department, conceived before the war, formed part of the plans of the development commissioners. After the war the plans were reconsidered, but shortage of money prevented development of the work on a large scale. In 1920 Dr. F. A. E. Crew, who was an assistant in the department of zoology of the university, was asked by Sir Edward Sharpey-Schafer, then chairman of the joint committee, to take charge of the embryo department, and a few rooms in the Old Infirmary buildings were devoted to its work. Here some sound scientific work was done. Studies on wool began in 1923, and studies on pigs in 1927, other subjects of agricultural importance being taken up later. In 1928, as the result of a gift of £30,000 from the International Education Board and of £10,000 from Lord Woolavington, the department was reorganized, and Dr. Crew was appointed to the newly founded chair of animal genetics. The buildings which have just been opened were then started. Their purpose is to provide facilities for work of a purely scientific nature which is expected to have an important effect upon agriculture in about fifteen or twenty years' time. At present inquiries are being undertaken into the inheritance of milk yield in cows, and into the ideal type of bacon-yielding pig.

## THE GIANNINI FOUNDATION FOR AGRI-CULTURAL ECONOMICS AT THE UNI-VERSITY OF CALIFORNIA

GIANNINI HALL, the gift of A. P. Giannini, built primarily to house the Giannini Foundation for Agricultural Economics, has been completed and is ready for occupancy by various divisions of the University of California College of Agriculture. At the present time, the Giannini Foundation will not require all the space provided by the four floors of the structure, and the college administrative offices, agricultural, extension, forestry and agricultural economics, will be housed there.

The building cost \$500,000, and is the third of the agricultural group on the Berkeley campus. It is, in floor plan and shape, practically a duplication of Hilgard Hall. The building is 280 feet in length, 64 feet through the center, and the wings are 63 feet in width. In addition to university activities, cooperative offices such as the California Farm Bureau Federation, United States Forestry Experiment Station and the National Park Service will be housed in the building.

The director is Professor C. B. Hutchison, formerly director for Europe of the division of agricultural education of the International Education Board. Members of the staff in addition to Dr. Howard Ross Tolley, formerly chief of the bureau of agricultural economics for the U. S. Department of Agriculture, now professor of agricultural economics and assistant director of the foundation, include Dr. George M. Peterson, formerly of the agricultural economics staff of the U. S. Treasury Department, and Dr. J. M. Tinley, of the Department of Agriculture of the Union of South Africa. In September Professor Leland Spencer, of Cornell University, will assist the foundation in a special six-months' study of the milk surplus problem on which the local station is now working.

The station will attempt to put California agriculture and horticulture as a whole on a business basis, with the grower receiving the monetary return that his effort will produce. Through the Giannini Foundation, according to the announcement, it is expected that "the state will be in a position to take care of every phase of agriculture from the moment the farmer or grower starts in search of a suitable piece of land until his crops are placed on the tables of the ultimate consumers throughout the world."

## STATE LANDS AND WILD LIFE OF WISCONSIN

THE development and utilization of the land resources of Wisconsin to the end of giving each man, woman and child an environment for a life pattern containing all the attributes of growth, beauty and constructive living is the dominant purpose of the Wisconsin Land Inventory program, according to John S. Bordner, who is in charge of the inventory and who gave an account of the project at a recent meeting of the Wisconsin Academy of Sciences, Arts and Letters.

Those areas least occupied for agriculture and already being zoned for other uses are being first evaluated, in enumerating some of the things done to coordinate these various factors and to aid in the administration of land for diverse uses. The depth of lakes, the nature of their water, glacial action, sources of ground water, geographical distribution of plants, soil genetics and the trend in forest succession are being taken into account.

Through these and many other studies it is possible to show how many acres there are which have worthwhile timber growing on them and how many have worthless brush or are sodded over with prairie grasses, how much swamp there is which will produce timber and how much is worthless for anything except to grow Christmas trees for the children of Wisconsin or to continue as a habitat of rare and beautiful plants.

We also have one crew of two men determining the age and rate of growth of timber of different kinds and on different soils. From this study, it is possible to calculate just what each kind of forest will produce annually, and to make a comparison of the yield and value of timber with growth. The distribution of wild life and the nature of their habitat are also mapped and tabulated in the same census.

The best land for private ownership, in growing timber and for summer homes, the areas adapted for use as parks, forest preserves, game preserves, boys' and girls' camps, or for whatever purpose the state may use them, are delineated so that they may be entered for the purpose of constructive use and not in a chaotic manner as land was entered in the pioneer days.

Throughout his address, Mr. Bordner emphasized the necessity of a life pattern that is not limited to the bounds of a man-made environment.

We are concerned, therefore, with the evaluation of land for diverse uses, to which land can be and should be put by our present and future population in Wisconsin. The evaluation of land for agricultural and forest, industrial and urban use is vital, but there are other uses just as vital, if our civilization is to reach beyond the immediate future.

## THE FIFTH INTERNATIONAL BOTANICAL CONGRESS

THE Fifth International Botanical Congress meets in Cambridge from August 16 to 23 under the presidency of Professor A. C. Seward, of the University of Cambridge. The honorary treasurer is Dr. A. B. Rendle, British Museum (Natural History), and Mr. F. T. Brooks, Botany School, Cambridge, and Dr. T. F. Chipp, Royal Botanic Gardens, Kew, are honorary secretaries.

According to the preliminary program, vice-presidents of the congress have been elected as follows:

Professor L. H. Bailey (Ithaca), Professor F. O. Bower (emeritus professor, Glasgow), Dr. J. I. Briquet (Geneva), Professor L. Buscalioni (Bologna), Professor R. H. Chodat (Geneva), Dr. L. Cockayne (Wellington, New Zealand), Professor P. A. Dangeard (Paris), Professor F. E. W. Elfving (Helsingfors), Professor H. G. A. Engler (Berlin-Dahlem), Professor Boris Fedtschenko (Leningrad), Professor Carl von Goebel (Munich), Professor V. Grégoire (Louvain), Professor R. A. Harper (New York), Professor B. Hayata (Tokyo), Professor J. Holmboe (Oslo), Professor H. O. Juel (Upsala), the President of the Linnean Society (London), Professor L. Mangin (Paris), Dr. E. D. Merrill (New York), Dr. S. G. Navashin (Moscow), Professor B. Němec (Prague), Sir David Prain (formerly director, Royal Botanic Gardens, Kew), Professor Christen Raunkiär (Copenhagen), the President of the Royal Horticultural Society (London), Professor C. Schröter (Zurich), Professor Hugo de Vries (Lunteren, Holland), Professor F. A. F. C. Went (Utrecht), Professor R. Wettstein-Westersheim (Vienna).

The presidents and vice-presidents of the sectional programs are as follows:

Switzerland), Professor H. R. Dean (Cambridge), Professor Orla Jensen (Copenhagen), Professor J. C. G. Ledingham (London), Dr. S. A. Waksman (New Brunswick, New Jersey).

Phytogeography and Ecology—President, Professor H. C. Cowles, University of Chicago. Vice-presidents, Professor L. Diels (Berlin-Dahlem), Professor K. Domin (Prague), Professor C. E. H. Ostenfeld (Copenhagen), Professor Pavillard (Montpellier), Dr. Ruebel (Zurich), Professor C. Skottsberg (Gothenburg), Professor W. Szafer (Cracow), Professor A. G. Tansley (Oxford).

Genetics and Cytology—President, Professor O. Rosenberg, Botanical Institute, Stockholm. Vice-presidents, Professor E. Baur (Müncheberg), Dr. A. F. Blakeslee (Cold Spring Harbor), Professor V. Grégoire (Louvain), Sir Daniel Hall (Merton, London), Professor H. Kihara (Kyoto), Professor B. Němec (Prague), Miss E. R. Saunders (Cambridge), Professor N. I. Vavilov (Leningrad), Professor O. Winge (Copenhagen).

Morphology (including Anatomy)—President, Professor J. C. Schoute, Groningen, Holland. Vice-presidents, Dr. A. Arber (Cambridge), Professor L. Buscalioni (Bologna), Professor C. J. Chamberlain (Chicago), Professor F. E. Fritch (London), Professor C. M. H. Glück (Heidelberg), Professor E. Küster (Giessen), Professor W. H. Lang (Manchester), Professor N. E. Svedelius (Upsala).

Mycology and Plant Pathology—President, Professor L. R. Jones, University of Wisconsin. Vice-presidents, Dr. O. Appel (Berlin-Dahlem), Professor A. H. R. Buller (Winnipeg), Dr. E. J. Butler (Kew), Dr. A. Jaczewski (Leningrad), Dr. R. Maire (Algiers).

Plant Physiology—President, Dr. F. F. Blackmann, Botany School, Cambridge. Vice-presidents, Dr. W. L. Balls (Cairo), Professor P. Boysen Jensen (Copenhagen), Professor V. H. Blackman (London), Professor E. Demoussy (Paris), Professor H. H. Dixon (Dublin), Professor L. Jost (Heidelberg), Professor M. Korczewski (Warsaw), Professor Lepeschkin (Tucson), Professor B. E. Livingston (Baltimore), Professor F. E. Lloyd (Montreal), Professor H. Lundegårdh (Stockholm), Professor N. Maximov (Leningrad), Professor W. J. V. Osterhout (New York), Professor W. Ruhland (Leipzig), Professor F. A. F. C. Went (Utrecht).

Paleobotany—President, Dr. D. H. Scott, East Oakley House, Basingstoke, England. Vice-presidents, Professor E. W. Berry (Baltimore), Professor P. Bertrand (Lille), Professor W. Gothan (Berlin), Professor T. G. Halle (Stockholm), Dr. W. J. Jongmans (Heerlen), Professor Kraüsel (Frankfurt), Professor A. Renier (Brussels), Professor B. Sahni (Lucknow), Dr. G. R. Wieland (New Haven).

Taxonomy and Nomenclature—President, Professor Dr. L. Diels, Botanischer Garten und Botanisches Museum, Berlin-Dahlem. Vice-presidents, Dr. N. L. Brit-