

more dangerous. The efficiency and abundance of mosquito vectors have greater influence on the prevalence of malaria than changes in the status of the human reservoir. The hazard of the establishment of foci of malaria in places now free from the disease is real and can not be overlooked. Chief efforts of public health authorities should be directed toward the elimination of anopheline mosquitoes. Attempts to regulate the location and movement of possible carriers of malaria meet many practical difficulties and offer slight hope of producing fruitful results.

Members of the armed forces who have had malaria overseas will receive adequate treatment before discharge. It is true that many may still harbor latent infection and may suffer a relapse at a later date. At present no drug is known which will completely eliminate the parasite and no means are available to detect those who may continue to harbor a latent infection. Many individuals suffer only a single attack of malaria, and among those who relapse the chance of subsequent attacks continually decreases. It appears safe to estimate that probably 80 per cent. of men in the services who have had malaria will be entirely free from the disease at the time they are discharged. To attempt follow-up of servicemen merely on the basis of a history of having had malaria would result in much wasted effort.

A concerted campaign against *Anopheles quadrimaculatus*, the only important malaria vector in the United States, is the most feasible and effective effort

that can be made in this country. Such a program is already planned by the U. S. Public Health Service. Cooperative mosquito control projects by state and local agencies will contribute greatly to reduction of our malaria problem. Not only will chance of the establishment of new foci be lessened but, more important, the control of the disease will be strengthened in areas where it is now endemic. Improved diagnosis and reporting of malaria, especially in states where it does not now exist, will enable prompt recognition of outbreaks and immediate institution of mosquito control measures. If proper measures are employed, extension of malaria in this country should not occur as a result of the war. During the past few years malaria has decreased to the lowest level ever recorded, both in the military and civilian populations. With properly directed efforts in mosquito control this decline should be maintained, and it is reasonable to hope that malaria may some day be completely eradicated from the United States.

The war has given tremendous impetus to the study of malaria, to the search for new drugs and to the development of improved methods of control. The gains from wartime advances in knowledge of malaria and its prevention appear to far outweigh the adverse effects of the war in spreading the disease and its vectors. Our armies are demonstrating that white men can invade the tropics and conquer malaria. The world can look optimistically toward more effective malaria control in the postwar years.

OBITUARY

MAURICE COLE TANQUARY

MAURICE COLE TANQUARY, professor of entomology (apiculture) in the Department of Agriculture of the University of Minnesota, St. Paul, died in the University Hospital on October 25, after an illness of over a month.

Professor Tanquary was born on November 26, 1881, and was reared on a farm near Lawrenceville, Ill. As a young man he taught in public schools and began his college work at Vincennes University. Transferring to the University of Illinois, he received the A.B. degree in 1907. He continued as a graduate student and as assistant in zoology and entomology at the University of Illinois, receiving his M.A. in 1908 and his Ph.D. in 1912.

On completion of his doctorate he was appointed instructor in entomology in the Kansas State College of Agriculture but in 1913 was given leave of absence to join the Crocker Land Expedition as zoologist. Returning from the Arctic in 1916 he was advanced to an assistant professorship at Kansas State College and to associate rank in 1919.

Later in 1919 Professor Tanquary was made state entomologist of Texas and chief of the division of entomology in the College of Agriculture and Mechanic Arts, holding these positions until 1924. In 1928 he was appointed professor of entomology at the University of Minnesota.

In early life he became much interested in the habits of insects. His first published paper reported experiments on the adoption of *Lasius*, *Formica* and *Polyergus* queens by colonies of alien species. His doctorate thesis, published in 1913 in the *Bulletin* of the Illinois State Laboratory of Natural History, was entitled "Biological and Embryological Studies on Formicidae." It was natural that as he advanced in economic entomology, he devoted more and more attention to the problems of beekeeping and of honey production.

The result was a determination to devote himself to this field. He resigned his position in Texas in 1924 and established in North Dakota a large commercial apiary, where he continued his studies on the habits of bees and bee management unhampered by other

routine. When he came to the University of Minnesota in 1928, it was with the understanding that he continue the management of this apiary, which was transferred to northern Minnesota. In it as in the college apiary, there were constantly underway studies on the overwintering of bees, the utilization of package bees, diseases of bees and other studies of remote as well as of immediate practical application. Over the years he was a persistent investigator of methods of controlled mating of the honeybee and had obtained promising results in this much worked field.

Professor Tanquary was an excellent teacher, who took a personal interest in his students and was never too busy to give them assistance in their problems. His willingness to carry his share of the load under the present abnormal conditions was well illustrated by the manner in which he cheerfully took over the teaching of biology in the School of Agriculture and the personal attention he gave the students. He was widely recognized as a man with a broad scientific grounding in entomology and exceptional ability to apply it in a practical manner. While his formal publications were few he was a regular contributor to bee journals, and carried on a very extensive correspondence of an advisory nature with both amateur and commercial beekeepers.

He was a friendly man. We found him, as did Macmillan under trying Arctic conditions, "even tempered, never got excited, was always in good humor." He will be missed sorely by his colleagues of years and by the many students and practical beekeepers who found him always ready to aid them in their problems.

WILLIAM A. RILEY

RECENT DEATHS

DR. FREDERICK SLOCUM, professor of astronomy and director of the Van Vleck Observatory of Wesleyan University, died on December 4 in his seventy-third year.

DR. ALONZO JOHN HAMMOND, consulting engineer of Chicago, Ill., died on December 1 at the age of seventy-five years.

DR. JANE BURNS HERSHEY, supervisor of bacteriology of the Laboratory Section of the St. Louis Health Division, died on November 5 at the age of thirty-one years.

In the obituary appreciation of Albert Kingsbury in the issue of *SCIENCE* for December 1, the date of his death is given as July 28, 1944. It should be July 28, 1943.

SCIENTIFIC EVENTS

THE VISIT OF INDIAN SCIENTIFIC MEN

THE following Indian scientific men are visiting the United States on a mission to develop scientific and cultural contacts between India and this country. A special press conference was held at the Government of India Information Services in Washington on December 11. Members of the delegation are:

Dr. Nazir Ahmad, director of the Technological Laboratory of the Indian Central Cotton Committee.

Colonel S. L. Bhatia, deputy director general of the Indian Medical Service.

Sir Shanti Swarup Bhatnagar, Kt., O.B.E., director of the Scientific and Industrial Research Directorate of the Government of India.

Sir Jnan Chandra Ghosh, Kt., director of the Indian Institute of Science, Bangalore, and president of the National Institute of Sciences of India.

Professor S. K. Mitra, Ghose professor of physics, University of Calcutta.

Professor Meghand Saha, F.R.S., Palit professor of physics, University of Calcutta.

Professor J. N. Mukherji, O.B.E., professor of chemistry, University College of Science, Calcutta.

THE ANNUAL MEETING OF THE AMERICAN MATHEMATICAL SOCIETY

THE fifty-first annual meeting of the American Mathematical Society was held at the Museum of Sci-

ence and Industry, Chicago, on November 24 and 25, in conjunction with the annual meeting of the Mathematical Association of America. The registration exceeded two hundred, including one hundred and seventy-seven members of the society.

The eighteenth Josiah Willard Gibbs Lecture was given on Friday evening, November 24, by Professor John von Neumann, of Princeton University. His subject was, "The Ergodic Theorem and Statistical Mechanics." The attendance at this lecture was about three hundred.

On Saturday afternoon, November 25, Professor Will Feller, of Brown University, gave an address entitled, "Limit Theorems in the Theory of Probability."

Thirty-eight contributed papers on research problems were presented, sixteen in person and twenty-two by title.

Resolutions on the death of the distinguished mathematician, Professor George D. Birkhoff, were adopted. These will be published in the January issue of the *Bulletin* of the American Mathematical Society.

The following officers were elected for terms of two years each: *President*, T. H. Hildebrandt; *Vice-president*, J. M. Thomas; *Secretary*, J. R. Kline; *Associate Secretary*, T. R. Hollcroft; *Treasurer*, B. P. Gill; *Librarian*, Arnold Dresden; *Members of Editorial*