

The refuge is designed as a feeding and resting place for wild fowl and other migratory birds and a natural home for fur animals. In addition, it is to be established for preservation of fishes and trees, wild flowers and other native plants.

Secretary Jardine has authority to purchase lands for the refuge, and administration is to be in charge of the Bureau of Biological Survey, which maintains many similar places owned by the government.

Jurisdiction of the Department of Agriculture will extend to wild birds, game, animals, fur-bearing animals, trees, wildflowers and plants where the Department of Commerce will have jurisdiction with respect to fishes, mussels and other aquatic life. The two departments are authorized to make suitable regulations governing hunting and fishing on the areas acquired.

The areas to be purchased are limited to bottom lands between the river and the bluffs, which rise precipitously on each side from 200 to 400 feet. The average price under the law can not exceed \$5 an acre. In this region the Mississippi flows through a valley averaging three to five miles in width. At times of high water a large part of this area is overflowed and not suitable for agriculture. There are many permanent sloughs and bayous, some of them navigable to boats of light draft.

To save fish in these cut-off bodies of water the Bureau of Fisheries sends agents each year to return them to the Mississippi or carry them to other localities for restocking depleted streams. Thus millions are rescued every year by federal and state agencies in one of the greatest spawning grounds in the country for such species as bass, pike and sunfish.

NEW PLAN OF STUDY FOR HONORS STUDENTS AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DR. DUGALD C. JACKSON, professor of electrical engineering, has sent to certain students at the Massachusetts Institute of Technology an invitation to become members of the honors group, a plan which was recommended by the corporation's visiting committee on electrical engineering and which the faculty authorized to be put into effect beginning with the next academic year.

The plan provides to the students in the group greater independence of study within the scope and ideals of the curriculum than is characteristic of the usual practice, and includes the following features:

The students in the group will be privileged to attend the class exercises of the regular subjects or not, as they individually please; but will be expected to successfully pass the usual term examinations, which should be readily accomplished as a result of the special reading proposed.

The laboratory work of each term, which now usually consists of a series of independent assignments, will consist of a general assignment relating to the principles of construction and the characteristics of the circuits, instruments and machinery treated during the term, with the time and method of work largely determined by the interest of each individual student, who will carry on under the advice and direction of the conference adviser. Students will be encouraged to carry on this work as far as practicable as individual investigations of the principles and applications under consideration, directed along paths of their own interests in the subject. The usual laboratory reports will be omitted, and the report for each student will be his notebook containing an outline of his plan for the term, the record of his various investigations and measurements, his comments and a brief summing up toward the end of the term of his accomplishments and progress during the term.

Freedom from existing restrictions of scheduled class hours and laboratory hours will afford greater opportunity for more reading and study related to the subjects under consideration. In order that the students' progress may be orderly and any difficulties encountered may be courageously faced and overcome a conference of an hour and a half each week will be held between the group and a member of the faculty learned in the subjects for the term, in which conferences the progress and the difficulties will be mutually discussed. Substitution of subjects in the curriculum will also be provided for to accommodate particular tastes and interests of students.

If the student becomes interested in a particular investigation, even as early as the junior year, that would develop into a suitable thesis project, this may be substituted for the larger part of the usual laboratory work.

For the purpose of stimulating the group to the scholarly thoughtfulness regarding their careers that is needful for distinguished leadership in creative electrical engineering, near the end of the senior year each student in the group will present to his conference advisers an oral statement of his progress and accomplishments during the junior and senior years, with comments on his grasp of the electrical engineering field and its collaterals.

THE NEW YORK INTER-SECTIONAL MEETING OF THE AMERICAN CHEMICAL SOCIETY

AN inter-sectional meeting of the American Chemical Society will be held in New York City from September 29 to October 1. All meetings will be held in Rumford Hall, the Chemists' Club, 52 East 41st Street, New York, at 10 A. M. unless otherwise noted. The following program will be presented:

Symposium on Motor Fuel and Oil Conservation. Dr. C. O. Johns, chairman.

September 29.—“Petroleum aspects of oil conservation”: K. G. Mackenzie, consulting chemist, The Texas Company.

September 30.—“Fermentation industries and motor

fuel": Milton C. Whitaker, president of the U. S. Industrial Alcohol Co. "Complete utilization of coal and motor fuel:" A. C. Fieldner, superintendent, Pittsburgh station, U. S. Bureau of Mines.

October 1.—"Motor design and fuel conservation": C. F. Kettering, president of the General Motors Research Corporation.

Fourth Chemical Industry Banquet.

October 1, at 8:00 P. M., banquet to take place at the Hotel Roosevelt. The speakers will be Dr. Chas. H. Herty, president of the Synthetic Chemical Manufacturers' Association, *toastmaster*; Honorable James E. Wadsworth, U. S. Senator from New York, and others to be announced.

Symposium on Artificial Silk.

October 2.—"The development of the artificial silk industry": M. G. Luft, technical director of the Industrial Fiber Company.

Informal Supper and Smoker.

October 2, at 7:00 P. M., informal supper and smoker to be held at the men's faculty club of Columbia University. Dr. Alexander Findlay, of the University of Aberdeen, will speak on "The appeal of science to the community."

THE SCOPES SCHOLARSHIP FUND

APPROXIMATELY one third of the \$5,000 fund being raised by the scientists of the country to further the graduate training of John T. Scopes, defendant in the Dayton evolution trial, has now been collected. Thus far, non-scientists have surpassed scientists, both in numbers interested and in the size of individual contributions; but this was expected, since most scientific men are away from their usual addresses during the summer. With the return of college and university faculties, the response of the profession most interested in the freedom of teaching will become more complete, and the balance of the fund will probably be quickly gathered. A complete list of contributors will be published.

Mr. Scopes has signified his intention to begin his graduate work in geology at the University of Chicago at the opening of the fall term. His thanks, and the thanks of the scholarship committee, are extended to all who by contributions and personal effort have made this recognition of his services to science possible.

FRANK THONE,
Treasurer

SCIENCE SERVICE,
WASHINGTON, D. C.

SCIENTIFIC NOTES AND NEWS

THE date of the Oxford meeting of the British Association for the Advancement of Science next year, at which the Prince of Wales will be president, is to be from August 4 to 11. The meeting in 1927 is to be held in Leeds. Vice-presidents appointed for the Oxford meeting include Sir Charles Sherrington, Dr. Gilbert C. Bourne, Professor E. B. Poulton, Sir Arthur Evans and Professor H. H. Turner. New members of the council of the association are: Professor A. L. Bowley, Dr. H. H. Dale, Sir Richard Gregory, Professor T. P. Nunn and Professor A. O. Rankine.

PROFESSOR GEORGE C. COMSTOCK, of Beloit, Wis., formerly director of the Washburn Observatory of the University of Wisconsin, has been elected president of the American Astronomical Society to succeed Dr. W. W. Campbell, president of the University of California and director of the Lick Observatory. Professor S. A. Mitchell, of the Leander McCormick Observatory of the University of Virginia, was elected vice-president, and Professor Joel Stebbins, of the University of Wisconsin, and Professor Benjamin Boss, of the Dudley Observatory at Albany, N. Y., were reelected secretary and treasurer. Professor H. C. Wilson, of Carleton College, and Dr. W. H. Wright, of the Lick Observatory, were elected members of the council.

THE committee appointed by Secretary Hoover to consider questions of policy and reorganization in connection with the transfer of the Bureau of Mines from the Department of the Interior to the Department of Commerce consist of the following: J. V. W. Reynnders, president of the American Institute of Mining and Metallurgical Engineers, New York, *Chairman*; C. P. White, chief of the Coal Division of the Bureau of Foreign and Domestic Commerce, Department of Commerce, Washington, *Secretary*; H. Foster Bain, ex-director of the bureau, New York; J. G. Bradley, ex-president of the National Coal Association, Dundon, West Virginia; L. S. Cates, president of the American Mining Congress, Salt Lake City; D. M. Folsom, vice-president of the American Petroleum Institute, San Francisco; Phil Murray, vice-president of the United Mine Workers of America, Pittsburgh.

DR. THEOBALD SMITH, director of the department of animal pathology of the Rockefeller Institute, has been nominated president of the International Anti-Tuberculosis Union. At the recent Geneva meeting it was decided that the next international conference should be held at Washington, from September 30 to October 2, 1926.