

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

CAMBRIDGE.—The University has gratefully accepted an offer received from Mrs. King, of Worthing, to give 100*l.* 5 per cent. War Stock for the establishment of a scholarship for research work on fevers, in memory of her daughter, Nita King, a member of a Voluntary Aid Detachment, who died of cerebro-spinal fever in France.

LONDON.—Prof. Bernard Pares, professor of Russian history, language, and literature in the University of Liverpool, has been appointed the first incumbent of the chair of Russian which has been established by endowment from the London County Council, and will be tenable at King's College.

The degree of D.Sc. (Economics) has been conferred on Mr. A. D. Smith, an internal student, of the London School of Economics, for a thesis entitled "The Development of Rates of Postage."

DR. ARNOLD EILOART has been appointed assistant lecturer in chemistry, and Mr. J. T. Westwood assistant lecturer in mechanical engineering, at the Technical College, Huddersfield.

MISS E. C. TALBOT, of Margam, has presented to the council of University College, Cardiff, a benefaction amounting to about 30,000*l.*, which will produce a salary of 1500*l.* per annum for the purposes of a chair in preventive medicine. The first occupant of the chair is to be nominated for election by the council by an expert board, of which Sir Wm. Osler is to be chairman.

PARTICULARS of a novel form of technical instruction have reached us from America. A winter school for the training of librarians is to be held at the Riverside Public Library, Riverside, California, from January 7 to March 2 of next year, and the services of numerous experts in library administration have been secured as lecturers and demonstrators. Among the subjects of lectures included in the attractive programme offered to intending students are:—The library as a museum, high-school libraries, library mechanics and handicraft, cataloguing and classification, office filing and indexing, and binding and repair work.

THERE is evidence that the need for improved technical education in France is engaging the attention of the authorities. The question was first raised a year ago by a paper by M. Léon Guillet in the *Bulletin* of the French Society of Civil Engineers for October-November, 1916. The meeting at which the paper was read was presided over by the Minister of Commerce and Industry, and out of the discussion which arose a committee was formed for the purpose of submitting recommendations to the Minister mentioned. Discussion was invited from persons not members of the society, and the results are published in the *Bulletin* of the society, January-April, 1917, and the *Revue de Métallurgie*, May-June, 1917. A summary of the committee's recommendations also appears in the September-October number of the *Bulletin de la Société d'Encouragement pour l'Industrie Nationale*.

THE Committee on the Neglect of Science has published an article by Sir Ray Lankester on the new scheme of examination for Class I. of the Civil Service. This is of considerable interest to those concerned with the position to be occupied by science in secondary-school and university education in the future. An admirable summary of the report of the Government Committee under the chairmanship of Mr. Stanley Leathes is embodied in this statement, and Sir Ray Lankester frankly admits that the new proposals are a great advance in the direction desired by the Neglect of

Science Committee. The Government Committee, in its report, has, however, contented itself with attempting to secure equality of opportunity to all branches of learning, and considers that the schools and universities should do the rest. Whether the theoretical advance will prove of practical value remains to be seen, for the older universities and great public schools are, without exception, dominated by the "classics." In the concluding sentence of Sir Ray Lankester's article the position is summed up as follows:—"Mr. Stanley Leathes's Committee, instead of rescuing education from the professional vested interests of the classical schoolmasters, hands back the victim, after many professions of good will, to the tender mercies of those who are banded together to starve, torture, and discredit her, and remorselessly to maintain the domination and the pecuniary allurements of the 'classical system.'"

SOCIETIES AND ACADEMIES:

LONDON.

Royal Society, December 13.—Sir J. J. Thomson, president, in the chair.—Prof. B. Moore: The formation of nitrites from nitrates in aqueous solution by the action of sunlight and the assimilation of the nitrites by green leaves in sunlight. Dilute solutions of nitrates exposed either to sunlight or to a source of light rich in light-energy of short wave-length (such as light from mercury vapour arc enclosed in silica) undergo conversion of nitrate into nitrite. There is an uptake of chemical energy in this reaction transformed from light-energy, as in the formation of organic carbon compounds in foliage leaves; it is to be added to the relatively small number of endothermic reactions induced by light. When green leaves are immersed in nitrate solution comparatively little nitrite accumulates, indicating that nitrites are rapidly absorbed by the green leaf. Nitrates taken up by plants from soil would, in presence of sunlight, be changed to nitrites, which are much more reactive than nitrates. This indicates that the early stages of synthesis of nitrogenous compounds are carried out in the green leaf and aided by sunlight. Rain-water collected for a considerable time contains no nitrites, all having been oxidised to nitrates, but if exposed to bright sunlight or ultra-violet light for a few hours a strong reaction for nitrites is always obtained. There is no hydrogen peroxide or ozone in air at surface level. The fresh odour in open air, commonly referred to as "ozone," is probably nitrogen trioxide, which at high dilutions has the odour of ozone. The oxides of nitrogen are probably formed by the action of sunlight, rich in ultra-violet rays, in upper regions of the atmosphere upon air and aqueous vapour.—J. R. Moir: The transition from rostro-carinate flint implements to the tongued-shaped implements of river-terrace gravels. Seven flint implements, exhibiting a beak-like profile, have been found, associated with early palæoliths, in certain ancient valley gravels. The implements described exhibit certain characteristics of form only before seen in the rostro-carinates discovered beneath the Pliocene Red Crag and in other pre-Palæolithic deposits in East Anglia. They show also by the nature of their flaking and provenance that they are of early Palæolithic age. The dual character of these specimens is very marked and points to the conclusion that the knowledge of the manner in which to make a palæolith was acquired by long experience in producing rostro-carinates. This view finds support in the experiments in flint-flaking which have been carried out. The specimens have been recovered from a wide area in southern England, and it seems reasonable to regard them as presenting transitional types linking the rostro-carinates with the earliest palæoliths.