William Curtis Harrison, Provost of the University of Pennsylvania.

Francis Landey Patton President of Princeton University.

Benjamin Ide Wheeler, President of the University of California.

## SCIENTIFIC NOTES AND NEWS.

THE National Academy of Sciences will hold a scientific session at the University of Pennsylvania, Philadelphia, beginning on Tuesday, November 12, at 11 a.m. A special stated session for the transaction of business will be held on November 13.

Professor George J. Brush, emeritus professor of mineralogy and formerly director of the Sheffield Scientific School of Yale University, received a loving cup from some of the former graduates, on the occasion of the recent bicentennial exercises.

The first autumn meeting of the American Academy of Arts and Sciences was held at the house of Mr. Alexander Agassiz, president of the Academy, in Cambridge, Mass. After an introduction by the president and a statement for the Rumford Committee by Professor Cross, the Rumford medals were presented to Professors Barus and Thomson who responded with brief remarks. Mr. Agassiz then gave an account of the Albatross expedition to the tropical Pacific. George Wharton Pepper, of Philadelphia, was elected an associate fellow of the Academy.

THE Franklin Institute, of Philadelphia, has awarded to Dr. Porter Shimer, of the department of chemistry, Lafayette College, the John Scott legacy medal and premium for his improved jacketed crucible.

THE second annual Huxley lecture of the Anthropological Institute was delivered by Dr. Francis Galton, F.R.S., on October 29, his subject being 'The Possible Improvement of the Human Breed under the Existing Conditions of Law and Sentiment.'

THE Council of the London Mathematical Society for the ensuing year is as follows: President, Dr. Hobson; vice-presidents, Professor W. Burnside and Major MacMahon, R.A.; treasurer, Dr. J. Larmor; honorary secretaries, R. Tucker and Professor Love; other members, J.

E. Campbell, Lieut.-Colonel Cunningham, R.E., Professor Elliott, Dr. Glaisher, Professor M. J. M. Hill, H. M. Macdonald, Professor L. J. Rogers, A. E. Western, E. T. Whittaker and A. Young.

DR. C. H. GILBERT, of the department of zoology at Stanford University, has been appointed to take charge of the deep-sea investigations of the United States Fish Commission about the Hawaiian Islands. He will leave on the Government ship *Albatross* about December 1.

THE Navy Department has selected Lieut.-Commander W. H. H. Southerland to succeed Capt. C. C. Todd as chief hydrographer of the navy, and orders have been issued detaching him from the command of the *Dolphin*.

WE regret to learn that Mr. Thomas Meehan, the well-known horticulturist, is seriously ill.

DR. THEODORE HOUGH, of the Biological Department of the Institute of Technology, is at his Virginian home convalescing from a long attack of typhoid fever.

An intercollegiate geological excursion was made to the Westfield valley in Central Massachusetts on Saturday, October 19, for the purpose of studying the formation of river terraces and the influence of rock ledges on their de-The excursion was under the velopment. leadership of Professor W. M. Davis, and was attended by forty-six teachers and students from twelve institutions-Yale, Amherst, Weslevan, Williams, Mass. Institute of Technology and Harvard; Milton and Worcester Academies, Springfield High School and Westfield, North Adams and New Britain Normal Schools. Professors B. K. Emerson, H. E. Gregory, W. N. Rice, and R. T. Jackson were members of the party.

MRS. STANFORD has returned to San Francisco after a journey to Egypt, where she purchased for the Stanford Museum a valuable collection of Egyptian antiquities.

Mr. H. Kato, of the Japanese Department of Agriculture, is at present in the United States, with the purpose of studying our fisheries.

Dr. D. Morris, the British commissioner of agriculture for the West Indies, has returned to Barbadoes after a visit to London.

WE learn from *Nature* that Mr. J. R. Jackson, who for a period of forty-three years has been associated with the Royal Gardens, Kew, has resigned the keepership of the Museum of Economic Botany, and is succeeded by Mr. J. M. Hillier, whose place, in turn, has been taken by Mr. J. H. Holland, late of the botanic station at Old Calabar.

MR. KEITH LUCAS, B.A., of Trinity College, Cambridge, has been nominated to occupy the university table at the laboratory of the Marine Biological Association at Plymouth.

DR. OLIVER LODGE, formerly professor of physics at University College and now the principal of Birmingham University, delivered the opening address to the medical students of University College, Liverpool, on October 12. At the close of the proceedings a bust of Dr. Lodge was unveiled by Professor W. A. Herdman.

THE death is announced of Dr. Vonkrafft, of the Geological Survey of India.

MR. ANDREW CARNEGIE has offered to provide libraries at San Juan, Porto Rico and Nashville, Tenn., each at a cost of \$100,000. He has also given £37,000 for libraries at Dundee.

MRS. BLACKSTONE, widow of T. B. Blackstone, has offered to give the city of Chicago a \$100,000 library building, to be conducted as a branch of the public library.

Dr. Frederick Peterson offers a prize of \$200 for the best original unpublished contribution to the pathology and treatment of epilepsy. Papers received will be submitted to a committee, consisting of three members of the New York Neurological Society, and the award will be made upon its recommendation at the annual meeting of the board of managers of the Craig Colony, October 14, 1902. Manuscripts should be sent to Dr. Frederick Peterson, 4 West Fiftieth street, New York City, on or before September 30, 1902. The successful essay becomes the property of the Craig Colony and will be published in its medical reports.

For a number of years archeological expeditions to Iceland and Greenland have been conducted at the expense of the Danish 'Carlsberger Funds.' The directors have now decided to defray the expenses of Dr. Kinde in making excavations on the Island of Rhodes,

especially in the neighborhood of the ancient Acropolis.

ARRANGEMENTS have been made at the Mill-port Marine Biological Station, Scotland, for the erection of a research laboratory and also of a private boarding house. The site for the new buildings has been promised by the Marquis of Bute, and a gentleman who prefers to remain anonymous has given £3,000 towards their erection.

THE German Society of Men of Science and Physicians will hold its meeting next year at Carlsbad under the presidency of Dr. Hans Chiari, professor of pathological anatomy at the German university at Prague.

The annual trip of the German Agricultural Society in 1903 will be made to the United States.

Foreign papers report the formation at Cape Town of a 'South African Association for the Advancement of Science,' to work as far as possible on the lines of the British Association. In July last a meeting was held to establish a congress of engineers, when an influential committee was appointed. The proposal gradually widened until at length it was found feasible to establish a local 'British Association,' and a meeting for that purpose was largely attended. Sir David Gill, the Astronomer Royal at the Cape Observatory, who presided, mentioned that in November last he had attended a meeting of the council of the British Association, at which a very strong desire was expressed to have a meeting of the British Association held in South Africa. He was sure, he said, that in the event of such a visit the hospitality of Cape Town and Kimberly and other centers would be quite equal to the strain which would be put upon it by the visit of distinguished men of science. Of course in the existing state of political affairs it was impossible to contemplate such a matter seriously, and they must leave the fuller consideration of the matter until the country was settled and they were in a position to exercise that hospitality. But if they founded some association of the kind now indicated, the year that the British Association came to South Africa they should naturally merge their meeting into that of the British Association, and their organization would naturally facilitate matters and aid them in making a successful meeting when the British Association came there. Their primary object would be to found an association as far as it was practically possible on the lines of the British Association. The formation of the association having been decided upon by formal vote, the title was discussed, 'South African' being carried by 31 votes against 19 for 'African.'

THE Spanish minister of education has ordered that hereafter all museums shall be open the year round free, and any one allowed to make copies of photographs. He also requested teachers to take their pupils frequently to the museums.

A REPORT of the committee of the metric system has been presented to the British Association of Chambers of Commerce. The committee has unanimously adopted the following resolutions: "(1) That, after considering various suggestions, this committee is unanimously of opinion that the chambers should unite in urging upon the government the compulsory adoption of the metrical system of weights and measures, leaving matters of detail to be considered later. (2) That the committee is unanimously of opinion that a British decimal system of coinage must be on the basis of retaining the sovereign, with the florin as a unit, divided into a hundred cents or farthings. (3) The committee recommends that there should be nickel coins of five and ten cents, and bronze coins of one, two and four cents or farthings."

THE greatest steamship of the time, the Celtic of the White Star Line, has made her 'maiden' passage across the Atlantic and back, and her first record-8 days, 9 hours, 46 minutes running time, excluding the time lost by fog, which happened to be in this case 15 hours. This is, for the present at least, the largest steamship in the world. The Oceanic of the same line is five and a half feet longer but of less beam and tonnage. The Celtic is 700 feet 'over all,' of 75 feet beam and 49 feet depth, measuring 20,880 tons. The Great Eastern, for a half century the largest ship on the lists of the fleets of the world, was 680 by 84 by 48 feet, registering, gross, 18,000 tons. The Celtic is the first ship to exceed that, at the time,

wonder of the world, largely the basis of the fame of Brunel and Russell. The total weight—the 'displacement',—of the new ship. at maximum computed draft, 36 feet 6 inches, would be nearly 38,000 tons, as compared with about 32,000 tons for the Great Eastern. The largest naval vessels are of about one-half this last weight. The Campania registers about 13,000 tons, the Kaiser Wilhelm der Grosse 17,000, the Deutschland 16,500 and the Oceanic 17,250. The engines are of the quadruple-expansion type, 33, 47.5, 68.5 and 98 inches diameter of cylinders and 5 feet piston-stroke. Steampressure is carried at 210 pounds per square inch by gauge, and is produced by 8 double. ended 'Scotch' boilers, each 15.5 by 19.5 feet. The two smokestacks are each 14 feet in diameter. The ship has capacity for 2,700 passengers or more and for 12,000 tons weight of merchandise. The cost of this ship was \$2,500, 000. The builders were Messrs. Harland and Wolff.

A REUTER telegram reports that the Liverpool School of Tropical Medicine has now completed the necessary arrangements for the dispatch of an expedition at once to the Gold Coast, and to the mining districts there. The school has secured the services as leader of this expedition of Dr. Charles Balfour Stewart, who will sail for West Africa this month. He will proceed first to Sierra Leone in order to study the methods now being employed there by Dr. Logan Taylor. After leaving Freetown, Dr. Stewart will proceed at once to Cape Coast Castle to attack the insanitary conditions there, as the mortality amongst the Europeans in that town is at present most serious. employ workmen for draining the ground and clearing the houses o broken water vessels and otherwise attacking the breeding-grounds of the mosquitoes. The expedition has been rendered possible owing to the generosity of a private individual who desires to remain anonymous. Anti-malarial operations will shortly be in full swing in Gambia, Sierra Leone, the Gold Coast and Lagos, the operations in the three first-named colonies being organized by and under the complete control of the Liverpool School of Tropical Medicine. Dr. Stewart received his professional education at Cambridge, the Liverpool Royal Infirmary and Guy's Hospital, London. After qualification, he studied specially at Vienna and Freiburg. He was then invited by the Secretary of State for India to proceed to India for plague work; and labored both up country and also as an assistant to M. Haffkine in the Imperial Research Laboratory at Bombay. He then returned to England and has been constantly engaged in the Thompson Yates Laboratory, Liverpool, on research and the preparation of plague prophylactic, by the request of the Secretary of State for War and the Agent-General of Cape Colony.

## UNIVERSITY AND EDUCATIONAL NEWS.

MR. T. JEFFERSON COOLIDGE, late Minister to France, has given a fund of \$50,000 to the Jefferson Physical Laboratory of Harvard University for physical research. The income is to be expended at the discretion of the director, Professor John Trowbridge. Among the terms of the gift is the following: The income of this fund shall be used primarily for laboratory expenses of original investigations by members of the laboratory staff; but the director, at his discretion, may award therefrom an honorarium, of not more than \$500 per annum, for the private use of any person who-although receiving no salary from the university-may wish to carry on original investigations under his direction at the Jefferson Physical Laboratory.

The General Electric Company has agreed to give \$12,500 for the establishment of a school of electricity at Schenectady, provided that an equal amount is secured from other sources. The school would be affiliated with Union College. It will be remembered that the New York legislature was asked last year to establish this school.

At the final meeting of the committee engaged in founding a fellowship at the New York University, in memory of the late Oswald Ottendorfer, held recently, plans were made for turning over the amount of subscriptions to the University. The treasurer, James Speyer, reported that the fund aggregated \$20,199.85.

Mr. George A. Armour has given \$2,500 a year for five years for the maintenance and de-

velopment of the classical seminary at Princeton University. The university is the residuary legatee of the estate of Dr. John Sayre of Missouri, \$15,000 of which is now available. It has also lately acquired, through the gift of an unnamed donor, the property of the late Professor Guyot.

Mr. Edward B. Page, of New York, has given to the Sheffield Scientific School of Yale University, \$6,000 to found scholarships.

On the occasion of the laying of the corner stone of the new medical building of the University of Michigan, Dean Vaughan announced that a few prominent medical alumni of the university had established a fellowship in connection with the medical department, to be known as the Corydon L. Ford Fellowship, in memory of the first professor of anatomy in the university.

PRESIDENT ANGELL, of Michigan University, announces that an instructor in forestry is soon to be appointed.

Professor W. D. Gibbs, of the Ohio State University, has been elected professor of agriculture and director of the experiment station at the New Hampshire College of Agriculture and the Mechanic Arts at Durham, N. H.

Professor Arthur W. Smith, who was at Tulane University last year, has been appointed professor of electricity and electrical engineering at the University of Mississippi.

Mr. Andrew Carnegie has accepted the Lord Rectorship of St. Andrew's University for the ensuing three years.

Dr. John Purser, for forty years professor of mathematics in the Belfast Queen's College, has retired.

Professor W. Somerville, having accepted post at the Board of Agriculture, will resign the chair of agriculture at Cambridge University at the end of the present term.

Professor Rüdorff, director of the Laboratory of Inorganic Chemistry in the Technical Institute of Berlin, has retired on account of his health.

PROFESSOR MAX WOLF, of Heidelberg, has declined the call to the professorship of astronomy at the university at Göttingen.