SCIENTIFIC NOTES AND NEWS

THE William Lawrence Saunders Gold Medal for 1930, awarded annually for achievement in mining by the American Institute of Mining and Metallurgical Engineers, will be presented to Mr. Daniel C. Jackling, of San Francisco, president of the Utah Copper Company and other mining corporations, at a dinner on October 31 at the Ritz-Carlton Hotel in New York City. President Hoover was the recipient of the Saunders medal for 1928.

DR. MICHAEL I. PUPIN, professor of electro-mechanics at Columbia University, has received the decoration of the White Eagle of the First Order, conferred upon him by Alexander I of Jugoslavia for outstanding service to the nation.

GUGLIELMO MARCONI has been elected president of the Italian Royal Academy, succeeding Senator Tomaso Tittoni, who resigned for reasons of health. Senator Marconi thus far had not been a member of the academy. Premier Mussolini, however, obtained King Victor Emmanuel's signature to decrees making the inventor both an academician and president of the body.

AT a special convocation of the faculty of the University of Chile, Dr. Roscoe W. Thatcher, president of the Massachusetts Agricultural College at Amherst, was last summer made an honorary member of the faculty and was awarded an honorary doctorate by the Catholic University of Chile at Santiago.

MR. FELIX M. WARBURG, vice-president of the Museums of the Peaceful Arts in New York, is the recipient of the golden ring of the Deutsches Museum presented by the Government of Bavaria. It was presented to him by Dr. G. Heuser, acting consul general at New York City. Mr. Warburg has been actively interested in the Deutsches Museum and also in the development of industrial museums in America, particularly in the New York institution.

DR. THOMAS S. CULLEN, professor of clinical gynecology in the Johns Hopkins University School of Medicine, was presented with the degree of doctor of laws by the University of Toronto at a special convocation on September 16, in connection with the opening of the Banting Research Institute. The honor was conferred in recognition of Dr. Cullen's work on cancer. He graduated from the University of Toronto forty years ago.

THE Founder's Day address at Lehigh University was delivered by Dr. Edward Wilber Berry, dean of the Johns Hopkins University, on October 2. He spoke on "The Nature of Progress." Honorary degrees were conferred on Professor Berry and on Harald Malcolm Westergaard, professor of structural engineering at the University of Illinois.

PORTRAITS of Dr. George L. Brown, dean of the faculty and of the division of general science of State College, and of Dr. Hubert B. Mathews, vice-dean of the faculty and for many years professor of physics, will soon be hung in the Lincoln Memorial Library of the South Dakota State College. The portraits were painted by Harvey Dunn, of New York, a former student at the college.

DR. IVAN M. JOHNSTON, of the Gray Herbarium of Harvard University, has been elected a corresponding member of the Argentine Society of Natural Sciences.

DR. J. C. TH. UPHOF, professor of botany at Rollins College, has been elected a corresponding member of the Deutsche Dendrologische Gesellschaft in recognition of his researches in the dendrology of the State of Florida.

DR. ELMER DREW MERRILL, as director of the New York Botanical Garden, has been appointed a professor of botany at Columbia University.

CHANGES in the department of chemistry of New York University include the appointment of Dr. A. O. Gettler as professor and J. K. W. Macalpine and W. West as assistant professors. Dr. Hilde Thurnwald, lately assistant to Professor G. F. Hüttig at the Deutsche Technische Hochschule, Prague, is spending the year at the university as a fellow of the Rockefeller Foundation.

DR. HARLAN T. STETSON, director of the Perkins Observatory of Ohio Wesleyan University, reports that the following appointments have been made as additions to the staff: Dr. N. T. Bobrovnikoff, formerly of the Lick Observatory and National Research Fellow at the University of California, assistant professor of astrophysics; Dr. N. Wyman Storer, formerly of Wesleyan University, assistant professor of astronomy, and Mr. Marvin E. Cobb, Drake University, fellow in astronomy.

MR. EDW. H. GRAHAM, formerly herbarium assistant, has been appointed assistant curator of the section of botany at the Carnegie Museum, Pittsburgh.

DR. H. M. MARTIN, formerly associate professor of animal pathology and hygiene at the University of Nebraska, has become parasitologist in the Pennsylvania Bureau of Animal Industry Laboratory, Harrisburg, Pennsylvania.

THE Roessler and Hasslacher Chemical Company, Incorporated, announces the following changes and appointments: Dr. W. F. Zimmerli, who has been with the commercial development division at the New York office, has been appointed head of the same department at Niagara Falls. New appointments to the technical staff at the Niagara Falls plant include: Noah S. Davis, Jr., Ph.D. (Yale, 1930); Alton Gabriel, Ph.D. (Cornell, 1930); H. E. Klein, Ch.E. (Purdue, 1930); Lloyd Mann, B.S. (Middlebury, 1930); H. A. McPhail, M.S. (Toronto, 1930); W. T. Rinehart, M.A. (Indiana); W. B. Tanner, Ph.D. (Iowa State, 1930); Jane Williams, B.A. (Indiana, 1930). Dr. J. H. Payne, of the Niagara Falls plant, has been assigned a year's leave of absence to complete studies in Germany.

DR. C. V. TAYLOR, of Stanford University, is visiting professor of zoology at the University of Chicago.

THE National Research Council has made a grant of $500 through the division of chemistry and chemical technology of Emory University to further the work of Dr. J. L. McGhee on the regeneration of hemoglobin in rat and man.

DR. JOHN B. NANNINGA, a graduate of Rush Medical School, has been appointed fellow in research at the University of Kansas School of Medicine, under Dr. Ralph H. Major. His fellowship was made available by the committee of scientific research of the American Medical Association and the National Research Council. It is to be devoted to the study of depressor substances.

DR. HELEN M. GILKEY, associate professor and curator of the herbarium at the Oregon State Agricultural College, being on leave of absence, has joined the staff of the Gray Herbarium of Harvard University for the academic year 1930–31.

PROFESSOR R. A. WARDLE, of the department of zoology of the University of Manitoba, spent the summer studying tapeworms in salmon at the Pacific Biological Station, Nanaimo, B. C., and Professor V. W. Jackson, of the department of biology, in studying the flatfish of the Pacific coast.

DR. R. G. GUSTAVSON, professor of chemistry at the University of Denver, has returned to his work after a year's leave of absence during which he taught and engaged in research work at the University of Chicago. Professor Gustavson will continue at Denver his experiments with the sex hormone.

DR. WALTER R. KIRNER, assistant professor of organic chemistry at the Rice Institute, Houston, Texas, has returned from a sabbatical year spent in study in Europe. During the year he worked at the University of Graz in Austria, studying the technique of micro-organic analysis under Professor Fritz Pregl. The complete apparatus for organic microanalysis has been purchased for the Rice Institute. Dr. Kirner also spent five months doing research in Professor Heinrich Wieland's laboratory in the University of Munich and five months with Professor Robert Robinson at the University College of London.

E. B. RENAUD, professor of anthropology at the University of Denver, has returned from the first archeological survey of eastern Colorado. Accompanied by student assistants, Dr. Renaud explored the region between the mountains and the Kansas state line, bringing back nearly a ton of relics which are now being worked over and classified. The trip was financed jointly by the Smithsonian Institution, the Colorado Museum of Natural History and the University of Denver.

DR. BAINI PRASHAD, director of the Zoological Survey of India, Indian Museum, Calcutta, is visiting museums of the United States.

DR. FRANK P. GRAHAM, newly elected president of the University of North Carolina, delivered the final address at the meeting of the North Carolina Forestry Association on September 27. He discussed the relation of education to forestry.

DR. ROBERT FRANK, Mount Sinai Hospital, New York City, will deliver the first Harvey Society Lecture at the New York Academy of Medicine, on Thursday evening, October 16. His subject will be "The Female Sex Hormone."

AT Wesleyan University, the first lecture of the year of the Middletown Scientific Association will be given on Friday, October 17, by Professor Frederick K. Morris, of the Massachusetts Institute of Technology, on "The New Meaning of Exploration." Professor Morris was a member of the expedition from the American Museum of Natural History of New York to Central Asia. He will tell of modern methods of exploration and will illustrate them with accounts from his own experiences in the interior of China and Mongolia.

THROUGH a misunderstanding, Dr. Ralph R. Mellon was given as one of the authors of the article in SCIENCE for August 15 entitled "An Effect of Short Electric Waves on Diphtheria Toxin Independent of the Heat Factor," by Dr. Waclaw T. Szymanowski and Robert Alan Hicks. Dr. Mellon is director of the laboratory in which the work was done.

APPLICATIONS for metallurgist must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than October 29, 1930. The entrance salary is $3,800 a year. This examination is to fill

vacancies in the departmental service, Washington, D. C., and in the federal classified service throughout the United States. Competitors will not be required to report for examination at any place, but will be rated on their education, training, experience and fitness, and on publications, reports or a thesis.

MR. HENRY FORD has contributed $250,000 to the Deutsches Museum at Munich.

THROUGH efforts of the Florida Audubon Society, the ornithological library of the late Dr. Henry Nehrling, horticulturist and ornithologist, has been acquired for Rollins College. The society loaned a portion of the purchase price and thus preserved for the college a collection said to be unique in many ways.

THE American Society for the Control of Cancer plans to publish on January 1 the first issue of *The American Journal of Cancer,* under the editorship of Dr. Francis Carter Wood, of the Crocker Institute of Cancer Research.

The Christian Science Monitor reports that a discovery of land in the inland ice of Greenland has been made by Dr. Lange Koch, who has returned to Copenhagen from his fourth expedition to that country. With Dr. Koch were the other members of the expedition, Professor Helge Backlund, Swedish geologist; two Danish students of natural history, a geologist and a botanist, who joined them in Greenland. The discovery was made along the eastern coast of Greenland, in the same latitude as the Umanok district by Professor Backlund, who had been sent out with a special section. Dr. Koch, however, through a series of investigations as early as 1929, had reached the conclusion that there must be land in the inland-ice in the form of islands. These were first seen during an ascent of the Jordan Hill.

THE Museum of Science and Industry (Museums of the Peaceful Arts) of New York City is projecting an extensive exhibition covering all the scientific and technical phases of color. The color exhibition will begin shortly after the first of January and will continue for two months. Dr. F. C. Brown, formerly assistant director of the U. S. Bureau of Standards, is director of the museum; Mr. I. G. Priest, chief of the colorimetry section of the Bureau of Standards, is chairman of the advisory committee, which includes most of the names best known in the field of color, and Dr. I. H. Godlove, formerly of the Munsell Color Company, is in charge of arrangements for the color exhibition. A number of the large industrial corporations have signified their intention of exhibiting color measuring and related apparatus. In addition, a number of special educational features, lectures, etc., are being planned.

THE U. S. Public Health Service will be enabled to begin its cancer survey of the United States at once due to the insertion of a $100,000 item in the Second Deficiency bill. The survey will include: (1) An investigation of the researches being carried on with respect to control of cancer in various institutions in the United States and abroad. (2) An investigation of existing methods of treatment of cancer with view to determining and encouraging use of best methods of treatment to the exclusion of those that are worthless or fraudulent. (3) The ascertaining of best methods of increasing the number of physicians skilled in the diagnosis and treatment of cancer. (4) The ascertaining of best means of educating the public with respect to the signs and symptoms of cancer in early stages in order to prevent neglect and delay in treatment. (5) The ascertaining of the extent to which provision now exists for furnishing optimum treatment for cancer for all sufferers, together with estimate of what would be needed to make this adequate and the cost thereof. (6) The collection of any other pertinent data to enable Congress to act advisedly in this matter.

UNDER the direction of Dr. Arthur L. Day, director of the geophysical laboratory of the Carnegie Institution, a well is being drilled at Norris Geyser basin in an attempt to find out at what depth the heat is located that causes geysers. A well was put down a year ago at the Old Faithful basin, extending to a depth of 406 feet, striking a temperature of 170 degrees Centigrade, or about 338 degrees Fahrenheit. Dr. Day directed this work. In this experiment, according to a statement made by Dr. Day to the *U. S. Daily,* the drill was pushed first through geyserite and then through glacial gravel, then more geyserite, indicating that the glacier was working in this territory before the ice age. In the experiment being conducted in the Norris basin, it is hoped to put the drill down until such heat and steam pressure is encountered as will prevent further drilling. It will be impossible to go through to molten rock, but it will be possible to judge by the distance and the increased temperature the approximate distance of lava.

THE Cumberland Power Company has rejected an offer from the Commonwealth of Kentucky of $230,000 for land owned and for options on other land on which Cumberland Falls are located, and the Commonwealth will proceed with condemnation suits, according to an announcement by the attorney general, J. W. Cammack. Refusal of the offer, the attorney general said, was made in a letter replying to his offer to purchase five tracts of land owned by the power company, for $210,000, and to pay $20,000 for

an assignment of all options held by the company on the Brunson property, the site of the falls. Upon receipt of the rejection of his offer, Mr. Cammack stated that papers in a condemnation suit are being prepared and will be filed at an early date, seeking to condemn Cumberland Falls and the acreage owned by the power company for state park purposes. The offer to the power company, he explained, was made under an act of the 1930 legislature accepting an offer of Mr. T. Coleman du Pont to donate $230,000 to acquire the falls for a state park.

FROM Science Service we learn that a series of gorgeous waterfalls never before seen by a European and practically unknown to natives have been discovered in South Africa by Farquhar B. Macrae, of the Northern Rhodesian Civil Service, and described by him in a report to the Royal Geographical Society. One of the falls is 200 feet in height, or 33 feet higher than the Niagara Falls, and rivals in beauty the famous Victoria Falls which are about twenty miles distant. This fall is, however, only one of a series following each other in rapid succession so that the total effect is that of a much greater drop totaling 334 feet. They are known to the natives as the Chiengkwasi Falls and are on the Chunga River which empties into the Zambezi. It is on the Zambezi River that the Victoria Falls are located. In describing the Chiengkwasi, Mr. Macrae says: "The main Chiengkwasi fall is a fine sight. Numerous very green ferns grow in holes and cracks in the stone and the water dashes down over the smooth face of the rock, spurting out in little plumes of spray wherever it meets an obstacle. In times of flood it must be an awe-inspiring sight during the few hours that such a short river would remain at its maximum height." A few miles from the Chiengkwasi Mr. Macrae found another impressive series of five falls. The largest of these was a drop of 83 feet. "Below this fall the scenery is most imposing. Towering basalt precipices rise on either side of the river, which is never much more than 100 feet broad and is generally considerably narrower. At one point the cliffs can not well be less than 400 feet high and are probably higher. They rise in a sheer wall from the water's edge. The general impression of height is greater than that conveyed to an observer standing at the bottom of the Palm Grove at the Victoria Falls."

ACCORDING to the French correspondent of the *Journal* of the American Medical Association a recent report shows that the new branch of the Pasteur Institute established some time ago, at Kindia, French Guinea, is developing in an excellent manner. The branch was created after long and patient effort. Professor Calmette in 1913 decided to establish the branch but the outbreak of the war postponed the plan. Originally the idea was to create merely a station for the collection of anthropoid apes destined for shipment to France for laboratory experiments and for a close inspection of the apes before transporting them, for in the past many animals have arrived in Europe in a tuberculous state. After the war the project was taken up, and the government of French West Africa offered 35 hectares of land in a healthful region, 7 kilometers from Kindia, which is located 150 kilometers from the coast, on the railway running from Konakri to the Niger. Since that time a number of buildings have been erected. The central building comprises the laboratory and the lodgings of the director and of transient guests. There are animal quarters, cabins for the native employees and a factory with electrically driven machinery. Eighteen hectares are under cultivation to produce food for the men and the animals. Apes of all kinds are captured and given quarters at Kindia, some for experimentation on the ground, and others for transport in sound condition to the Pasteur Institute in Paris. The laboratory, utilizing cattle and small animals, prepares various serums, among others the antiplague serum. Studies are carried on in connection with antituberculosis vaccination in apes, the inoculation of apes with human malaria and its treatment, the artificial production of cancer (thus far, without results), the spirochetoses of the ape, pneumococcosis, rabies and anthrax. This laboratory has the advantage of having for experimentation animals living in their native habitat, protected against the diseases that beset them in the laboratories of Europe. The directing personnel consists of Colonel Wilbert, veterinarian; an assistant director, and a physician of the colonial forces. There are from seventy to eighty native employees.

DISCUSSION

SALINE DRINKING WATER AND ABNORMAL LIVESTOCK

IN the May 30, 1930, issue of SCIENCE, Ira S. Allison attributes the poor development and abnormal condition of the livestock in western Minnesota to the high sulphate content of the water in this region. Dr. Allison is entirely correct in his statements regarding the condition of the livestock and the general correlation of this fact with excessive sulphates in the water, but his conclusion that this relationship is one of cause and effect is not borne out by numerous