studies on their reaction to ultra-violet patterns, but the recording of new forms he preferred to hand on to others. Under his curatorship, the insect and spider collections of the American Museum became one of the most important in the world, numbering almost two million specimens.

Probably his best known "expedition" was to his own back yard and its immediate surroundings near his suburban home in Ramsey, New Jersey. The record of this "expedition" is contained in "A Lot of Insects" written with his characteristic humor and his ability to open up problems of insect life to the lay student as well as to the professional entomologist.

Dr. Lutz's contributions to ecology are numerous and varied. In addition to the reports on his ingenious and novel experiments on insect sounds and visual reactions, he published papers on insect adaptations, spider webs, non-selective characters, diurnal rhythm, insects of thermal waters, humidity in relation to insect physiology, galls, and caddis-worm case building. In his early years he became skeptical of such remarkable cases of recorded adaptation as mimicry of butterflies and defensive capacity of soldier termites, and this skepticism is again apparent in his most recent book.

In addition to improvising and directing the exhibits of insects at the American Museum, Dr. Lutz became interested in 1925 in the exhibition of living animals and plants by means of labelled nature trails and the success of this form of nature education has spread widely. His work in these fields of interest again exhibits his characteristic originality and ingenuity. He always did his best to give information concerning insects to innumerable visitors to the American Museum, and his "Field Book of Insects" was in reality an attempt to answer the common questions about insects asked by the general public.

Numerous scientific honors were bestowed upon Dr. Lutz during the course of his life. He was a member of the American Society of Zoologists and the American Society of Naturalists, he was starred in the second edition of American Men of Science, he was a fellow of the Entomological Society of America and the New York Academy of Sciences, he received the A. Cressy Morrison Prize of the New York Academy of Sciences in 1923, and he was president of the Entomological Society of America in 1927.

In 1904 he was married to Martha Brobson, who survives him together with four children, Frank B. Lutz, Anna Lutz, Ensign Laura Lutz, of the WAVES, and Mrs. Boyd Schurman. It was a pleasure to be entertained in the Lutz home in the nineteen-twenties when the four children were growing up. Both Dr. and Mrs. Lutz joined in the children's games, and any visitor likewise found himself involved. Dr. Lutz, naturally of a nervous disposition, was endlessly patient with the most trivial questions from the children. A genuinely important bit of insect research would be laid aside while a fourth-grade arithmetic problem was so clarified that I am sure many a public school teacher in Ramsey must have received, at third hand, some echo from the Pearson Laboratory.

The bare outline of some of the achievements of his life fails to convey the essence of Dr. Lutz's colorful personality and geniality. His enjoyment of life may be detected in his books which reflect his interest in the unusual as well as the usual. His rich sense of humor was always present in his personal relations as well as in his writings, whether for a professional or lay reader. Possibly his character was best exhibited in his relations to his non-professional colleagues. He was always interested in the amateur naturalist and enjoyed the company of those who made biological studies a hobby rather than a duty. Those who associated with him for years in the New York Entomological Society meetings will understand these qualities of congenial friendliness which are hard to set forth in words.

His own anecdotes were delightful and I am sure he would not mind having one told about him. I attended a meeting of the New York Entomological Society, I believe in 1920, when a speaker was engaged in giving a rather lengthy description of taxonomic characters of a certain group of insects. Dr. Lutz was sitting in the rear of the room and soon was heard to say "Oh Lord!" quite audibly. The speaker said, "In view of the sounds of protest from Dr. Lutz, I shall try to hurry through these descriptions," whereupon Dr. Lutz rejoined, "Go right ahead! At the next meeting I intend to read a check-list of the bees of North America."

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RECENT DEATHS

DR. LEROY S. PALMER, professor of agricultural biochemistry and chief of the division of the department of agriculture of the University of Minnesota, died on March 8 at the age of fifty-six years.

DR. FRANCIS J. BROGAN, instructor in chemistry at Hunter College, New York City, died on March 13 at the age of forty-four years.

DR. GEORGE HUME SMITH, of Indianapolis, Ind., recently professor of mathematics at Butler University, in the past connected with the departments of botany of the University of Illinois and the University of Missouri, and with *Biological Abstracts,* died on February 7 at the age of forty-seven years.

DR. HENRY ANDREW BUEHLER, geologist and di-

rector of the Missouri State Bureau of Geology and Mines at Rolla, died on March 14 in his sixty-eighth year.

SIR DAVID PRAIN, from 1905 to 1922 director of the Royal Botanical Gardens at Kew, died on March 17 at the age of eighty-six years.

SCIENTIFIC EVENTS

THE ALABAMA RESEARCH INSTITUTE

THE Alabama Research Institute was organized as the result of a year's study by a committee of Alabama citizens appointed in 1940 by the Alabama State Chamber of Commerce. Benjamin Russell, the chairman, submitted the report of the committee to the Chamber of Commerce on October 9, 1941. This report concluded:

> That Alabama could no longer afford to sit idly by and permit its vast variety of materials to remain in their present unutilized and unprofitable condition; but instead that Alabama should through scientific research do that which is necessary to bring these materials into profitable use for the comfort and enrichment of the people of our state, as so many other states in our Union are now doing.
>
> Your committee therefore, after unanimously reaching the conclusion that here in Alabama we should have an organization primarily engaged in research work, has drafted a constitution and by-laws for such an agency and adopted as its name Alabama Research Institute.
>
> Alabama Research Institute, in addition to its regular function as a research organization, will act as a coordinating agency in research undertakings, with the University of Alabama, Alabama Polytechnic Institute and other state institutions, and private and corporate organizations in Alabama, covering a broad field as is provided in its constitution. . . .
>
> For the general advancement of our state the Alabama Research Institute needs, and your committee believes will have, the active support of the people of Alabama.

Shortly afterwards the institute was organized as a non-profit corporation.

As now planned, the organization will function in a manner not unlike that of other successful research institutions of similar character, several of which were originally organized and endowed by a few individuals who felt that the field of research should be extended or enlarged. The present approach is on that principle—except that many individuals and business concerns are invited to supply the capital. It is intended that there shall be available within the state a well-equipped laboratory, a comprehensive technical library and scientific personnel for general research purposes.

Initially the institute will be financed almost wholly from subscriptions from business and from individuals. These subscriptions are to be used solely for the purpose of implementing the institute as a going business concern, for the introduction of certain researches on Alabama raw materials, to employ a competent research director and staff, to buy equipment, apparatus and supplies, to obtain and accumulate a technical library, to pay rent for a place for housing the institute and for general overhead and administrative expense. After it has been in operation for a few years, it is hoped that it will be self-sustaining from fees paid by private industry for special research programs and from royalties and profits from patents and discoveries developed by the institute from research in its own behalf.

THE ROCKEFELLER FOUNDATION

A REVIEW of the work of the Rockefeller Foundation for 1943 is given in the annual report of Dr. Raymond B. Fosdick, president of the foundation, which has just been issued. During 1943 the appropriations amounted to $7,760,186. The income from investments during the year was $8,079,164. The appropriations were distributed for the most part in six major fields, roughly as follows:

Public health	$2,450,000
Medical sciences	1,529,000
Natural sciences	599,000
Social sciences	1,068,000
Humanities	1,055,000
Program in China	108,000

Of the money appropriated during the year, 69 per cent. was for work in the United States and 31 per cent. for work in other countries.

In discussing a report from its representatives in Rio de Janeiro that gambiae mosquitoes, some of them alive, had been found in planes coming from Accra and Dakar in Africa to Natal and that five live gambiae had been discovered in dwellings near the Natal airport, the report points out that though the situation is now in hand, it poses a problem of larger significance which can not be evaded.

> Around the ports of Africa and deep within the hinterland lie the breeding centers of the gambiae. The safety of the Western Hemisphere, which is now within a few hours' flight across a narrow ocean, can no longer be left to the uncertainties of a flit-gun campaign. Modern airplane travel has made old methods and ideas of quarantine completely obsolete. If the Americas are adequately to be protected, the breeding places of gambiae, wherever in Africa or elsewhere they may be found, must be eradicated. The campaign must be carried to the sources of infestation. It can no longer be defensive; it must be offensive.
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> But the problem, of course, is far broader than gambiae.