

Herbert Rand, Franklin Gifford, Alice Smith Cowdry, Dr. R. P. Bigelow and Dr. W. H. Rich.

The tablet occupies a place in the main hall of the laboratory building. On it are inscribed the dates of Mr. Edwards's birth and death and the following words:

This memorial to Vinal Nye Edwards is erected by his friends as a mark of their esteem, in recognition of his gifts as a naturalist and of his services to science.

The exercises were held on the lawn between the laboratory and the residence buildings and were well attended by the residents of Woods Hole and associates of the Marine Biological Laboratory as well as by the staff of the Bureau of Fisheries. The presentation address was made by Dr. Linton, who quoted from the many laudatory letters received from well-known American biologists who had known and worked with Vinal Edwards. The speech of acceptance was made by Lewis Radcliffe, deputy commissioner, and the unveiling was by Madison Edwards, a brother of Vinal Edwards.

A CALIFORNIA OIL WELL

DR. FREDERICK P. VICKERY, of the Southern Branch of the University of California, writes that on September 25 the Miley Oil Company's No. 6 well, located at Athens, Los Angeles County, California, reached the climax of a career of record breaking by becoming a producing well at a depth of 7,591 feet.

Some of the records established by this well are as follows: (1) Depth 7,591 feet. The deepest hole ever drilled, as well as (2) deepest oil well in the world. (3) Landed $4\frac{3}{4}$ -inch, No. 15, casing at 7,591 feet. The longest string of pipe ever set. (4) Cemented $4\frac{3}{4}$ through perforations at 7,305. The deepest cement job ever attempted. (5) Took formation cores from depth of 7,570 feet and recovered perfect samples of good oil sand.

The well was drilled with rotary tools in a total of 230 working days, an average of 33 feet per day. The total cost of drilling, including labor, material and overhead, was \$164,000, or \$21.60 per foot.

The following casing was set:

15 $\frac{1}{2}$ -inch, No. 70, cemented at 988 feet.

8 $\frac{1}{4}$ -inch, No. 36, cemented at 5,289 feet.

4 $\frac{3}{4}$ -inch, No. 15, landed at 7,591 feet and cemented through perforations at 7,305 feet.

The well is producing about 150 barrels of 37° Be gravity oil per day with 20 per cent. of salt water. A gas lift is used to make the well flow, as pumping was considered impracticable on account of the depth.

THE FIELD MUSEUM EXPEDITION TO MADAGASCAR

A TWO-YEAR expedition to Madagascar, in search of the origins of the races now inhabiting the island, was started on October 15 by Ralph Linton, assistant curator of ethnology of the Field Museum of Natural History. He will work among the descendants of the Fatimite Caliphs who were driven out of Arabia and Egypt in the eighth century, and will also attempt to prove by an exploration of the entire island that it holds many of the oldest features of Malayan culture.

The peoples of Madagascar have long furnished a problem for ethnologists and archeologists. They are of mixed cultures, inclusive of three apparently main elements—Bantu negroes from Africa; the Hovas of Malay stock and a fringe of Arabs all along the coasts, the descendants of the Fatimite Caliphs. These three elements are sub-divided into fifteen or more main tribes which, in turn, are divided again into smaller partially distinctive groups. There are also hints of a pygmy element among the populations.

Mr. Linton, in his two-year stay, will explore the entire island, living with the tribes and making collections of their culture, ceremonials and domestic life which, when made the subject of scientific study, will show the history of the people despite their mixed bloods. The most extensive research will be made among the southern tribes who, despite the advanced stage of French activity on some parts of the island, are almost unknown to white men.

The natives of the island are expert in metal, textile and pottery making, and have for many centuries worked the gold mined on the island. A silk producing moth, unlike the Asiatic worm, is also cultivated. Beautiful cloth and baskets are woven from raffia, a fiber.

Mr. Linton will sail from New York and go first to London. He will spend two weeks in England, visiting and studying the Madagascar material in museums. He will also spend three weeks in similar work in France, sailing from Marseilles on December 10, and arriving in Tamatave, Madagascar, on January 7. Antananarivo, the capital of the island, will be used as the base for the expedition, which will immediately start work in a radius of that city.

SCIENTIFIC NOTES AND NEWS

DR. F. HENRY SMITH, professor of natural philosophy at the University of Virginia, celebrated his ninety-sixth birthday on October 14.

THE well-known histologist, Professor Camillo Golgi, of Pavia, recently celebrated his eighty-second birthday.

THE government of France has conferred the cross of the Legion of Honor, officer grade, on Dr. Charles L. Parsons, secretary of the American Chemical Society, and transmitted it to him through the French Ambassador at Washington.

DR. THOMAS BARBOUR, curator in the Museum of Comparative Zoology at Harvard University, was recently elected corresponding member of the Zoological Society of London and also of the Netherland Zoological Society of Amsterdam.

DR. E. L. STEVENSON, of New York, has returned from a six months' trip abroad, during which time he gave two lectures before the International Geographical Congress, which met in Cairo, Egypt, last April. On this occasion Dr. Stevenson had conferred upon him by the Egyptian government its highest decoration—grand officer of the order of the Nile.

THE Elia de Cyon prize of the Academy of Sciences at Bologna has been awarded this year to Professor H. Fredericq, of Liège, for his works on "The humoral mechanism of the action of various heart remedies in coldblooded animals." The second prize was given to Dr. L. Lotti for his research on "The vasomotor reflexes in young infants and the new-born."

DR. J. F. F. BABINSKI, of Paris, has been appointed honorary professor of neurology at the University of Vilna.

DR. ROBERT J. ANDERSON, chief of the nonferrous metals section at the Pittsburgh station of the U. S. Bureau of Mines from 1919 to 1924, has been awarded the William H. McFadden gold medal of the American Foundrymen's Association, in recognition "of his notable and distinguished achievements in the non-ferrous casting industry and of his scientific contributions to the metallurgy of aluminium."

ON the occasion of his sixtieth birthday Professor Max Askanazy, director of the Institute of Pathological Anatomy at Geneva, was the recipient of a special number of the *Revue médicale de la Suisse romande* containing fourteen original articles dealing with pathology.

DR. PAUL GISVIUS, professor of agriculture at the University of Giessen, retired on October 1.

DR. CHARLES H. MAYO, of Rochester, Minn., president of the American College of Surgeons, will preside at the meeting of the society in Philadelphia on October 26, and will induct into office his successor, Dr. Rudolph Matas, of New Orleans.

DR. M. I. PUPIN, professor of electro-mechanics at Columbia University and president of the American Association for the Advancement of Science, is a member of the committee in charge of the observance

of American Education week in New York. It is planned to have a series of conferences and an educational exhibition at the armory at Sixth Avenue and Fourteenth Street, opening on November 19.

PROFESSOR FRED R. FAIRCHILD, of Yale University, has been asked by the United States government to head a committee to inquire into and make a report on forest taxation in the countries of the world. With Professor Fairchild will be a group of forest and tax experts being organized by the U. S. Bureau of Forestry.

C. F. CURTISS, dean of the department of agriculture at Iowa State College and director of the Iowa Agricultural Experiment Station, has been named head of a committee from the cornbelt area to work with the state and federal authorities in finding ways to combat the European corn borer. The committee was selected following conferences in the borer infested regions of Ohio, Michigan and Ontario, Canada. Others who will work with Dean Curtiss are: C. V. Truax, Ohio state secretary of agriculture; F. W. Willits, Pennsylvania state secretary of agriculture; Dr. C. E. Woodbury, of the American Cannery Association; Dean W. C. Coffey, University of Minnesota; Dean L. E. Call, Kansas State Agricultural College; Dean H. W. Mumford, University of Illinois, and Dean E. A. Burnett, University of Nebraska.

DR. GEORGE CHRISTOPHER CLAYTON, M.P., and Professor Henry Cort Harold Carpenter, F.R.S., have been appointed members of the advisory council to the British Committee of the Privy Council for Scientific and Industrial Research.

DR. E. D. BALL, director of scientific work in the United States Department of Agriculture, has been appointed associate entomologist of the Florida State Plant Board.

DR. WILLIAM B. WHERRY, professor of bacteriology at the University of Cincinnati, has been appointed a member of the Cincinnati Board of Health to succeed the late Dr. Edward Walker.

DR. ELMER A. HARRINGTON, formerly head of the department of physics at the Massachusetts Agricultural College and during the past year special investigator on X-ray methods at Harvard University, has been appointed research associate on the Portland Cement Association fellowship staff at the Bureau of Standards.

PROFESSOR HENRY F. JUDKINS, head of the department of dairy manufactures at the Massachusetts Agricultural College, has been granted a leave of absence to go to Springfield to be production manager for the Eastern Dairy Association.

DR. GILBERT H. GROSVENOR, president of the National Geographic Society, has returned after three months in Europe. He will go to Santa Fé, N. M., to join Neil M. Judd, who is completing five years' work as head of the Pueblo Bonito Expedition.

DR. GEORGE GRANT MACCURDY, of Yale University, director of the American School of Prehistoric Research, has returned to the United States. During the summer he visited, with sixteen students, seventy-seven prehistoric sites in England, France, Germany, Spain, Switzerland and Belgium.

DR. H. MOLLET and several other Swiss scientists left on October 7 for Sumatra, for the purpose of observing the eclipse of the sun on January 14 on behalf of the Berne Astronomical Institute.

DR. PIERRE JANET, professor of psycho-pathology in the Collège de France, is visiting the United States, following an official mission to Mexico. During the past week Dr. Janet gave a number of lectures and clinics in Philadelphia.

SIR WILLIAM ARBUTHNOT LANE, the distinguished British surgeon, sailed on October 14 on the liner *Majestic* to attend the meetings of the American College of Surgeons in Philadelphia.

PROFESSOR NAKEDATO, director of the Tokio Observatory, has arrived in Moscow to visit the observatory of Moscow University.

PROFESSOR CALVIN H. KAUFFMAN, of the department of botany of the University of Michigan, has been granted sabbatical leave for the first semester of the academic year 1925-26, and expects to devote that period to field study in the Pacific Coast States.

MRS. MARGARET H. MOSS, of the University of Witwatersrand, Johannesburg, South Africa, is coming to Wellesley College as an exchange professor in botany. Miss Alice M. Otley, associate professor of botany in the college, will take her place in South Africa.

DR. SIMON FLEXNER, director of the laboratories of the Rockefeller Institute for Medical Research, and Dr. Wm. H. Welch, director of the Johns Hopkins School of Hygiene and Public Health, were speakers at the semi-centennial exercises of the founding of Vanderbilt University which took place on October 15 and 16.

WE learn from *Nature* that in honor of the founder of the British Science Guild, Sir Norman Lockyer, the council has established an annual Norman Lockyer lecture, one of the objects of which is to direct the attention of the public to the influence of science upon human progress. The first lecture will be given by Sir Oliver Lodge, on November 16, upon the subject of "The link between matter and matter."

THE Harveian Oration will be delivered before the Royal College of Physicians of London on October 19, by Sir Frederick Mott, M.D., F.R.S., on "The progressive developments of Harvey's doctrine of *Omne vivum ex ovo*."

AN edition of the complete works of Dr. William S. Halsted, late professor of surgery at the Johns Hopkins University, is under way, edited by Dr. Walter C. Burket, Evanston, Ill., in two volumes. As an introduction to the edition, a biographic sketch of Dr. Halsted is being written by Dr. William H. Welch, director of the Johns Hopkins School of Public Health and Hygiene, who is the oldest living associate of Dr. Halsted. Dr. Halsted was associated with the Johns Hopkins University from 1881 until his death in September, 1922.

THE memory of André Parmentier, horticulturist and founder of the Brooklyn Botanical Garden, was honored on October 17 at the unveiling of a tablet within the garden near the entrance at Eastern Parkway and the Brooklyn Museum. Dr. C. Stuart Gager, director of the garden, accepted the bronze plate bearing an account of Parmentier's purchase of the land one hundred years ago. Johnston Mali, Belgian Consul in New York, presented the tablet in behalf of the Parmentier-Bayer Centenary Committee.

ARRANGEMENTS are in progress by the Italian Associazione Nazionale Industrie Elettriche to celebrate in a suitable manner the centenary of the death of Alessandro Volta, which took place near Como on March 5, 1827.

DR. FRANCKE HUNTINGTON BOSWORTH, emeritus professor of laryngology at the University and Bellevue Medical College, New York City, died on October 17, in his eighty-third year.

DR. E. J. BABCOCK, professor of chemical metallurgy and dean of the college of engineering at the University of North Dakota, died on September 3, aged sixty years.

PROFESSOR HAROLD MAXWELL LEFROY, of the Imperial College of Science, London, died on October 14 from the effects of poisonous gases upon which he was experimenting.

PROFESSOR EDWIN HENRY BARTON, F.R.S., dean of the faculty of pure science in the University College of Nottingham, died on September 23, at the age of sixty-seven years.

WITOLD CERASKI, emeritus professor of the university and former director of the Observatory of Moscow, Russia, has died at the age of seventy-six years. He was much interested in celestial photography and

his wife, Mme. L. Ceraski, discovered many variable stars on the plates taken at Moscow.

AUGUSTUS O. EIMER, whose death occurred on April 13 last, left his entire estate to his widow as residuary legatee. It is eventually to come to Columbia University and consists of capital stock of the firm of Eimer and Amend, manufacturers of scientific apparatus and chemicals.

ANNOUNCEMENT has been made of gifts to Columbia University totaling \$111,615. This sum includes \$15,000 from the Borden Company for research in food chemistry and nutrition, and \$5,000 from the Walker Gordon Laboratory Company for the same purpose. The Commonwealth Fund has contributed \$15,000 to constitute the Psychiatric Commonwealth Clinic Fund, and \$5,000 to meet the cost of educational researches to be conducted by the university. Other gifts were \$2,500 from Edward D. Faulkner to be applied towards the cost of research work in the department of surgery, \$2,000 from E. E. Olcott for the establishment of the "Robert Peele prize" in the school of mines, \$2,000 from Eli Lilly and Co. for the pernicious anemia fund in the department of pathology, \$1,000 from Rohm & Haas Co. to maintain a research fellowship in biological chemistry, and \$900 from Mrs. Elsie Clews Parsons for work in the department of anthropology.

THE United States Civil Service Commission announces open competitive examinations for the following positions in the forest service: Senior forester, \$5,200; senior forest economist, \$5,000; forester, \$3,800; forest economist, \$3,800; associate forester, \$3,000; associate forest economist, \$3,000; assistant forester, \$2,400, and assistant forest economist, \$2,400. Receipt of applications will close on November 17. Competitors will not be required to report for a written examination, but will be rated on their education, experience and on a thesis or publications which must be filed with their application.

DR. WILLIAM G. FOYE, secretary of the New England Intercollegiate Geological Excursion, writes that the twenty-first excursion was held in the vicinity of Waterville, Maine, on October 9 and 10. Professor E. H. Perkins, of Colby College, was the leader. On October 9 the party visited localities near Waterville where the Silurian slates are exposed. Specimens of *Nereites deweyi* and *Monograptus colbiensis* were collected. During the afternoon the glacial geology about the Belgrade Lakes was studied. On October 10 automobiles carried the group to Litchfield, west of Gardiner, at which place the rare rock type Litchfieldite containing sodalite and cancrinite was collected. Later in the day Mount Apatite and its gem

bearing pegmatites was visited, at Auburn. Twelve institutions were represented on the excursion: Bowdoin, 1; Clark, 1; Coburn Institute, 1; Colby, 4; Dartmouth, 1; Massachusetts Institute of Technology, 4; Middlebury, 1; Mount Holyoke, 2; New Hampshire State, 3; Wellesley, 4; Wesleyan, 2; Williams, 2; unattached, 2; total 28.

THE new discovery of high grade uraninite ore on the western coast of the White Sea is expected to give the Soviet Union a full supply of domestic radium, according to a bulletin from the Russian Academy of Sciences received by the Russian Information Bureau. Hitherto Russian scientists have had to depend on supplies of radium imported from abroad. The samples brought to Leningrad by A. N. Lobunzev, geologist, from the White Sea expedition, have been analyzed by the Radium Institute of the academy, which reports the ore as rich in uranium as ore obtained in Joachimsthal, Czechoslovakia. The academy has dispatched an expedition headed by A. E. Fersman, chief mineralogist, to the White Sea, to make arrangements for securing the ore in quantity.

AN epidemic goiter survey of Massachusetts will be made this fall and winter, if the State Department of Health can complete its tentative arrangements with the United States Public Health Service in Washington. Dr. George H. Bigelow has conducted a preliminary sounding at home and has mapped out the survey. The probabilities are that Dr. Robert Olesen, a surgeon in the employ of the United States Public Health Service, will be sent to Massachusetts to conduct the same kind of a survey that he made in Colorado last year. His services are wanted there because of his experience in Colorado, as his method of procedure will permit an interpretation of the Massachusetts results in the light of a comparison with those of Colorado. The first concern of the health authorities is whether there is an undue prevalence of endemic goiter in Massachusetts, and the next step will be to establish its relationship to the iodine contents of the drinking water and incidentally also the iodine contents in the soil.

THE annual report for 1924 of the inspector, Dr. J. A. Giles, under the act for regulating experiments on living animals in Great Britain has been issued. The number of persons holding licenses for such experiments was 1,042, but of these 239 performed no experiments during the year. The total number of experiments made was 177,815, or 43,032 more than in the preceding year. The whole of that increase is accounted for by the larger number of simple inoculations and similar experiments performed without anesthetics, and there was a decrease of 893 in the number of operations performed with anesthetics.

Dealing with the latter class the report says: "Of the 9,162 experiments 1,109 were simple inoculations into the skin of guinea pigs, which were anesthetized in order to keep the animals motionless during the introduction of a minute quantity of the fluid to be tested for the purpose of standardization. Of the remaining 8,053 experiments in this table, comprising all the cases in which any serious operation was involved, 4,324 were performed under license alone, or under certificate C, and therefore came under the provision of the act that the animal must be kept under an anesthetic during the whole of the experiment, and must, if the pain is likely to continue after the effect of the anesthetic has ceased, or if any serious injury has been inflicted on the animal, be killed before it recovers from the influence of the anesthetic."

An attempt is being made to preserve the Indian totem poles in the vicinity of Hagelton, Kispiox, Hagwelgate, Gitsegjukla and Kitwanga, British Columbia. The poles at Gitsegjukla and Kitwanga may be seen from the Canadian National Railway car windows. So far as known this Canadian government railway is the only one in the world from which totem poles may be viewed. The work is being carried on under the Canadian Department of Indian affairs. Harlan I. Smith, of the National Museum of Canada, is in charge in the field and is assisted by T. B. Campbell, in the engineering problems, and H. F. Ballentyne in the art and architectural work.

THE U. S. Department of Agriculture reports that the nation-wide drive to eradicate bovine tuberculosis up to April 1 included 10,201,492 cattle under supervision; 6,777,624 cattle in herds successfully passing the first test; 1,187,908 cattle in fully accredited herds; 617,810 cattle tested during March, 19,841 cattle reacting to the test during March; 3,498,072 cattle on the list to be tested, and sixty-nine counties recognized as free from bovine tuberculosis. Reports show unusual interest in tuberculosis eradication on a county-wide basis. In the first three months of the year, the number of counties having less than 0.5 per cent. of the disease increased from fifty-three to sixty-nine. Veterinary officials of the Bureau of Animal Industry consider that such progress is proof of the practicability eventually of freeing entire states from bovine tuberculosis.

WE learn from the *Journal* of the American Medical Association that, in accordance with plans prepared by the committee to investigate the health hazards of tetra-ethyl gasoline, the U. S. Public Health Service is carrying on chemical and clinical studies in various parts of the country of the manufacture, distribution and use of this gasoline product. Sur-

geon General Cumming has detailed Dr. J. F. Leake to assume charge of all these investigations and to cooperate with the director of the Hygienic Laboratory and with medical officers of the section of industrial hygiene and sanitation. Two fields of study have been determined on. One of these will be in a Middle Western city where tetra-ethyl lead gasoline has been in use for several years. In this city investigations will also be carried on in an experimental garage where this gasoline has never been used. Identical experiments will also be carried on in an Eastern city.

THE Federation of Bird Clubs of New England has been presented with Milk Island, off Rockport, for a bird sanctuary. This island, the gift of Mrs. Roger W. Babson, will be presented to the state by the federation. The island comprises about fifteen acres. The officers of the federation will present it to the state as a bird refuge in perpetuity, and the island will be known as the Knight Bird Refuge in memory of Mrs. Babson's father and mother. By this gift the Commonwealth of Massachusetts will have by the end of this year seven islands for bird sanctuaries, acquired either as gifts or by purchase by the federation. These islands are Egg Rock in Lynn Harbor, Ram Island, off Mattapoisett, Carr Island, off Newburyport and the Merrimack River, Tern Island, off Chatham, Smith's Island, off Nantucket, and Penikese in Vineyard Sound.

THE American Museum of Natural History announces that the museum architects, Trowbridge and Livingstone, are collaborating with Howard Russell Butler, of Princeton, in the preparation of plans for the proposed new astronomical hall which is to occupy the place of the present auditorium. This hall will include five floors and will cost \$2,000,000. The first floor will be devoted to the museum's large collection of meteorites. On the second floor will be a great hall, extending through the third floor, for astronomical models and exhibits, while the astronomical hall proper will extend from the fourth floor through the fifth and sixth floors and will be capped by a huge dome, which will represent the heavens with the constellations.

UNIVERSITY AND EDUCATIONAL NOTES

DR. G. B. FRANKFORTER, of the University of Minnesota, has become professor of chemistry at Stanford University.

DR. HILDING BERGLUND, a native of Sweden who has been an assistant professor in the Harvard Medical School since 1923, has been elected professor of