

Horticultural Institution he produced by mutation a giant fertile hybrid of foxglove which was recognized by the Kew authorities as a new species.

He was a pure scientific investigator, an artist in all things, and whatever he undertook he carried through outstandingly well. He was so modest and unassuming that his fine qualities were appreciated only by those closely associated with him.

JAMES EWING

### RECENT DEATHS

DR. HERDMAN F. CLELAND, professor of geology at Williams College, was drowned when the steamship *Mohawk* sank on January 24. He was sixty-five years old.

DR. ALBERT MANN, since 1919 research associate in

botany at the Carnegie Institution of Washington, died on February 1 at the age of eighty-one years.

DR. GRANVILLE MACGOWAN, formerly professor of surgery at the University of California, died on January 31 at the age of seventy-seven years. He was president of the American Urological Association in 1912.

FREDERICK S. DELLENBAUGH, anthropologist and explorer, died on January 29 at the age of eighty-one years.

MISS ROSALIE B. J. LULHAM, lecturer in natural history at the Froebel Educational Institute and author of "An Introduction to Zoology through Nature Study," died on December 28.

## SCIENTIFIC EVENTS

### THE PUBLIC HEALTH OF INDIA

THE report for 1931 of Major-General J. D. Graham, Public Health Commissioner with the Government of India, has recently been made public. According to the *British Medical Journal*, General Graham insists on India's need of an organization which shall be capable of framing and conducting a public health policy for the country as a whole. Such a Ministry of Health is found in Canada, Australia and South Africa, and is none the less necessary in India because the executive control of public health has been transferred to the Provinces.

A census was taken in February, 1931, and vital statistics for the year can be more accurately estimated than in the nine previous years, the last census having been taken in 1921. The birth rate for the year in British India was 34.3 per mille, as compared with 33.4 on the estimated population for 1930, and 35.7 for the previous quinquennium (based on the 1921 census). The general death rate was 24.8 per mille, and the death rate for infants under the age of 12 months per 1,000 live births was 178.8, as compared with 180.8 in 1930 and 177.6 in the previous quinquennium. Out of every 190 deaths recorded, forty-three occurred in children below the age of 5, and forty-eight in those below the age of 10. The infantile death rate for British India was nearly 2% times that for England and Wales and South Africa; more than double that for Germany, and nearly 5½ times that for New Zealand. Countries in which the figures compare more closely with those of British India include Rumania, Hungary, Japan, Italy, Egypt and Soviet Russia. The three main causes of infantile mortality are given as congenital and developmental defects, alimentary disturbances and infective disease, the first accounting for nearly all

stillbirths and deaths in the first seven days of life, while the two latter affect the older children. Sanitary improvements have operated against the two latter causes, but not against the first, and in the production of these defects prematurity plays an important part.

Antimalarial campaigns continued during the year under review, including cinchonization schemes where funds permitted. Tuberculosis is believed to be generally on the increase, especially in some of the larger and more overcrowded cities, such as Peshawar, Delhi and Calcutta. The anti-tuberculosis campaign has not proceeded very far as yet, but the disease is now notifiable in the Punjab, the Central Provinces, Madras, Baluchistan and in municipal areas in Assam and the Upper Provinces. In Bombay Presidency, out of every 1,000 deaths recorded in 1931, 43.6 were ascribed to pulmonary tuberculosis. In 1931 there was a large fall in the incidence of cholera in British India, apart from the Presidency of Bombay, but high mortality curves were present in Bengal and Bombay. The death rate for plague was, however, twice that in 1930, although lower than that in 1929, the Upper Provinces suffering most.

Leprosy surveys, which had been continued during three and a half years, were ended in 1931. They showed that leprosy was much more prevalent in India than was formerly supposed; probably one million cases would not be an overestimate. The disease was found to be most common among semi-aboriginals or aboriginals, who left their tribal seclusion and hired themselves out to agriculturists or industrial concerns. Infection of the more advanced classes of the community was in the first place largely attributable to the employment of servants in an infectious stage. Movements of the population, which have increased

on account of better education and transport in recent years, are a potent factor in spreading the disease and in infecting new areas. This is General Graham's last annual report as Public Health Commissioner and he briefly reviews his decennium in that office and indicates the more salient advances.

### THE FIELD MUSEUM ANTHROPOLOGICAL EXPEDITION TO THE NEAR EAST

THE Field Museum Anthropological Expedition to the Near East, sponsored by Marshall Field, has concluded its work for 1934, consisting of an anthropometric survey of the native population of Iraq, and similar studies in Persia and the Caucasus region of the U.S.S.R.

The leader of the expedition, Henry Field, assistant curator of physical anthropology, has returned to his post in the museum, ready to begin the task of assembling and studying the data collected, which has for its purpose an attempt to solve certain racial problems. One of the objectives is to determine the relationship of the peoples of the Near East, both those of to-day and their ancient ancestors, to the modern and ancient peoples of Africa, Europe and Asia. This is a question of great scientific importance into which no satisfactory research has previously been made.

The work of the expedition covered a period of ten months, during which 17,000 miles were traveled, and 3,000 persons were submitted to studies, consisting of anthropometric measurements and observations, the taking of front and profile photographs, hair samples, blood samples, and other data pertinent to tracing racial origins. In addition to its anthropological work, the expedition collected 3,000 animals, 1,000 insects, 2,600 plants and a quantity of geological material, for the departments of zoology, botany and geology.

Mr. Field was accompanied by Richard A. Martin, of Chicago, who as photographer made 7,000 negatives, and in addition collected the zoological material, as well as assisting the leader in the anthropological work. As many as twelve assistants were attached to the expedition temporarily at various points for local work. The anthropological studies were a continuation of the survey begun by Mr. Field in 1925.

Observations were made upon selected subjects from each of the important racial groups. Of special interest in Iraq were the Kurds, fierce-looking mountain tribesmen, of whom 750 submitted to the anthropologists' calipers and cameras, and the Yezidis, fanatical devil-worshippers, 300 of whom cooperated by acting as scientific specimens. Forty separate measurements and observations were made on each

individual. Living in tents as guests of Sheikh Agil, great desert chieftain of the Shammar Beduins, the members of the expedition were enabled to measure 450 members of this tribe.

The expedition made an archeological survey of the North Arabian Desert, crossing from Baghdad to Trans-Jordan Palestine and Syria, and thence returning to Iraq. During this trip a large number of prehistoric flint implements testifying to the existence of early man in this area were collected.

After five months in these areas, the expedition proceeded to Persia, where anthropological studies were made of some 250 individuals. After completing its work in that country, the expedition entered the U.S.S.R. at Baku, and traveled through the Caucasus to Kiev, Moscow and Leningrad. In the mountains of the Caucasus some 200 men and women were studied.

### PENNSYLVANIA'S PRIMEVAL FOREST

EDWARD E. WILDMAN, member of the "Tionesta Committee" of the Pennsylvania Forestry Association, writes that on Friday, November 23, 1934, the National Forest Conservation Commission approved the purchase by the United States Forest Service of 4,000 acres of primeval forest still standing in Warren and McKean Counties, Pennsylvania, in the northwest section of the state, and within the limits of the Allegheny National Forest Reservation. It is known as the Tionesta Tract.

The stand is mainly a hemlock-mixed hardwood type, with fine old trees here and there of black cherry and cucumber. The Pennsylvania Forestry Association has been urging the preservation of this tract for the past three years as a forest laboratory where only observation, not experimentation, should be carried on. It is with this understanding that the commission authorized its purchase. Trails will be made into the forest where they can be laid without cutting, but no camping there is contemplated.

Under the title "The Thousandth Acre," the tract was described by the Allegheny Forest Research director, R. D. Forbes, recently in *American Forests*.

The Forest Service wants to see how this forest maintains itself and its wild life century after century totally undisturbed by man. Its fauna and flora are typical of the Middle Atlantic States, and therefore this tract is unique, for those of the nearest primeval regions now preserved—the Adirondacks on the north and the Great Smokies on the south—are different in many features. Mr. Wildman writes:

Not only professional foresters, but every student of natural history and every lover of the untouched wilderness will be glad to hear of the success of the association in this endeavor.