS HILDRETH, emeritus professor of clinical medicine and formerly dean at Tufts College Medical School, Boston, died on November 27, at the age of eighty-seven years.

SIR RICHARD DOUGLAS POWELL, formerly president of the Royal College of Physicians, died on December 15, aged eighty-three years.

DR. LAMBINET, chief of the bacteriologic service at the University of Liége, and a pioneer in study of hookworm, has died.

THE new Peabody Museum of Natural History at Yale University will be opened on December 29. Speakers at the dedication ceremony will be Dr. James Rowland Angell, president of the university; Dr. Charles Schuchert, professor of paleontology; Dr. Richard Swann Lull, director of the museum, and Dr. Henry Fairfield Osborn, president of the American Museum of Natural History.

THE forty-fourth course of popular lectures will be given at the Stanford University Medical School on alternate Fridays at 8 p. m., as follows: January 8, "Dietary Peculiarities of Children," Dr. H. K. Faber; January 22, "Skin Disturbances from Foods and Drugs," Dr. H. E. Alderson; February 5, "Ductless Glands and Obesity," Dr. Hans Lisser; February 19, "Gastrointestinal Disturbances and Nutrition," Dr. P. K. Brown; March 5, "Fatigue and Rest," Professor E. G. Martin; March 19, "On the Prevention of Disease," Dr. G. E. Ebright.

THE Sigma Xi Alumni Association of the University of Pittsburgh held a meeting on December 14 at which the following program was presented by members of the staff of the Medical School: "The Alleged Veratrine Action of Epinephrine on Skeletal Muscle," Dr. T. K. Kruse; "The Rôle of the Endothelial Leukocyte in Tuberculous Infections," Dr. S. R. Haythorn; "Principles underlying the Mechanism of the Heart Beat," Dr. H. G. Schleiter; "Regeneration in the Amphibian Spinal Cord," Dr. D. Hooker.

THE status of cancer research in the great European laboratories and the question of what research is doing to-day to aid diagnosis and treatment of the disease was discussed by Dr. George A. Soper, managing director of the American Society for the Control of Cancer, and Dr. William A. Woglum, of the Crocker Institute for Cancer Research at Columbia University, at a joint meeting of the Baltimore City Medical Society and the Maryland Cancer Committee, arranged for the purpose of "giving active workers in the field of cancer an opportunity to hear what is being done on the research side of the problem."

ACCORDING to Industrial and Engineering Chemistry, the National Live Stock and Meat Board has granted the National Research Council \$6,000 for a period of two years for research concerning the nutritive value of meat. The National Research Council special committee appointed to handle this money has granted two fellowships. In addition to this fund the board has granted a fund of \$250 to E. B. Forbes, of State College, Pennsylvania, for work on the iron content of meat. The Institute of American Meat Packers has made a grant of \$3,500 to Yale University for research under the direction of Professor L. B. Mendel on the influence of food on the quality of fat produced in the animal body. This is the third year of this grant.

A REPORT on the estate of the late Ohio C. Barber, of Ohio, shows, according to press dispatches, that more than \$5,000,000 of the estate will be used to establish the Ohio C. Barber Agricultural and Industrial School, to be conducted in connection with Western Reserve University.

THE Green Bay Museum, Green Bay, Wis., of which Arthur C. Neville is director, has received a gift of \$50,000 for the erection of a much needed new museum building. The donors are Mr. and Mrs. George Grant Mason, of New York City. The gift is conditioned upon agreement by the city to maintain the building and to name it The Neville Public Museum.

THE geological department of Vanderbilt University has recently bought the Lyon collection in geology. This collection was originally gathered by Sydney S. Lyon and later was greatly enlarged by his son, Victor W. Lyon. It consists of some thousands of fossils mainly from classical paleozoic localities in Kentucky and Indiana, among which there are a number of types. In addition there are some minerals, several hundred pamphlets and between 3,000 and 4,000 books on geology and paleontology. It is probably one of the last of the old-time private collections.

M. TATSUKE has donated 500,000 yen for the erection of a hospital and medical institute building in Osaka at the Kyoto Imperial University. The medical institute probably will be named the Tatsuki Institute.

THE Academy of Medicine of Paris has been left a legacy of 50,000 francs by Madame Alphonsine-Matilde Maire for founding a biennial prize, to be known as the "Prix Docteur Jules Brault," for the best work on exotic pathology or dermatology.

THE University of Pennsylvania has received a gift from Mr. and Mrs. Frederick S. Duncan, of Englewood, N. J., of a family portrait of Robert Adrain, his private library and the manuscripts of his original researches. Dr. Adrain was made professor of mathematics and natural philosophy in Queen's College, now Rutgers. In 1813 he was selected for a similar professorship in Columbia University. In 1826 he became professor of mathematics and vice provost of the University of Pennsylvania.

WORK has been started in the suburb of Annenhof near Moscow on the construction of a series of buildings intended to accommodate the Russian Experimental Electrotechnical Institute with all its workshops and laboratories. Each one of the buildings will be especially constructed to suit its requirements. Thus, the machinery and appliance laboratory will be equipped with a special hall for the testing of the different systems of illumination, etc. The construction costs are tentatively estimated at five million roubles. About two million five hundred roubles will be required for the equipment of the laboratories.

THREE fellowships for research in fertilizer usage have been placed by the National Fertilizer Association in the South. One is assigned to Mississippi Agricultural and Mechanical College, on the study of the value of potash in mixed fertilizers and the effect of potash on rust and wilt of cotton. The other two fellowships are to be at the Georgia State College of Agriculture and Clemson College, South Carolina, to study methods of applying fertilizers as to time, placement and rate of applications on typical Piedmont and Coastal Plain Soils.

A STUDY of the agriculture of the Connecticut Valley, with particular reference to solving the problems of the tobacco growing industry, is being undertaken by the Connecticut Agricultural College, with the endorsement of the Connecticut Valley Tobacco Growers Association. As outlined by Professor I. G. Davis, head of the economics department, under whose direction the survey will be conducted, it will consist of four phases. When completed, it is hoped, it will lay the foundation for a continuously sound agricultural program for the Connecticut Valley.

THE first agricultural college in Burma was recently opened at Mandalay, according to *The Experiment Station Record*. A farm of 600 acres and facilities for a four-year course for 84 students have been provided. Special attention is to be given to the selection of better varieties of rice, beans, cotton and sugar cane, the study of plant diseases, silk culture and the building up of a pedigreed herd of pure Burma cattle.

UNIVERSITY AND EDUCATIONAL NOTES

THE residuary estate of the late Lewis B. Woodruff, ornithologist and lawyer of New York, has been left to Yale University "to further the interests of its museum." The amount has not been made public. In addition a permanent fund of \$10,000 is provided for the New York Entomological Society. The will suggests that the income be devoted primarily to the publication of technically illustrated monographs of groups within the field of the society's authorized activities. All his scientific collections and material on natural history are given to the American Museum of Natural History.

SIR CHARLES HYDE, proprietor of the Birmingham Post and the Birmingham Mail, has made a gift of £100,000 to Birmingham University.

THE late M. Douglas Flattery, of Boston, has bequeathed the sum of \$25,000 to Harvard University to be added to a trust fund for research in medicine.

PLANS to merge the Armour Institute of Technology with Northwestern University are under consideration. The institute would then become the engineering school of the university.

DR. CARL HEDBLOM, professor of surgery at the University of Wisconsin, has been appointed professor of surgery in the school of medicine of the University of Illinois, Chicago.

DR. H. H. BEARD, associate in biochemistry at Western Reserve University, has been made senior instructor in biochemistry and acting head of the department.

AT Tufts College Medical School, Dr. Frank H. Dunbar has been appointed assistant professor of pathology and Dr. Edwin H. Place, assistant professor of pediatrics.

FREDERICK P. WEAVER has been appointed head of the newly established department of agricultural economics at Pennsylvania State College.

DR. JOSEPH BARCROFT, reader in physiology at the University of Cambridge, has been appointed to the chair of physiology in succession to the late J. N. Langley.

THE vacancy in the Regius Professorship of Physic at Trinity College, Dublin, caused by the resignation of Dr. John Purser, has been filled by the election of Dr. T. Gillman Moorhead, who has been for the last five years King's Professor of Materia Medica.

Dr. SERGIO SERGI has been named a titular professor of anthropology at the Royal University at Rome, and director of the Anthropological Institute of the university.

DISCUSSION AND CORRESPONDENCE TRYPARSAMIDE

THERE has been some discussion as to the parts played by the workers at the Rockefeller Institute and the University of Wisconsin in regard to the initiation of the research on the therapeutic use of tryparsamide in neurosyphilis.¹ Dr. Brown states in his article in SCIENCE of October 16, 1925, that

''. . . this study was undertaken in response to a specific suggestion based on laboratory and preliminary clinical investigation'' and ''The connection of the Wisconsin group of workers with the development of tryparsamide was, therefore, essentially the same as that of Alt and other clinicians with the development of salvarsan \ldots .''

The obvious implication of these statements is that our study of tryparsamide in neurosyphilis at Wisconsin was initiated at the suggestion of Brown. The fact is that tryparsamide was but one of a considerable number of drugs studied by us in this connection. Of these, only three were obtained from the Rockefeller Institute.

¹ Jacobs, W. A., *Medicine*, 1924, iii, 191. Leake, C. D., SCIENCE, 1925, Sept. 18, p. 251. Brown, W. H., SCIENCE, 1925, Oct. 16, p. 350.