

A touching appeal for the cause of microbiologic research was recently made by Dr. Charles Nicolle, director of the Pasteur Institute of Tunis, in a letter published in the *Temps*. He had just completed a stay of two months in France, and he returned appalled at the conditions which he found. The country which has produced Pasteur, Duclaux, Laveran and Roux, to mention only a few of the more illustrious scientists, and which received Metchnikoff with open arms, without the least compunction is permitting the decline of a science that has given France a large part of her past glory and from which she has always derived the first benefits.

Nicolle admits that it would be unfair to demand that the state support the laboratories, especially at the present time. However, he thinks that it is not the teaching laboratories from which we should expect to see great discoveries come forth: he who teaches is an erudite, while the mentality of the research worker is entirely different, and it is through other than teaching institutions that all real progress in microbiology must come. The typical institution of this kind in France and the one most widely known is the Pasteur Institute of Paris, the parent establishment whose offspring may be found in France, the colonies and abroad. The Pasteur Institute is a private establishment and does not serve as a teaching medium. The members of its staff devote all their efforts to scientific investigations, and in the thirty-five years of their endeavors they have shown marked ability. The institute derives its income from the sale of biologic products and from donations, and to-day neither of these sources furnishes ample means. Not having the inexhaustible resources of the government back of it, it is now merely vegetating, and it is only by a miracle that more can be accomplished.

Nicolle, therefore, addresses to the public an appeal for support of the microbiologic laboratories, pointing out that the matter should be of special interest to the farmers, for instance, for it makes possible a continuation of the researches on apthous fever, a disease that has been responsible for the loss of millions and constitutes a permanent menace to agriculture. On the other hand, Nicolle calls attention to the difficulty of inducing young men to enter the laboratories, for the small budgets make a career in a laboratory anything but profitable.

THE BRITISH MINISTRY OF AGRICULTURE

Nature states that changes are announced at the British Ministry of Agriculture, the effect

of which is the promotion of Mr. F. C. L. Floud to be permanent secretary and the liberation of Sir Daniel Hall from office work so that he will be able to keep in close personal touch with agricultural developments and devote his whole time to the organization of agricultural education and research. The scheme now in operation comprises four essential parts: (1) Research institutions, where knowledge is gained and agricultural science systematically developed and put into such form that teachers and experts can use it. At first this work was distributed among a number of university departments, but of recent years there has been a tendency to concentrate it at a few institutions owing to the necessity for bringing individual workers into closer personal contact with each other and with the large-scale problems of the farmer. (2) Agricultural colleges, where experts and large farmers will be trained, receiving a three years' course of instruction of university character. Most of these colleges are associated with universities which award degrees in agriculture; for students who do not wish to take degrees there is a diploma course requiring a high standard of technical work. (3) Farm institutes for small farmers and farm-workers who can not spare three years for college, but have some practical knowledge and are unable or unwilling to go through the ordinary college course. These institutes aim at giving sound courses of instruction on soil, manure, crops, animal husbandry, etc., but it is usually presumed that the student will take up farming in the area served by the institution, and for which the instruction is specially appropriate. (4) Advisory officers. In each county arrangements are made whereby farmers, small-holders, and others may consult the agricultural expert appointed by the county authority in regard to any difficulties they may meet with in their work. The expert is in a position somewhat similar to that of the general medical practitioner, and usually finds that he can deal with a large number of the cases presented to him. He is, however, in touch with the colleges, research institutions, etc.,

and can always obtain expert advice in any particular problem of special difficulty.

COLLECTION OF BIRDS FOR THE CALIFORNIA ACADEMY OF SCIENCES

ANOTHER well-known ornithological collection has been added to the rapidly increasing collections in the Museum of the California Academy of Sciences, San Francisco, California—the W. Otto Emerson collection.

Mr. Emerson began his bird studies in California some forty years ago, at that time laying the foundation of one of the most complete local collections of birds assembled in this state. His studies have been maintained in his spare time to the present date, and the results of his bird studies and observations are apparent in his notes and carefully selected series of specimens of local species. As Mr. Emerson has lived at Hayward, Alameda county, California, practically all of this period, his collection and notes have especial value from the standpoint of local occurrences, distribution, changes, etc.

In this collection are some most useful series of ducks in the first stage of juvenile plumage, carefully identified, which, added to such material as is already in the academy collection, will be of much value for comparisons, and the study of plumage. Besides the series of birds of especial local value, there are a good series of warblers from various parts of the United States, and some rare records from California in the line of warblers, and some original record specimens for the state of several species of sparrows, etc.

The academy suffered the loss of its very valuable collection of birds in the fire of 1906, and, while the series of sea and shore birds has been more than replaced, the land birds have had but little effort expended upon them. The addition of the Emerson and Mailliard collections, which consist principally of land birds, has very materially assisted in bringing the academy collection nearer to its old basis.

In addition to the collection of bird skins, some valuable manuscripts of Dr. James G. Cooper, such as those of "The Ornithology of California, Land Birds, 1870," and "The Birds of Washington Territory, 1860-65," to-

gether with some of Dr. Cooper's note books, dating back to 1853, have accompanied the collection.

THE GEOLOGICAL SOCIETY OF AMERICA

THE thirty-third annual meeting of the Geological Society of America will be held Tuesday to Thursday, December 28 to 30, at Chicago by invitation of the University of Chicago and in affiliation with the American Association for the Advancement of Science. The scientific sessions will be held in Rosenwald Hall on the university campus.

The address of the retiring president, Dr. I. C. White, will be delivered in the Reynolds Club building at 8 o'clock p.m., Tuesday, December 28, 1920. The annual subscription smoker will be held at the Reynolds Club at the conclusion of President White's address. Tickets, \$1.00 each. The annual subscription dinner will be held at the Chicago Beach Hotel, 51st Street and Lake Michigan, Wednesday evening, December 29, at 7 o'clock. Hotel headquarters will be established at the Chicago Beach Hotel.

The Paleontological Society will hold its twelfth annual meeting at Chicago in conjunction with the Geological Society of America. Full information regarding this meeting may be obtained, as usual, from the society's secretary, Dr. R. S. Bassler, U. S. National Museum, Washington, D. C.

The Mineralogical Society of America will hold its second annual meeting at Chicago in conjunction with the Geological Society of America. Full information regarding this meeting may be obtained from the society's secretary, Mr. H. P. Whitlock, American Museum of Natural History, New York City.

The Society of Economic Geologists will hold its initial meeting at Chicago in conjunction with the Geological Society of America. For further information regarding this meeting, address Professor J. Volney Lewis, secretary, New Brunswick, N. J.

EDMUND OTIS HOVEY,
Secretary

AMERICAN MUSEUM OF NATURAL HISTORY,
NEW YORK,