

### UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

CAMBRIDGE.—Among the additions made during the year 1906 to the collections under the charge of the museums and lecture-rooms syndicate, special mention has been made in the forty-first annual report of the syndicate of the gift to the school of botany, by Mr. Francis Darwin, of the scientific library to his father. Dr. E. C. Stirling has presented to the museum of zoology a cast of a skeleton of the gigantic extinct marsupial *Diprotodon australis*, and the Duke of Bedford two specimens of Przewalsky's horse from the collection at Woburn Abbey. The collection of antelopes has been largely increased, principally through the donations of Mr. C. B. C. Storey, Mr. A. L. Butler, Major W. B. Emery, and Captain E. Mackenzie Murray. The executors of the late Mr. J. S. Budgett have presented a number of specimens to the museum of zoology, and certain pieces of apparatus to the zoological laboratory. The Strickland curator directs attention to the completion of the late Prof. Newton's "Ootheca Wolleyana," and to the fact that the whole of Prof. Newton's magnificent collection of palæarctic eggs becomes thereby the property of the University. Numerous anthropological gifts to the museum of human anatomy are recorded in the reports of Dr. Barclay-Smith and Dr. Duckworth.

A SUMMER school for university extension students will be held at Oxford during August. The inaugural address will be delivered in the examination schools on Thursday, August 1, at 8.30 p.m., by the Earl of Halsbury, F.R.S. The meeting will be divided into two parts, the first of which will extend from August 1 to August 14, and the second from August 15 to August 26. The lectures in the science section will be arranged with the object of illustrating the part played by Oxford in the advancement of science, particularly in the seventeenth century. Among the lecturers will be Dr. T. B. Strong, Dr. W. Oster, F.R.S., Mr. J. Wells, Dr. Breerton Baker, F.R.S., Prof. F. Gotch, F.R.S., Prof. H. H. Turner, F.R.S., Prof. E. B. Poulton, F.R.S., and Mr. J. L. Myres. There will also be special classes in practical map-making, nature-study, and principles and practice of education.

PROF. A. S. HEMMY, Government College, Lahore, writes to correct a report as to the state of science in the Punjab which appeared in the *Civil and Military Gazette*, and was summarised in NATURE of May 16 (p. 70). The local paper pointed out that comparatively few students present themselves for examinations in the science faculty of the Punjab University, and therefore suggested that scientific studies are not making much headway in India. Prof. Hemmy remarks that though the study of science in the Punjab is in a somewhat backward condition, the various laboratories being badly endowed, the article in the local paper, upon which our note was based, is misleading. The regulations of the Punjab University permit science (of a very slightly lower standard) to be taken up for the arts degree as well as for the B.Sc., and the great majority of students who take up science do so as part of the more popular B.A. course. It appears that the numbers quoted in the note only represent, therefore, a fraction of the total number studying science. For 1907, in the arts faculty, out of 3666 candidates for matriculation, 1426 took up physics and chemistry; out of 689 candidates for the intermediate, 254 took the same subject; of the 340 for the B.A., 25 took physics and 32 chemistry; while of the 52 M.A. candidates, 3 took physics and 4 chemistry.

AN exhibition of selected specimens of work of pupils in the rural schools of East Suffolk was held at the County Hall, Ipswich, on June 15. The exhibition was arranged by Alderman the Rev. C. J. Steward, chairman of the Education Committee of the East Suffolk County Council, to whose energy and enthusiasm this movement owes so much. It is clear that valuable work is being done in East Suffolk schools to train observational powers and to stimulate interest in natural phenomena. Forty-three distinct exhibits were shown, including some excellent collections of the grasses and wild plants of each district,

while mounted and labelled specimens illustrating the life-history of common plants and animals, meteorological records kept and displayed in the form of charts, plans of the villages and of the school buildings, carefully selected specimens showing the structure and growth of common timber trees, plans of school gardens, records of the country month by month, and excellent studies of the changes in ditches and ponds during the year, were also shown. In addition, there were records of bee-keeping and illustrations of budding and grafting. East Suffolk has made a good start in the newer teaching, and the exhibition itself, as well as the numbers of those who attended from all parts of the county, shows that a genuine interest is being taken in the matter. A selection of the exhibits is to be sent to the Royal Agricultural Society's show at Lincoln.

A CONFERENCE will be held in Naini Tal this year, we learn from the *Pioneer* of Allahabad, for the purpose of considering many difficult questions connected with technical education, and if possible to devise some properly coordinated scheme which shall lead the way for the whole of India. In an enlightened editorial article the *Pioneer* reviews the objects the advocates of technical instruction have in view, and indicates many of the special requirements of the Indian population which must be borne in mind in devising a scheme suited to Eastern needs. It is pointed out that for the success of any system provision must be made for the different classes of workers engaged in modern productive industries, workmen or artisans, foremen or overseers, managers or masters, and that it is necessary to provide grades of technical education corresponding to primary, secondary, and university or higher education. The lowest grade is that which presents most difficulty in India. At the present time, the article states, it is impossible to give instruction in elementary science in Indian village schools, but something might be done to teach drawing and to give handicraft training by means of a form of apprenticeship to village craftsmen. It is proposed that the most promising of those so trained might then be assisted to undergo a course at an industrial school in the nearest large centre, and thus the instruction in the primary schools of the country could be brought in touch with modern needs, and a system commenced which would advance any scheme of technical education finally adopted. It is suggested that workshop practice could best be given in India in apprenticeship schools of the Continental type, and that evening classes would serve the purpose of improving the workmen and selecting those capable of profiting from a systematic course of higher study. No difficulty is anticipated so far as educating the foremen is concerned, and technical institutes of the right kind are recommended as the best way to provide higher technical education. Undoubtedly, the article continues, much has already been done in India to provide a system of technical education, and progress has been made by means of art schools, industrial schools, and engineering colleges, but there is a tendency to lose sight of modern developments, and the immediate need now is a systematic arrangement of the work at present undertaken.

### SOCIETIES AND ACADEMIES.

#### LONDON.

**Royal Society, May 9.**—"The Ascent of Water in Trees." (Second paper.) By Prof. A. J. Ewart. Communicated by Francis Darwin, For. Sec. R.S.

The experiments detailed or quoted tend to show that the continuous ascent of water is only possible in living wood, and that the power of conduction is rapidly lost on death, without any mechanical blocking of the vessels being necessarily responsible for the change. Hence we are forced to conclude that the living cells in tall trees continually restore the conditions for the ascent of water wherever these are affected by the excessive emptying of the vessels, and decrease the resistance to flow, as far as possible, by maintaining continuous water columns in parts at least of the wood. So long as these are present *ab initio*, a pumping action only becomes necessary in trees more than 20 to 50 metres in height, but suspended