vary, and discussing them is an actual advantage, because such discussion leads us to make other investigations and to undertake new experiments." Failure to observe this difference between fact and interpretation has been the cause of many needless and bitter personal controversies, and indeed it may affect seriously the relation between the students and their instructors. You will find that there are contradictions in the opinions and interpretations of instructors in different departments or even in the same department. These need not be a source of confusion, provided, as Claude Bernard says, we agree on the facts. There are professors who unintentionally perhaps impress their own opinions upon students with such authority that these opinions are regarded as unalterable facts. All of us must guard against this tendency, for nothing is more destructive to the freedom of thought, ingenuity and creative thinking of the student, the very qualities we are eager to encourage. The student must never feel that he will be penalized for expressing an honest well-founded contrary opinion in our midst. Let it also be said that the student must examine his own motives to be sure that they are not simply a desire to contradict, but an earnest seeking after the truth. In that spirit only can academic freedom and freedom of speech be kept alive in our universities.

SCIENTIFIC EVENTS

NEW FELLOWS OF THE ROYAL SOCIETY OF EDINBURGH

ACCORDING to a report in *Nature*, the following have been elected fellows of the Royal Society of Edinburgh: E. B. Ball, president of the Institution of Mechanical Engineers; J. Bowman, city water engineer, Edinburgh; B. S. Bramwell, advocate, London; J. Brough, lecturer in vertebrate zoology, University of Edinburgh; Dr. A. F. Buchan, teacher of mathematics, James Gillespie's School, Edinburgh; J. M. Caie, deputy secretary, Department of Agriculture for Scotland; J. Cameron, formerly head of the Pharmaceutical Department, Peiping Union Medical College; Professor J. W. Cook, department of chemistry, University of Glasgow; Dr. J. Coutts, lecturer in pharmaceutics and demonstrator in practical pharmacy, St. Bartholomew's Hospital Medical College, London; Satchidinanda Datta, veterinary research officer, Imperial Veterinary Research Institute, Calcutta; Dr. T. Elder Dickson, art master, George Watson's Ladies College, Edinburgh; Dr. A. T. J. Dollar, assistant in the department of geology, University of Glasgow; Dr. H. I. Drever, assistant in the department of geology, University of St. Andrews; W. McC. Harrowes, medical director, New Saughton Hall Private Mental Hospital, Polton, Midlothian; T. Hart, collector of the Trades House of Glasgow; Professor C. F. W. Illingworth, department of surgery, University of Glasgow; J. G. Kyd, registrar-general for Scotland; P. R. Laird, secretary to Department of Agriculture for Scotland; Dr. Robert McAdam, lecturer in mining and surveying, Heriot-Watt College, Edinburgh; Dr. J. A. Macdonald, lecturer in botany, University of St. Andrews; Dr. A. E. W. McLachlan, clinical medical officer, Newcastle General Hospital, Newcastle-upon-Tyne; Dr. A. MacNiven, physician superintendent, Royal Mental Hospital, Glasgow; Professor G. F. Marrian, department of chemistry in relation to medicine, University of Edinburgh; Dr. E. R. A. Merewether, H.M. medical inspector of factories, Birmingham; R. M. Neill, senior lecturer in zoology, University of Aberdeen; Dr. H. B. Nisbet, lecturer in chemistry, Heriot-Watt College, Edinburgh; J. S. C. Reid, solicitor-general for Scotland; H. Riley, founder and head master of Strathallan School, Forgandenny, Perthshire; J. Thomson, distiller, London; Dr. H. M. Traquair, president of the Royal College of Surgeons of Edinburgh, lecturer on diseases of the eye, University of Edinburgh.

THE DETROIT CENTER OF THE UNIVERSITY OF MICHIGAN

FINAL arrangements for the construction of a building to cost $1,500,000 in the art center group in Detroit that will serve as permanent headquarters for the Engineering Society of Detroit and the University of Michigan Extension Service have been made. A memorial to the public spirit and philanthropy of the late Horace H. Rackham and of Mary A. Rackham, it will be known as the Horace H. Rackham Educational Memorial, will combine professional, scientific and educational activities.

The building will be located on the south side of Farnsworth Avenue, facing the Detroit Institute of Arts and diagonally across from the Detroit Public Library. Construction will begin early in 1940.

The exterior of white limestone, with marble spandrels and simple ornamental carvings, will house three distinct units of the building. The central section will be an auditorium, seating 1,000 persons, which will be at the disposal of both the society and the university. It will be flanked on the east by a wing housing the Engineering Society and on the west by a wing devoted to the University's Extension Service. The entire memorial will be 404 feet in length and will vary in depth from 150 feet at the center to 65 feet at the ends.

Three floors are provided in the wing of the Engi-

neering Society. It will have approximately 45,000 square feet of floor space and has been carefully planned to provide facilities for scientific, professional and social activities of the society, and its affiliated societies. The university wing, of about 40,000 square feet floor space, will be devoted to classrooms for approximately 1,000 students and offices for the Extension Service and the Institute of Public and Social Administration of the university. It will house seminar rooms, special lecture rooms equipped for scientific demonstrations and a studio and control room to be used in radio broadcasting classes. The library will be housed in a second floor room over the entrance of the Memorial Auditorium. The new headquarters for the Extension Service will bring together in one central place the extensive educational program in Detroit of the university. The Extension Service offers between fifty and fifty-five courses each semester and enrolls approximately 2,500 each year in its extension courses. This work is now directed from offices on East Ferry Street, while the classes are held in various buildings all the way from the Statler Hotel to Northern High School.

PALEONTOLOGICAL EXPEDITION OF THE NATIONAL GEOGRAPHIC SOCIETY AND THE SOUTH DAKOTA STATE SCHOOL OF MINES

REMAINS of protoceras, titanothere and other New World types of rhinoceros—will be sought in the West next summer by a joint paleontological expedition of the National Geographic Society and the South Dakota School of Mines. According to the announcement of the plans of the expedition made by Dr. Gilbert Grosvenor, president of the society, the field work will be carried on in the Badlands of western South Dakota, an eroded region which lies between the Cheyenne and the White Rivers, southeast of Rapid City. Dr. Joseph P. Connolly, president of the School of Mines, will be in charge of research. He will be assisted by James D. Bump, curator of the museum of the school.

It is estimated that the animals whose bones the expedition hopes to find lived in the Badlands area, then a grass-covered region of rolling plains, about thirty million years ago. Through changes not entirely clear to geologists, large quantities of eroded materials and volcanic ash from an unknown source were deposited on the old grassy plains, covering skeletons of some of the creatures that inhabited them.

Erosion during the last ten thousand years or more, while creating the deeply carved terrain of the Badlands, has exposed some of the buried bones and has disclosed the region to be a rich treasure house for science. Specimens of many types of vertebrate animals have been "mined" there during the last three quarters of a century. But among these only a few complete skeletons of titanothere, protoceras and rhinoceros have been recovered. The chief aim of the expedition will be to bridge this gap in scientific knowledge, but it is expected that the bones of other animals will be collected also.

The protoceras as reconstructed was remotely related to deer and antelope. The male, about the height of a sheep, had six horns or knobs on his head, one pair of them far down on his slender muzzle. Other unusual features were a pair of long slender tusks, rare among cud-chewing animals, front feet with four toes, and hind feet with only two. No member of the protoceras family has been discovered outside of North America.

The titanothere was a sort of elephantine rhinoceros, the largest being as much as nine feet high at the shoulder. Buried in the same beds of rock were much smaller rhinoceros-like creatures whose skeletons also will be sought by the expedition. Both these types of animals had relatives in the Old World.

The South Dakota Badlands were relatively inaccessible until a decade ago. Within the past few years some of the most scenic and picturesque portions of the eroded area have been set aside by the United States Government as the Badlands National Monument. Through this reservation excellent automobile roads have been built and over them scores of thousands of tourists pass each summer. During the year 1939 visitors numbered 205,100, the greatest number to visit any National Monument west of the Mississippi River.

THE INSTITUTE OF FOOD TECHNOLOGISTS

THE first meeting of the Institute of Food Technologists will be held from June 17 to 19 at the Morrison Hotel, Chicago.

The program will consist of four three-hour sessions devoted to symposia on Food Engineering and on the Influence of Processing on Vitamin Content of Food supplemented by papers on food preservation, composition of foods, methods of analysis of foods and packaging of foods. The third day is to be given over to visiting of plants of the food manufacturing industry in Chicago. The chairman of the Program Committee is Dr. D. K. Tressler, New York State Agricultural Experiment Station, Geneva, N. Y. Plans for the meeting are being worked out by the newly organized Chicago Association of Food Technologists, of which Dr. E. H. Harvey, of Wilson and Company, is chairman of the Local Committee on Arrangements.

The institute was organized in Cambridge, Mass., last July at the close of the second conference on Food Technology, held under the auspices of the Massachusetts Institute of Technology. Its officers are: