

don county, 1827, and a distinguished Master of Arts of the University of Virginia, where he was a fellow student and an intimate friend of a group of prominent Southerners, including Dr. J. A. Broadus, William Wirt Henry, Professor Frank Smith of the University of Virginia, and others. Dr. Broun was graduated in 1850. He was elected to the professorship in the college of Mississippi in 1852 and stayed there two years, then to the chair of mathematics in the University of Georgia.

In 1856 Dr. Broun founded Bloomfield Academy near the University of Virginia, which he conducted successfully until the outbreak of the war between the States. In 1859 he married Miss Sallie J. Fleming, daughter of a prominent Virginia family. She has been dead a number of years.

Dr. Broun enlisted in the Confederate army as a lieutenant of artillery. He rose to the rank of lieutenant colonel in the Ordnance Department, and on account of his high mathematical and scientific attainments was made Commandant of the Arsenal in Richmond. He, perhaps, gave the last order in that city directing the blowing up of the Confederate Arsenal.

After the close of the war Dr. Broun was elected to the chair of physics in the University of Georgia, and in 1872 he became president of the Agricultural and Mechanical College of that University. From 1875 to 1882 he was professor of mathematics in Vanderbilt University, Nashville, Tenn., and in 1882 was elected president of the Agricultural and Mechanical College of Alabama, now known as the Polytechnic Institute. He remained in Auburn one year and went to the University of Texas as professor of mathematics, where he was made chairman of the faculty. In 1884 Dr. Broun was reelected president of the Alabama Polytechnic Institute at Auburn. He had served continuously as president of the institution since 1884.

Dr. Broun was a man of varied and accurate scholarship and of rare wisdom in the control of a great institution. Broadly founded in the principles of educational science, he always planned wisely, and was the first to

establish and to develop several new branches of scientific education in the South, such as manual training, electrical engineering and biology.

SCIENTIFIC NOTES AND NEWS.

PLANS have been formed for the erection of a memorial tower and meteorological station in honor of Dr. J. P. Joule, F.R.S., at Sale, Cheshire, where he lived from 1872 to the time of his death in 1880.

DR. ED. SUESS, professor of geology at Vienna, has been made an honorary member of the Academy of Sciences at St. Petersburg.

M. ALFRED PICARD has been elected a member of the Paris Academy of Sciences.

THE Prince of Wales has been admitted as a fellow of the Royal Society.

DR. J. R. GREEN, the well-known botanist, has been elected a fellow of Downing College, Cambridge.

DR. WILHELM HITTORF, professor of physics at Münster, celebrated the fiftieth anniversary of his professorship on January 12. He was on the occasion made an honorary doctor of engineering of the Technical School at Charlottenburg.

THE twenty-fifth anniversary of the professorship of Augusto Tamburini, professor of psychiatry at the University of Modena, was celebrated on December 25, by the presentation of a medal and other ceremonies.

PROFESSOR ERNST VON LEYDEN, the eminent pathologist at the University of Berlin, will celebrate his eightieth birthday on April 20.

DR. KARL PIESKE, engineer in the hydrological bureau in Berlin, has been given the title of 'professor.'

DR. C. H. HERTY, of the University of Georgia, will shortly resign to accept a position in the bureau of forestry.

PROFESSOR A. C. HADDON, of Cambridge University, has been appointed advising curator of the Horniman Museum at Forest Hill, now under the charge of the London County Council.

DR. ADOLF MEYER, the new head of the Pathological Institute of the New York State

Hospitals, has recommended the reappointment of Dr. P. H. Levine as head of the chemical department and of Dr. Brooks as associate in bacteriology.

It is stated in *Nature* that Professor E. Millosevich has succeeded Professor P. Tacchini as director of the Astronomical Observatory of the Roman College and of the astronomical museum connected with it. Professor Tacchini has resigned his office of administrator in the Reale Accademia dei Lincei, and Professor Volterra has been appointed as his successor. Professor P. Villari having been unable to accept the office as president, an election to the presidential chair will be made early in June.

MR. W. S. BRUCE, the leader of the Scottish Antarctic expedition, has secured the services of Captain Thomas Robertson, who for the last twenty years has sailed regularly every spring to the Arctic regions and once to the Antarctic.

SIR W. E. GARSTIN has started for the Sudan to examine the upper reaches of the Blue Nile and the Atbara. He expects also to visit Lake Tzana, in Abyssinia.

M. HUGUES LE ROUX, the French explorer and civil engineer, is in the United States for the purpose of delivering lectures. His first lecture in New York will be given on March 18, before the Geographical Society.

THE Royal College of Physicians of London has appointed Dr. D. Ferrier, F.R.S., to be Harveian orator, Dr. Cullingworth to be Bradshaw lecturer, and Dr. H. T. Bulstrode to be Milroy lecturer.

PROFESSOR WILLIS L. MOORE, chief of the Weather Bureau, lectured at Wesleyan University on February 18, his subject being 'Storm Phenomena.'

THE British Association of Technical Institutions held its annual meeting on January 31, when Lord Avebury was elected president for the ensuing year, and delivered an address, in which he dwelt on the neglect of modern languages and science in the system of education.

DR. H. A. GILES, professor of Chinese at the

University of Cambridge, will give a series of lectures at Columbia University, beginning on March 5. They inaugurate the new department of Chinese, established at the University by General Charpentier with an endowment of over \$200,000.

THE death is announced of Dr. Robert Adamson, professor of logic and rhetoric at Glasgow University and the author of numerous contributions to philosophy, including works on 'Roger Bacon' and on the 'Philosophy of Science in the Middle Ages.'

DR. C. M. GULDBERG, professor of mathematics at Christiania, died on January 14, aged sixty-five years.

MME. CLÉMENCE ROYER has died at Paris at the age of seventy-two years. She first became known as the translator of Darwin's 'Origin of Species,' to which she prefixed an important introduction. She was the author of numerous works and articles on philosophy, ethics and natural science.

DR. THOMAS NEALL PENROSE, medical director, United States Navy, retired, died on February 13, aged sixty-seven years.

CAPTAIN CHEYNE, R. N., who was present as an officer with the three Arctic expeditions that went in search of Sir John Franklin, has died in Halifax, N. S., on February 9, in his seventy-fifth year.

MR. ALFRED WILLIAM BENNETT, a well-known English botanist, died on January 23. According to a notice in the London *Times* he was born at Clapham, in 1833, and was educated at University College, London. The first of his more important contributions to scientific literature was editing, with Mr. Thiselton Dyer, the English edition of Sachs's 'Text-book of Botany,' 1875; in 1889 he published, in conjunction with Mr. G. Murray, a 'Handbook of Cryptogamic Botany'; his most popular work was the 'Flora of the Alps,' which appeared about seven years ago. He was a fellow of the Linnean Society and of the Royal Microscopical Society, the *Journal* of which society was edited by him.

IN a recent number of *SCIENCE* it was stated that the collection of Aino objects made by

Professor Bashford Dean in Japan was 'purchased' for the American Museum of Natural History. It should have been said that the museum reimbursed Professor Dean for the sum which he advanced in making the purchases, and that he contributes as his share in the collection his field expenses and services.

A BILL appropriating \$50,000 to enable Professor John B. Smith of Rutgers College to make experiments for the eradication of mosquitoes has been reported favorably in the New Jersey legislature.

THE position of assistant in pathology with a salary of \$840 and of assistant in physiology at a salary of \$1,000 in the Bureau of Plant Industry, Department of Agriculture, will be filled by civil service examination on February 26.

A TELEGRAM has been received at the Harvard College Observatory from Professor W. W. Campbell at Lick Observatory stating that Professor Perrine finds that the remarkable coronal disturbance in the Sumatra eclipse was immediately above the prominent and only sunspot visible during eleven days.

At the meeting of the Connecticut Academy of Sciences on February 12, Professor A. E. Verrill exhibited several remarkable photographs in natural colors, made direct from nature by a new autochromatic process, invented by Mr. A. Hyatt Verrill of New Haven. One of these photographs was a Bermuda landscape in which the beautiful tints of the water, etc., were well brought out. Three other plates were copies of water-color drawings of brilliantly colored Bermuda fishes. The photographic reproduction of these showed accurately all the delicate shades of green, blue, pink, purple, yellow and orange. The intense red colors appear to be the most difficult to render by this process at present, but no doubt this will soon be remedied by further experiments now in progress.

THE third annual Charter Day meeting of the Sigma Xi Society at the University of Nebraska was held on February 14. Professor Samuel Calvin, of the University of Iowa and director of the Iowa Geological Survey, was the guest of the Society at the annual banquet

and delivered the annual address on 'Records of the Great Ice Age in the Upper Mississippi Valley.' The lecture, which was illustrated by lantern slides, presented the important discoveries of the speaker on the precise limits and characteristics of the various ice sheets which have been demonstrated as present during the ice age in Iowa and the adjacent States.

Nature reports that at the recent annual general meeting of the Royal Scottish Arboricultural Society, Lord Mansfield said he was authorized to state that it was Mr. Hanbury's intention to appoint a departmental committee to inquire into and report upon the present position and future prospects of forestry and the planting and management of woodlands in the United Kingdom, and to consider whether any further measures might be taken with advantage, either by the provision of further educational facilities or otherwise, for their promotion and encouragement. Mr. Munro-Ferguson, M.P., has been invited and has consented to act as chairman of the committee.

THE London *Times* states that the recent acquisitions to the zoological department of the British Museum of Natural History include the interesting collections made by Sir Harry Johnston in Uganda. The great interest attaching to the discovery of the now celebrated okapi has overshadowed the rest of the collection forwarded to the museum by Sir Harry. It contained, nevertheless, many specimens of considerable scientific interest. Mr. Oldfield Thomas, the mammalogist of the department, has been unable to separate specifically the five-horned giraffe obtained near Mount Elgon from the ordinary North African form. The specimen has unusually developed horns, and on that account is of special interest. The collection of birds, though small in number, was particularly welcome, since it was made up chiefly of big birds, such as vultures, storks and herons. Travelers, as a rule, will not take the trouble to skin and bring home birds of this description. The fishes also proved to be very valuable, as they were the first specimens received from Lakes Victoria and Baringo. They included two specimens new to science, described by Mr. Boulenger.