THE following cable, dated May 21, has been received by President Vincent, of the Rockefeller Foundation, from the secretary general of the League of Nations, Geneva: "Deeply regret inform you Drs. Samuel Darling and Norman Lothian met with fatal automobile accident while traveling as members League of Nation's Malaria Commission near Beirut yesterday." Dr. Darling, who for the past ten years has been a member of the staff of the International Health Board of the Rockefeller Foundation, has made important contributions to scientific knowledge of malaria, relapsing fever, dysentery and parasitic diseases, particularly hookworm disease, filariasis and trypanosomiasis. He was born in Harrison, N. J., in 1872, and received his degree in medicine at the College of Physicians and Surgeons, Baltimore. From 1906 to 1915 he held the post of chief of laboratories of the Isthmian Canal Commission, Panama Canal Zone.

THE late Sir T. Clifford Allbutt, Regius professor of physics in the University of Cambridge, who died in February last aged 88 years, has bequeathed to the Fitzwilliam Museum of Cambridge his portrait by Sir William Orpen, R.A., and on the death of his wife a quantity of antique furniture and drawings and paintings by noted artists, including Romney, Landseer, Rossetti, Watts and Turner.

THE second general assembly of the International Astronomical Union will be held at Cambridge, England, from July 14 to 22.

THE third annual meeting of the Virginia Academy of Science was held in Richmond on May 1 and 2, together with the Virginia section of the American Chemical Society. At the business session the academy voted to become affiliated with the American Association for the Advancement of Science on the terms set forth in their recent memorandum on the relations between affiliated academies and the association, as has already been recorded in SCIENCE. Dr. Robert E. Loving, of the University of Richmond, was elected president for the coming year.

THE third annual banquet of the Sigma Xi club of the Kansas State Agricultural college, with several visiting members of the Sigma Xi chapter at the University of Kansas in attendance, was held on April 24. Sixty-two members, including fifteen from the University of Kansas, attended. Dr. R. K. Nabours, president of the local club, acted at toastmaster. Dr. Raymond C. Moore, head of the department of geology of the University of Kansas, and state geologist, spoke on "Contributions of geology to the progress of science." Dr. Nobel P. Sherwood, head of the department of bacteriology, spoke on "The service of medicine in the progress of man." Professor J. W. McColloch, of the department of entomology at the Kansas State Agricultural College, discussed "The advancement of science with the study of insects," and E. C. Miller, of the department of botany, "The study of plants as an aid in scientific progress."

UNIVERSITY AND EDUCATIONAL NOTES

THE sum of $200,000 has been given to the University of Chicago by Mr. Charles H. Swift. This gift has for its purpose the institution and maintenance of a "distinguished service professorship." It is the first professorship endowment at Chicago yielding an income of $10,000. Other endowments are expected to follow to supply financial rewards for distinguished service. Present members of the faculty and outsiders will be eligible. Mr. Max Epstein has contributed $10,000 for "scientific work in medicine or one of the allied sciences." The university has also received $53,000 from Mr. Morton D. Hull and an anonymous gift of $50,000.

DR. GLENN FRANK, editor of *The Century Magazine,* has been elected president of the University of Wisconsin.

PROFESSOR GREGORY P. BAXTER, teacher of chemistry at Harvard since 1897, has been named Theodore William Richards professor of chemistry. This professorship was recently established at Harvard by Thomas W. Lamont, and Professor Baxter, a graduate of Harvard College in 1896, is the first incumbent. A second new chair in chemistry is also announced, the Sheldon Emery professorship of organic chemistry. Professor Arthur B. Lamb, director of the chemical laboratory, is named as the first incumbent of the new chair. Dr. William John Crozier, professor of zoology at Rutgers College, has been appointed associate professor of general physiology.

DR. J. E. WODSEDALEK, head of the department of zoology and director of pre-medical and graduate studies at the University of Idaho, has been made dean of the graduate school.

DR. EDWARD L. TROXELL, of Yale University, has been appointed professor of geology and dean at Trinity College.

DR. SEWALL WRIGHT, senior husbandman in charge of animal genetics in the bureau of animal industry, U. S. Department of Agriculture, has been appointed associate professor of zoology in the University of Chicago. Dr. Wright will have charge of the subject of genetics in the department of zoology dating from January 1, 1926.

THE following promotions have been made in the department of physics of the University of California: From assistant to associate professor, Frederick S. Brackett and Leonard B. Loeb; from instructor to assistant professor, J. J. Hopfield and V. F. Lenzen.

DR. WOLFGANG KOEHLER, professor of psychology in the University of Berlin, as has already been stated in SCIENCE, has been appointed visiting professor of psychology in Harvard University for the first semester of the year 1925–26. He, however, remains during this period visiting professor in Clark University, where he has been since February of this year.

DR. HAROLD A. WILSON, F.R.S., professor of natural philosophy in the University of Glasgow, has accepted reappointment to the professorship of physics which he held at the Rice Institute from 1912 to 1924 inclusive.

DISCUSSION AND CORRESPONDENCE

PHOTOGRAPHING THE SHADOW BANDS

PREVIOUS to the recent solar eclipse great interest was displayed in the problem of photographing the shadow bands. The conditions were unusually favorable, and very many persons must have made attempts to photograph the bands. It was therefore to be expected that many such photographs would be taken and that some of them would find their way into the newspapers and magazines. However, up to the present moment I have neither seen such pictures nor seen in print any mention of their having been secured. It may therefore be of interest to know that a photograph of the shadow bands was secured by a photographer of this locality.

The negative is four by five inches in size and shows in the foreground five shadow bands on a plane snow surface. Unfortunately, the exposure was too short and the picture is therefore "thin." It could scarcely be reproduced for magazine or newspaper printing, but photographic copies are sufficiently clear to be of scientific interest. The only object in the picture serving to fix the size is a footprint in the snow. It is therefore difficult to estimate the size of the bands. Each shadow appears to be about eighteen inches long, three or four inches wide and separated from its neighbor by about ten or twelve inches. This agrees with the observations made by the writer at a point not much more than a mile from the photographer's station.

In all characteristics the photographs appear to represent wave phenomena. In length, width, relative position and shading, the shadows in the picture exactly imitate a water surface rippled by the wind. In fact, in looking at the picture one can not escape the feeling that the surface of the snow is thrown up in waves, so perfect is the illusion of wave form. This agrees well with the suggestion that the shadow bands are caused by the light shining through a rippling surface of contact between two layers of air of differing density. This is supported by the observation made by the writer that the bands were moving in the same direction as the lower air currents (northeastward) and at approximately the velocity of the air movements.

The gentleman who made the photograph is Mr. Glen Lowry, a professional photographer, of Stroudsburg, Pa. He kindly supplies the following photographic data:

Location, three miles north of Port Jervis, N. Y., on road leading to Huguenot. Graflex camera, Eastman super-speed film, F 4.5 aperture, 1/1000 second exposure, exposure made just one minute after close of totality. The exposure might well have been five to ten times longer.

W. L. EIKENBERRY

STATE NORMAL SCHOOL
EAST STROUDSBURG, PA.

THE GERMINATION OF BARLEY UNDER LATE SPRING MALTING CONDITIONS IN INDIA

THE malt houses of India are not equipped with the elaborate control apparatus found in many of our American plants. The summers are very hot and no malting is done in midsummer. To secure a longer malting season malt houses have been established in the hills at some elevation. I visited one of these at the time the last malt of the spring was on the floor. The temperature at this season is high and the air dry. Some peculiarities of germination under these conditions seem worthy of noting.

The barley is a very fine grade of grain with an unusual uniformity of development and soundness. In midwinter practically perfect germination is secured. The best malting conditions probably obtain in December. At this time the temperature of the malting floor is about 60° F. and the air sufficiently humid to grow the grain with no additional water after the soak. In June, however, when the last malting is done, the floor is actually hot to the touch. Daily sprinklings are given the grain. Yet at this time with high temperature (74° F.) the grain remains on the floor for twelve days or longer. Under fast malting conditions in the United States the plumules are often protruding in five or six days. The plumule of the high temperature malt of India has hardly started at the end of twelve days. The Royal Pilsen malt of Austria, which is commonly regarded as the world's best, is characterized by a growth of plumule two thirds the length of the grain in practically every kernel. The plumules of Ameri-