amounts are considered adequate for the acquisition of the minimum area required by the law. That acquisition but awaits the details of purchase, the local examination of titles and, in some cases, condemnation procedure where it is necessary. It would appear, therefore, that the establishment of a Great Smoky Mountain National Park, with the delivery of land titles on February 6, will pass into the final stages of actual accomplishment.

INTERNATIONAL EXPEDITION TO THE BAHAMAS UNDER THE AUSPICES OF PRINCETON UNIVERSITY

PLANS have been completed for an international expedition to the Bahamas under the auspices of Princeton University, from February 1 to April 15. The expedition is under the direction of Professor R. M. Field, of Princeton University, and is being supported by Mr. Hugh Matheson, of Miami, who is lending his yacht the *Marmion*, and with the cooperation of the following institutions:

The Percy Sladen Trust of London

- The Rouse Ball Fund of Trinity College, Cambridge
- Die Notgemeinschaft der Deutschen Wissenschaft
- The U. S. Coast and Geodetic Survey
- The American Museum of Natural History
- The Buffalo Society of Natural Sciences
- State of New Jersey Agricultural Experiment Station The International Summer School of Geology and Natural Resources

The subjects of research and the personnel are as follows:

- 1. Navigation: Mr. Hugh Matheson, Miami.
- 2. Gravity Determinations: Under the direction of Dr. William Bowie, of the U. S. Coast and Geodetic Survey. Ensign Joseph P. Lushene in charge of field work.
- 3. Marine Biology: Professor Ulric Dahlgren, department of biology, Princeton University. Dr. Roy W. Miner, curator of invertebrate zoology, American Museum of Natural History.
- 4. Bacteriology: Dr. S. A. Waksman, State of New Jersey Agricultural Experiment Station, Rutgers University. Dr. Werner Bavendamm, Technische Hochschule, Dresden.
- 5. Geology: Percy Sladen Trust Expedition to Andros Island. Mr. Maurice Black, fellow of Trinity College, Cambridge, and Commonwealth Fund fellow, department of geology, Princeton University.
- 6. Marine Sedimentation: Professor R. M. Field, department of geology, Princeton University, and research associate, Buffalo Society of Natural Sciences. Dr. Ernest Dixon, British Geological Survey.
- 7. Oceanography: Dr. Charles Fish, Buffalo Society of Natural Sciences.

The purpose of the expedition is to continue the study of the physical, chemical and biological conditions governing the character of the sediments in the region, as well as the effect which these sediments have upon the life and habits of the marine organisms.

The expedition is expected to yield new and interesting data concerning oceanographic and biologic problems, and it is hoped that the results obtained will supply information which will be of aid in interpreting certain geological problems, such as the origin of limestones and dolomites and the habitats of marine organisms in the ancient tropical seas. One of the fundamental geological problems in this region is the question of the origin of the islands, as well as the relation of their stability to the character of the sediments which mantle their surfaces.

BRITISH HONORS

Nature reports that the New Year Honors list of Great Britain contains the names of the following men of science and others associated with scientific work: Baronets: Sir Gregory Foster, who has retired from the post of provost of University College, London, and was recently vice-chancellor of the university; Sir Eustace Tennyson-D'Eyncourt, at one time director of naval construction, admiralty. K.C.M.G.: Lieutenant-Colonel Andrew Balfour, member of the Colonial Advisory Medical and Sanitary Committee and director of the London School of Hygiene and Tropical Medicine. Knights: Professor T. P. Nunn, principal of the London Day Training College and professor of education in the University of London; Mr. Archibald Page, chief engineer and manager of the Central Electricity Board and a past president of the Institute of Electrical Engineers; Mr. Alexander Rodger, inspector-general of forests, Government of India: Professor T. Zammit. curator of the museum, Malta. C.I.E.: Mr. B. C. Burt, Imperial Council of Agricultural Research, India; Mr. H. L. Newman, chief conservator of forests, Bombay; Mr. S. Walker, chief engineer and secretary for irrigation, North-West Frontier Province, India. C.B.E.: Professor J. S. S. Brame, professor of chemistry and metallurgy, Royal Naval College, Greenwich; Mr. G. E. S. Cubitt, lately conservator of forests, Straits Settlements and Federated Malay States; Captain A. T. A. Dobson, assistant secretary, Ministry of Agriculture and Fisheries. O.B.E.: Mr. Joseph Jones, formerly curator of the Botanic Gardens, Dominica; Mr. W. A. S. Lamborn, medical entomologist, Nyasaland Protectorate; Captain R. N. Liptrot, principal technical officer. Air Ministry; Mr. W. R. Mustoe, superintendent of horticultural operations; Delhi; Dr. E. S. Russell, director of fishery investigations, Ministry of Agriculture and Fisheries. *M.B.E.*: Mr. John Aikman, assistant, Royal Botanic Gardens, Kew; Mr. E. A. Bearder,

technical adviser, Dyestuffs Advisory Licensing Committee; Mr. A. A. Gomme, librarian, Patent Office, Board of Trade.

SCIENTIFIC NOTES AND NEWS

PROFESSOR GILBERT N. LEWIS, dean of the college of chemistry in the University of California, has been elected an honorary member of the Swedish Academy of Sciences.

DR. J. S. PLASKETT, director of the Dominion Astrophysical Observatory at Victoria, B. C., has been awarded the gold medal of the Royal Astronomical Society, London, "for his valuable observations of stellar radial velocities, and the important conclusions derived from them."

PROFESSOR WILLIAM H. BRAGG, Fullerian professor of chemistry at the Royal Institution, London, and Dr. Godfrey Harold Hardy, professor of geometry at the University of Oxford, have been elected members of the Prussian Academy of Sciences.

THE council of the British Institution of Electrical Engineers has made the ninth award of the Faraday Medal to Sir Ernest Rutherford, Cavendish professor of experimental physics and director of the Cavendish Laboratory at the University of Cambridge. The medal is awarded for notable scientific or industrial achievement in electrical engineering or for conspicuous service rendered to the advancement of electrical science, irrespective of the recipient's nationality.

M. CHARLES NICOLLE, head of the Pasteur Institute at Tunis, has been elected a member of the French Academy of Sciences. Dr. Nicolle was awarded a Nobel Prize in 1928. He discovered the bacillus of typhus and that of the "Mediterranean fever."

THE University of Edinburgh has conferred the doctorate of science on Professor R. S. Adamson for his studies in plant ecology and plant anatomy.

DR. WALTER B. CANNON, George Higginson professor of physiology at the Harvard Medical School, who is Harvard exchange professor at the Sorbonne, Paris, has been appointed Linacre lecturer for 1930 at the University of Cambridge.

PROFESSOR OTIS EVERETT RANDALL, professor of applied mathematics at Brown University, where he has taught since 1885, will retire in June, having reached the age limit of seventy years.

THE staff and students, including many former students, of the Osborn Zoological Laboratory at Yale University, on January 13 celebrated the sixtieth birthday of Dr. Ross G. Harrison, Sterling professor of biology and director of the laboratory. During the afternoon a reception for Dr. Harrison was held in the building, at which a handsome watch, appropriately inscribed, was presented to him on behalf of the staff and students by Professor W. R. Coe, senior member of the departmental faculty. Dr. S. R. Detwiler, professor of anatomy at Columbia University, one of Professor Harrison's early students, presented to him the current volume of the Journal of Experimental Zoology, entirely composed of contributions by Dr. Harrison's students and prefaced by his portrait. Later an informal dinner was held at the Faculty Club. In addition to congratulatory telegrams and letters from many individual biologists at home and abroad, Dr. Harrison received felicitations from the Statione Zoologica at Naples, the Kaiser-Wilhelm Institut für Biologie at Berlin and the Medical Faculty of the University of Bonn where he received the degree of M.D. thirty years ago. The University of Freiburg conferred upon him the honorary doctorate of philosophy.

THE Swedish Geographical Society has presented its medal to General Umberto Nobile, Italian commander of the *Italia* Polar Expedition of two years ago. General Nobile lectured before the society on the expedition and paid a tribute to Finn Malmgren, who lost his life on the ice north of Spitzbergen.

THE Geological Society of London has this year made the following awards of medals and funds: The Wollaston Medal to Professor A. C. Seward, master of Downing College, and professor of botany in the University of Cambridge, for his researches in stratigraphy and palaeobotany; the Murchison Medal to Mr. A. L. Hall, of the Geological Survey of South Africa, for his researches on the stratigraphy and economic geology of South Africa; a Lyell Medal to Mr. F. Chapman, paleontologist to the federal government of Australia, for his work in paleontology (especially on the Foraminifera), and for his researches on the Tertiary rocks of Australia; a second Lyell Medal to Mr. H. B. Maufe, director of the Geological Survey of Southern Rhodesia, for his work on the geology and mineral resources of that colony; the Wollaston Donation Fund to Mr. E. G. Radley, of H. M. Geological Survey, for his work on the chemical analysis of rocks and minerals; the Murchison Geological Fund to Mr. John Smith, of Dalry, for his contributions to the geology and paleontology of Western Scotland; the Lyell Geological Fund to Miss