

where a base will be established. The minesweeper, U. S. S. *Penguin*, which is carrying the party to Iloilo, has been assigned as station ship for the expedition, which is headed by Commander C. H. J. Keppeler, U. S. N. The party includes Paul Sollengerger, from the Naval Observatory; Lieutenant H. C. Kellers, medical corps, U. S. N., and Professor and Mrs. William A. Cogshall, of the University of Indiana. The base will probably be established on the grounds of the Philippines Railway Company, Iloilo, which has offered every assistance.

A PARTY of geologists and advanced students, under the leadership of Professor R. M. Field, of Princeton University, will make a six weeks' trip to the British Isles beginning July 14. The annual American train-tour of the Princeton summer school of geology and natural resources will begin June 27 and traverse Canada. A special Pullman car fitted for lectures, dining and sleeping will accommodate 23 students.

It is reported in the London *Times* that the preliminary arrangements in connection with the new expedition to the Antarctic, which will be under the leadership of Sir Douglas Mawson, are well advanced, and it is expected that the *Discovery* will sail in June. Captain J. K. Davis, director of investigation, Marine Department, Commonwealth Government, who will act as second-in-command of the expedition, will arrive in London at an early date, and will navigate the *Discovery* to Australia. Sir Douglas Mawson does not propose to sail in the vessel from London, but will join her in the Antipodes. It is probable that the expedition will set out from Hobart, Tasmania, towards the end of the year. Sir Douglas Mawson is reported to have stated that he was completing certain arrangements here and the remainder would be dealt with in Australia. There will be a scientific staff of ten, and the *Discovery's* crew will number twenty-six. He hoped to carry out oceanographical investigations, and a coast-line survey would be an important feature of the work.

THE New York Hospital and Lying-In Hospital have agreed to merge, the union to be effected in the near future. The merged hospitals, according to the announcement, will become an integral part of the project for the care of the sick, for teaching and research in the New York Hospital-Cornell Medical College Association. By agreement with the Lying-In Hospital, about \$8,000,000 in resources is made available for the association. This money will be used for the building and the work of a maternity hospital between Sixty-eighth Street and Seventieth Street, overlooking the East River. This will constitute an institute devoted to the care of women and infants, teaching and research. Mr. J. P. Morgan and the

Laura Spelman Rockefeller Memorial, through Mr. John D. Rockefeller, Jr., the society announced, have given \$2,000,000 each toward the new maternity hospital. George F. Baker and George F. Baker, Jr., gave \$1,000,000 each. The remaining \$2,000,000 available under the agreement will come from the present assets of Lying-In Hospital.

At a dinner of the board of trustees of the Research Fund of the American Otological Society, Inc., at the Academy of Medicine on March 12 plans were considered for raising \$2,500,000 for the study of deafness. Dr. Arthur B. Duel, who is chairman of the board of trustees of the Research Fund, stated that Edward S. Harkness has already pledged a gift of \$100,000 on condition that \$400,000 more be raised by July 1. Starling W. Childs has also pledged \$25,000 with the same provision.

THE bill making appropriations for the Department of Agriculture for the fiscal year 1930, which begins July 1 next, was approved by President Coolidge. Funds carried in this act, together with certain special appropriations which become available automatically at the beginning of each year, will make a total of \$156,995,030 available for 1930. Of this amount \$82,000,000 is for road building. Increases in the bill for the work of the department and for payments to states for other than road purposes total approximately \$4,700,000. Decreases carried in the bill, many of which are due to the omission of non-recurring items, amount to approximately \$1,000,000, making a net increase of about \$3,700,000.

A COOPERATIVE arrangement with the American Petroleum Institute and the Special Libraries Association has been made by the Department of Commerce, whereby the organizations named will assist the Bureau of Mines in the preparation of the monthly bibliography covering current articles, books and reports dealing with petroleum and allied substances. This monthly bibliography is distributed by the San Francisco field office of the Bureau of Mines to approximately 500 oil companies and others interested. Under this cooperative agreement trade journals will be abstracted by the various members of the Special Libraries Association and the material sent to the Bureau of Mines' bibliographer at the San Francisco petroleum field office for compiling and inclusion in the monthly bibliography.

UNIVERSITY AND EDUCATIONAL NOTES

It is announced that the University of Texas, under a compromise agreement in the district court, will re-

ceive approximately \$1,000,000 and the heirs of W. J. McDonald, Texas banker, the remainder of an estate valued at about \$1,350,000.

THE dean of the medical school of the University of Oregon, Dr. Richard B. Dillehunt, announces that the Rockefeller Foundation has given \$400,000 to the medical school, \$300,000 of which will be used to construct a new clinic building on Marquam Hill, Portland, and the remainder for equipment.

At Harvard University one or more scholarships in mining geology will be made possible by the gift of \$10,000 made in memory of Carlton Thayer Brodriek, '08, by his father and mother, Mr. and Mrs. Alfred H. Brodriek, of Newton Highlands.

FOR the promotion of scientific research by graduates three fourths of the freshman class at Lehigh University have relinquished chemical laboratory refunds in favor of the student chemical foundation. These refunds consist of balances remaining at the end of the year from deposits made at the beginning of each semester to cover the cost of material used in the laboratory. The total amount to be turned over, it is estimated, will be \$5,000 this year. Of this sum, \$1,500 will be used for two graduates in chemical engineering to carry on research next year and the balance will be used to build up a permanent fund of \$50,000.

DR. SAMUEL T. ARNOLD, associate professor of chemistry at Brown University, has been appointed acting dean during the absence of Dean Otis E. Randall, who has leave of absence.

PROFESSOR E. A. MILNE, of the University of Oxford, will give a course of lectures on "The Physics of the Stars" during the summer session of the University of Michigan.

PROFESSOR A. H. COMPTON, of the University of Chicago, has been appointed a member of the 1929 summer session staff in physics at Cornell University. He will give courses dealing with "X-Rays and Electrons."

DR. THEOPHILUS S. PAINTER, of the University of Texas, has been appointed professor of biology for the summer session of 1929 at Western Reserve University. Dr. Painter will give two series of lectures on different aspects of cytology.

ACCORDING to *Popular Astronomy*, Dr. Knut Emil Lundmark, of the Observatory of Upsala, has been appointed professor of astronomy in the university and director of the observatory at Lund as the successor to Professor C. V. L. Charlier, who recently retired. Professor H. Vogt, of the Königstuhl Observatory, Heidelberg, has been called as director of

the observatory and as professor of astronomy at the University of Jena.

DISCUSSION

WHAT IS THE TYPE OF A GENUS?

THE necessity for a concrete type specimen, which fixes the identity of a species with objective definiteness and can be referred to as absolutely authoritative in spite of eventual errors in description, is now almost universally recognized. The usefulness of the type specimen has become so clear that we may expect presently to regard it as indispensable, and provide accepted substitutes in cases where there were no original types or where these have been lost.

The need for the same objective typification in the case of genera is equally manifest, but the codification of rules is more needed in this case, and the best method of satisfying the need of types is not clear. I have been trying for a long time to locate objective types of the acceptable genera of *Polypodiaceae*, and have encountered difficulties in principle as well as in detail. What is agreed upon is that a genus must have a type species. In the easy, simple instances, this is sufficient; the genus has a type specimen in that of its type species. This is true even without any agreement that a genus needs a type specimen.

But a couple of examples will show the need of rules or laws, and of a court to interpret and apply them. Take the genus *Ptilopteris*, of Hance.¹ It was duly defined and explained in Hance's elegant Latin, concluding: "Duæ tantum hucusque mihi certe innotuerunt species: has inquam:

1. *Pt. Hancockii*, sp. nov. [which is then diagnosed, and]
2. *Pt. Maximowiczii* (= *Polypodium Baker!*)."

The second of these represents a genus, not previously recognized, so distinct that its affinity is not yet agreed upon, and in complete agreement with Hance's generic diagnosis. The first is a *Polystichum*, absolutely at home in that genus, and not even in full conformity with Hance's diagnosis of *Ptilopteris*. The rule that the type species of the genus shall be the first species listed under it (in the absence of another specified type), would reduce *Ptilopteris* to synonymy with *Polystichum* and leave *Pt. Maximowiczii* without a tenable generic name. The Kew suggestion, that "standard species" be adopted, will meet the difficulty in this case. *Pt. Maximowiczii* can be the standard species and its type specimen may be that of the genus. It is clear, from the fact that it agrees with his diagnosis while his first species does not, that this fern was the real subject of his generic diagnosis. But then, is the type specimen of *Ptilopteris* the one Hance used as the basis of his generic

¹ *Journal of Botany*, 22: 188, 1884.