

At temperatures below 85 degrees there was very little response if any.

A comparatively small number of the mosquitoes reacted positively to heat at any one time; thus with 300 mosquitoes in the cage perhaps not more than fifteen or twenty would be attempting to feed at the height of the reaction. Whether the same individuals were concerned in each of a series of such responses or whether various individuals at different times took part, was not determined.

In nearly all of these experiments, which were made in an open insectary, no attempt was made to eliminate the odor of the observer but in some tests made in a closed room in an air-tight apparatus the mosquitoes responded in the usual manner when air was drawn from outdoors through a long tube. It is interesting to note, however, that when the breath was bubbled through the water instead of the usual current of air a decided increase of interest on the part of the mosquitoes was manifest. The admixture of various amounts of carbon dioxide with the air stream did not increase the interest over that shown for undiluted air.

In one series of experiments a hole about two inches square was cut in the lid of each of two pasteboard boxes which were exactly alike. These holes were covered with cheese-cloth and a layer of absorbent cotton was supported immediately beneath this cloth. In one box the cotton was moistened with cool water while in the other it was moistened with hot water and was supported by a bottle containing hot water. When these two boxes were exposed in the mosquito cage considerable numbers of the mosquitoes would visit the warm box and attempt to feed while they paid no attention to the cool box.

Several types of traps in which heat was employed as an attractant were tested in the field and mosquitoes could be caught in even the crudest of these traps but the insects were also able to escape from all of them, displaying decidedly more ingenuity in this respect than is shown by the house fly. Experiments with more complicated traps were cut short owing to the entire disappearance of mosquitoes.

It was also found that mosquitoes in cages fed readily upon a solution of potassium arsenite in sweetened water and that this material was highly toxic to them. This suggested the use of such a poisoned bait in heat traps and traps were also devised in which the insects might be destroyed upon entering a chamber containing potassium cyanide. Neither of these agencies could be tested in the field.

S. E. CRUMB

BUREAU OF ENTOMOLOGY,
U. S. DEPARTMENT OF AGRICULTURE

SCIENTIFIC EVENTS

HEINRICH SUTER

ON March 17 there passed away Heinrich Suter, for many years gymnasial professor in Zurich, Switzerland, and a noted student of the history of Arabic mathematics and astronomy. For thirty years he was active as a translator and commentator of Arabic authors. The twenty years preceding 1892, when his first distinctly Arabic research was published, were years of preparation, during which he published a history of the mathematical sciences and a number of papers on mathematics during the Middle Ages in Europe. Most of his shorter articles appeared in the *Bibliotheca Mathematica* and in Schlömilch's *Zeitschrift für Mathematik und Physik*. As regards the quality of Suter's extensive studies of Arabic science it is enough to say that they are highly respected in an age when higher standards of historical accuracy are being established in Europe.

Suter was born on January 4, 1848, at Hedingen, near Zurich; he studied in Zurich and Berlin, and took his doctorate in 1872.

FLORIAN CAJORI

THE CALCUTTA SCHOOL OF TROPICAL MEDICINE

THE *British Medical Journal* states that the School of Tropical Medicine and Hygiene and the Carmichael Hospital for Tropical Diseases at Calcutta were opened by Lord Ronaldshay, governor of Bengal, on February 4. In the issue of December 3, 1921 (p. 957), it was noted that the School of Tropical Medicine and

Hygiene had begun work in the previous November, when a telegram of congratulation, announcing that the first lectures had been given, had been sent by the director, Lieutenant-Colonel J. W. D. Megaw, I.M.S., to Sir Leonard Rogers, who played the leading part in the inception and carrying through of this great enterprise. In the *Journal* of April 23, 1910 (p. 1010), the very great advantages which Calcutta offered for the establishment of a school of tropical medicine were pointed out; not only is the variety of clinical cases illustrating tropical diseases unsurpassed, but there is an excellent hospital and medical school, with a highly qualified staff accustomed to teaching, and for the greater part of the year the climate is no drawback. Some eleven years ago the general scheme for the school of tropical medicine was worked out by Sir Leonard Rogers, but its subsequent history has been marked by many delays, not a few of them to be traced to the war; the foundation stone was actually laid by Lord Carmichael, governor of Bengal, in February, 1914. The hospital has accommodation for about 100 patients, European and Indian, while the school has chairs of tropical medicine, pathology and bacteriology, protozoology, pharmacology, serology, public health, and chemistry, to which appointments have already been made; professors of hygiene, entomology, and biochemistry have still to be appointed. In addition, there are assistant professors of the chief subjects, and a number of special research appointments have been made. The nucleus of a reference library has been formed, mainly by gifts from Sir Leonard Rogers. In the report of the director for 1921 it is stated that classes will shortly be opened for the diploma in public health of Calcutta University; classes for the diploma in tropical medicine have already begun. The director considers that the result of the first year's working has entirely removed the doubts and fears which assailed him when he entered on his responsible duties. Considerable progress has also been made in the research laboratories, and reports have been published of work in connection with leprosy and kalazar and filariasis, and on the work of the hookworm laboratory.

FIELD WORK OF THE MUSEUM OF ZOOLOGY OF THE UNIVERSITY OF MICHIGAN

DURING the next fiscal year, which begins on July 1, the Museum of Zoology of the University of Michigan will carry on field work in Michigan, California, Washington, Oregon, North Dakota, Tennessee, Curacao, Panama, Mexico, Brazil and British Guiana.

Fifteen persons will be in the field: Carl L. Hubbs, Norman A. Wood, Lee R. Rice, Mina Winslow, Frederick M. Gaige, Helen T. Gage, Theodore H. Hubbell, and Alexander G. Ruthven, of the museum staff, and Crystal Thompson (Amherst College), Robert Hatt (University of Michigan), Rolland Hussey (Bussey Institution), Horace B. Baker (University of Pennsylvania), Thomas L. Hankinson (Michigan State Normal School), and Jesse Williamson and John Strohm of Bluffton, Indiana.

The work in North Dakota will be done in cooperation with the North Dakota Biological Station, of which Professor R. T. Young is director.

The work in western Brazil is under way and is being directed by Jesse Williamson. The party will remain in the field until sometime next year.

BRANCHES OF THE PSYCHOLOGICAL CORPORATION

EXECUTIVE committees for branches of the Psychological Corporation have been organized in several states as follows:

Massachusetts: William McDougall, *chairman*; Herbert S. Langfeld (Harvard University), *secretary*; Edwin G. Boring, W. F. Dearborn, W. R. Miles, Daniel Starch, F. L. Wells.

Pennsylvania: W. V. Bingham, *chairman*; E. K. Strong, Jr. (Carnegie Institute of Technology), *secretary*; Clarence E. Ferree, Francis N. Maxfield, B. V. Moore, J. H. White, Lightner Witmer.

Ohio: George F. Arps, *chairman*; Harold E. Burt, (Ohio State University), *secretary*; B. B. Breese, B. R. Buckingham, Henry H. Goddard, H. M. Johnson, Garry C. Myers.

Michigan: W. B. Pillsbury, *chairman*; H. F. Adams (University of Michigan), *secretary*;