

eight original Darwin letters known as the Müller collection, which is the gift of Professor Henry Fairfield Osborn, president of the American Museum of Natural History, New York.

Nor should we overlook the reference of a contemporary to an important part of the afternoon's pro-

ceeding, the "pious" pilgrimage made by every visitor to the kitchen garden and experimental greenhouses, and to the plantation with its "sand" walk where Darwin paced up and down every day swinging his iron-shod stick and meditating on his work.

JOSEPH LEIDY, II

OBITUARY

RECENT DEATHS

JOHN STERLING KINGSLEY, of Berkeley, California, since 1921 emeritus professor of zoology at the University of Illinois, died on the steamship *President Taft*, three days out of Yokohama, and burial was made at sea. Mr. Kingsley, with his daughter, Miss Mary E. Kingsley, was on a trip around the world.

DR. EDWARD BEECH CRAFT, executive vice-president of the Bell Telephone Laboratories, died on August 21 at the age of forty-seven years.

DR. HARRY C. FRANKENFIELD, meteorologist in charge of the river and flood division of the Weather Bureau, died in Washington, D. C., on July 29 as a result of injuries received when struck by an automo-

bile on July 22. One of his most notable contributions to meteorological science was the development of numerical computations by which the flood stages of rivers at different points may be forecast days in advance. Dr. Frankenfield was in his sixty-seventh year.

DR. PETER A. YODER, chemist and sugar-cane technologist in the bureau of plant industry of the U. S. Department of Agriculture, died on July 20 at the age of sixty-two years.

THE death is announced of M. Auguste Lebeuf, since 1903 director of the Observatory of Besançon and a correspondent of the Paris Academy of Sciences.

SCIENTIFIC EVENTS

SCIENTIFIC RESEARCH IN INDIA

THE *London Times Educational Supplement* reports that the Inter-University Board, India, has published a pamphlet showing the facilities for scientific research at Indian universities. This follows a similar pamphlet issued a year ago on the corresponding facilities for Oriental studies. It is interesting to note that, while seventeen chartered and Indian state universities supplied information for the first pamphlet, the number of replies in respect of scientific research is limited to thirteen. The deduction to be drawn is that no definite arrangements are made for scientific research at the remaining universities. It may be noted, however, that, whereas the first pamphlet gave in an appendix some particulars of Oriental research facilities at a few extra-university institutions, such as that at Poona founded by the late Sir R. G. Bhandarkar, the present pamphlet does not include within its scope either the All-India College of Science at Bangalore or the Bose Research Institute at Calcutta.

The reply from Dacca sets forth a number of material advantages for students, among them being reasonable cost, a healthy climate, excellent hostel accommodation, splendid playing-fields, provision for games, students' societies of all kinds and careful medical attendance and supervision. It is added that

since the university is residential, the students have the advantage of coming into close touch with the teachers under whom they wish to carry on their investigations.

The Lucknow University, which like Dacca University, came into existence in 1921, claims that its botany department has an advantage not possessed at any other seat of learning in India—that it has on the staff two specially trained men in their subjects, who are both D.Sc.'s of London University. Fossil botany and soil science are subjects in which research is being mainly, if not solely, carried out by this department among the Indian universities. Special attention is being devoted to one aspect of the subject—namely, the coordination of academic work with agricultural and applied botany (including industrial and economic botany). Some of the researches now being carried on in the department have practical bearing on important Indian agricultural problems. The Royal Commission on Indian Agriculture, while recommending that postgraduate training should be essential for candidates from the provincial agricultural colleges seeking higher posts in the agricultural departments, held that such training should ordinarily be given at the Pusa Research Institute, "which, in present conditions, is the only institution in India in which facilities for higher instruction in all branches

of agricultural science are available." In support of this view it was remarked that it would usually be difficult to fit the small number of postgraduate students from the agricultural colleges into the ordinary Indian college system; but it was recognized that, as the scientific side of the universities develops, they may be expected to provide more facilities for postgraduate study in pure science.

The Benares Hindu University makes strong claims to an advanced position in the matter of scientific research. The chemical laboratory is a modern fire-proof two-storied building, with thirty-four big rooms, including two big lecture theaters and a small lecture room. Special facilities are provided to enable competent students to conduct original investigations. The student, under the guidance of the professor in charge, undertakes for an extended period a comprehensive investigation of some problem in chemistry of theoretical or practical significance. Ordinarily the standard and the scope of these researches is that necessary for the award by the university of the doctorate of science.

In Southern India some progress is being made. The Madras University has adopted schemes for the establishment of research laboratories in zoology, botany and biochemistry. Suitable sites for the construction of the proposed laboratories have been selected, and detailed plans and estimates are under preparation, temporary arrangements being made for research work in the meantime. The new Andhra University is associated with the Madras University in awarding studentships tenable in the laboratories of its college at Vizianagram for research in spectroscopy. The research department, founded by the Raja of Vizianagram, is specially well equipped for this subject. The Mysore University has the advantage of some coordination of its work in certain branches, notably that of geology, with the All-India College of Science at Bangalore.

THE AUSTRALIAN ANTARCTIC RESEARCH EXPEDITION

THE prime minister of the commonwealth has recently made in the Australian Parliament the following statement, which is quoted in the *Geographical Journal*, London:

Having given the closest and fullest consideration to the question for several years past, the commonwealth government has reached the conclusion that the time is now ripe for an Australian expedition to proceed to that part of the Antarctic which lies immediately to the south of Australia. It has therefore decided to organize and equip such an expedition, which, it is at present contemplated, will leave Australia towards the end of this year. In view of his great experience and knowl-

edge of Antarctic conditions and his world-wide reputation in scientific circles, we have approached Sir Douglas Mawson and asked him to lead the expedition. Sir Douglas has informed us that he will be prepared to do so. The special interest of the commonwealth in the Antarctic region lying south of Australia, extending from the Ross Sea in the east to Enderby Land in the west, which is generally known as the Australian sector, has been often affirmed in the past. Of the various expeditions to this region, the richest so far in scientific and other achievement was Sir Douglas Mawson's expedition of 1911-14. The expedition that the commonwealth government has decided to organize this year will, it is hoped, complete and crown this previous Australian effort.

His Majesty's government in Great Britain has generously placed the *Discovery* at the disposal of the expedition, free of charge. This vessel is at present in the service of the Falkland Islands Dependencies, and has been specially constructed for work in the ice. It is the best ship at present afloat for the purposes of the expedition.

The forthcoming expedition will seek to effect a variety of objects, mostly of a scientific nature. The exploration and mapping out of that part of the coast-line which could not be completed by the Mawson expedition in 1911 will be undertaken, scientific and meteorological work will be carried out, investigations into the economic resources of the region will be made.

The exact location of the coast-line of this sector of the Antarctic in which Australia is interested is of material importance. The expedition will therefore carry out hydrographic survey work, comprising the correct location and charting of coasts, islands, rocks and shoals. It is proposed to equip the expedition with aeroplanes so that inland surveys can be made. The study of meteorological conditions which will be made will enable the relationship between these conditions and the climate and weather of Australia to be determined more adequately than at present. A further important part of the expedition's work will be to carry out investigations regarding the fauna, notably whales and seals, of the region explored. Whaling in various parts of the Antarctic, notably south of the Falkland Islands, New Zealand and South Africa, has now assumed considerable importance, and the government feels that it is most desirable that investigations should be made in the near future to determine the economic and commercial value of the waters of the Australian sector in this respect.

Sir Douglas Mawson, who was for some months in England on the business of the expedition, has now returned to Australia, leaving Captain J. K. Davis to take out the *Discovery* in August next. The *Geographical Journal* understands that the ship is lent to the Australian by the British government, which has rented her from the Falkland Islands government, and that a new and larger ship is now being built for the research work of the Falkland Islands Dependencies.