SCIENTIFIC EVENTS

JOINT EXPEDITION TO BRITISH INDIA

AN expedition in the high mountain country north of Cashmir, British India, to study the mechanism and effects of adaptation and acclimatization of man and animals to life at high altitudes, is being organized by Harvard University, with the cooperation of Cambridge University, England, and the University of Copenhagen, Denmark. The field work will be carried on for five months in the spring and summer of 1935, from a base camp at 17,500 feet in the Kolumpa Valley, near Leh, in the Himalayas. The expedition is being financed by the universities and by scientific foundations here and abroad.

The Fatigue Laboratory of Harvard is directing the enterprise. Members of the expedition will be Dr. Ancel Keys, of the Fatigue Laboratory, head of the party; E. Hohwü Christensen, laboratory of zoophysiology, University of Copenhagen; Gordon Bowles, department of anthropology, Harvard University; Harold T. Edwards and William Hathaway Forbes, Fatigue Laboratory; Bryan H. C. Matthews, King's College, University of Cambridge, and John H. Talbott, department of medicine, Harvard University. Cooperating work will be undertaken by David Bruce Dill in the Fatigue Laboratory.

Scientific apparatus will be taken that will permit a detailed study of the respiration, circulation, metabolism, acid-base balance, water balance, heat regulation, cardiac performance, excretion, blood gas transport and subjective responses in rest and in work of varying intensity. Continuous observations will be made, but especially detailed programmes will be carried out at sea level, 5,000 feet, 11,000 feet, 14,500 feet, 17,500 feet, 19,500 feet and the same stations coming down. The base camp will be a short distance from the famous Turkestan-Cashmir caravan route, the highest road in the world regularly traversed by man. This road has three passes at about 18,000 feet and three other passes at more than 18,000 feet.

The expedition will study the natives who live in such altitudes. The snow line is at about 18,000 feet here. Grazing is carried on to 17,000 feet, and the natives drive their flocks as high as 18,000 feet. There are a few settlements at 16,500 feet. One monastery is at 16,000 feet, a nunnery at 17,000 and a hermit lives at 18,000 feet.

Anthropological studies of the natives will be made by Mr. Bowles in the Ladak country, in which the base camp will be located. The people are known as Ladaki, and are almost entirely of Tibetan stock. They are Lama Buddhists in religion. The famed Cashmir wool comes from Ladak. The expedition will go from Srinagar, a city of 150,000 in the Vale of Cashmir, up to the base camp, a distance of about 300 miles by caravan.

The only other comparable studies of high altitudes by scientific expeditions were at Cerro De Pasco, in Peru, 22 days at 14,500 feet; Pike's Peak, 7 days at 14,108 feet; Mt. Massive, Colo., 3 days at 14,400 feet, and Mt. Rosa, Italian Alps, overnight at 15,000 feet. N. E. Odell, British geologist, spent nine days at 23,000 feet on Mt. Everest. The highest peak ever climbed was Mt. Kamet, 25,400 feet, in British India, three years ago, by an expedition under F. S. Smythe.

The advisers to the expedition are: Professor Joseph Barcroft, the University of Cambridge; Dr. Hellmut De Terra, Yale University; Professor Lawrence J. Henderson, Harvard University; Professor E. A. Hooton, Harvard University; Professor August Krogh, Copenhagen University; Professor Alfred Redfield, Harvard University; Dr. Donald D. Van Slyke, the Rockefeller Institute.

THE AMERICAN DAIRY SCIENCE ASSOCIATION AND THE GENEVA STATE EXPERIMENT STATION

THE annual meeting of the American Dairy Science Association will be held in Ithaca and Geneva, from June 26 to 28. It is expected that investigators from all sections of the United States and Canada will attend. Babcock, Sturtevant, Wing, Van Slyke, Jordan, George A. Smith and others carried forward their researches in the field of dairy research at the Geneva station. While some of the early workers in dairy science at Geneva moved to other institutions to complete their life work, much of the early dairy research carried on at the Experiment Station still stands as a foundation for later investigations.

One of the early undertakings of Dr. E. L. Sturtevant, first director of the station, was to assemble on the station grounds representatives of the different breeds of dairy cattle for a comparison of their value as milk animals. This was a unique experiment at the time and formed for some time the basis of recommendations for the selection of dairy cows.

Dr. S. M. Babcock was the first chemist to be employed at the Experiment Station. He later moved to Wisconsin where he perfected the method for measuring the butter fat content of milk that now bears his name. It remained for his successor at Geneva, Dr. L. L. Van Slyke, to introduce the Babcock method to New York dairy farmers and to demonstrate to them that it was practical and that it safeguarded their interests. Dr. Van Slyke also made contributions to the chemistry of milk and of cheese in addition to making other researches of value to agriculture.

George A. Smith, for many years head of the Dairy Division at the Experiment Station, was instrumental in building up the present herd and made important contributions to the cheese industry of the state.