

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

CAMBRIDGE.—An exhibition of 50*l.* a year tenable for two years is offered each year by the governing body of Emmanuel College to a research student commencing residence at Cambridge as a member of Emmanuel College in October. Applications, accompanied by two certificates of good character, should be sent to the master of Emmanuel not later than September 24.

The next combined examination for fifty-six entrance scholarships and a large number of exhibitions at Pembroke, Gonville and Caius, Jesus, Christ's, St. John's, and Emmanuel Colleges will be held on Tuesday, December 2, and following days, commencing at 9 a.m. on Tuesday, December 2. Mathematics, classics, natural sciences, and history will be the subjects of examination at all the above-mentioned colleges. Most of the colleges allow candidates who intend to study mechanical sciences to compete for scholarships and exhibitions by taking the papers set in mathematics or natural sciences. A candidate for a scholarship or exhibition at any of the six colleges must not be more than nineteen years of age on October 1, 1913. Forms of application for admission to the examination at the respective colleges may be obtained from the masters of the several colleges, from any of whom further information respecting the scholarships and exhibitions and other matters connected with the colleges may be obtained. The forms of application must be sent in on or before Saturday, November 22.

Mr. W. Dawson has been appointed reader in forestry in the University until September 30, 1917.

OXFORD.—Additional buildings are about to be provided for research and teaching purposes in connection with the School of Forestry. The expense will be met partly out of the funds at the disposal of the Delegates for Forestry, and partly by a grant of 1000*l.* from the Development Fund controlled by the Treasury. The Council of the Surveyors' Institution has contributed 210*l.* towards the cost of a research laboratory on the diseases of trees.

Convocation has authorised the curators of the University Chest to receive the sum of 6000*l.* from the trustees of the University Endowment Fund, to be applied to the building and equipment of the new laboratory of engineering science, as soon as the allotted site shall have been legally secured to the University.

DR. J. ARGYLL CAMPBELL, junior assistant to Prof. Schäfer, in the University of Edinburgh, has been appointed professor of physiology in the University of Singapore.

THE fortieth annual dinner of the old students of the Royal School of Mines will be held on Monday, June 9, at the Café Monico, Piccadilly Circus. Mr. Frank Merricks will be in the chair. Tickets may be obtained from the hon. secretary, Mr. T. A. Rickard, 820 Salisbury House, E.C.

THE St. George's Gallery, New Bond Street, was the scene last week of an interesting exhibition of photographs of the Holy Land. These photographs were the work of Miss Sophie Nicholls, who travelled in Palestine in 1910-11 as a Frances Mary Buss travelling scholar. The scenic and panoramic views force upon the mind the aridity of the land, the apparent unchangeable character of the works of man in the towns or villages which are tucked, as it were, into crannies of the bleak hill slopes. A

set of twelve of the most typical views has been compiled for the use of schools and colleges, and an explanatory book containing topographical maps showing the position of the camera and its range of view is in preparation. Particulars of these publications may be obtained from Messrs. J. A. Sinclair and Co., Ltd., 54 Haymarket, S.W.

THE Board of Education has issued (Cd. 6795) its regulations for the training of teachers for elementary schools, to come into force on August 1 next. Substantial changes will then be made with regard to the curriculum and examinations of students who will follow the ordinary two years' course of the training college. The majority of students entering the training colleges now have had four years' education in a secondary school, whereas, when the old regulations for training colleges were drawn up, the general education of their students on entry was often very meagre. The changes are in the direction of diminishing the time devoted to general education by the training-college student and increasing that given to what are called "professional" subjects. More prominence, too, is to be given to practical work in teaching while at college. It has been found necessary to add to the equipment of the primary-school teacher a knowledge of hygiene and physical training, and both these subjects are classed as professional. Elementary science is rightly considered a subject of general education. Physics, chemistry, botany, rural science, and housecraft are called "additional," or "subjects which are not ordinarily needed by elementary-school teachers, but which may in certain cases be included in the training-college curriculum, either because they would be useful for teachers in schools of a special type, or because the student may desire to study them with a view to improving his own general education."

SOCIETIES AND ACADEMIES.

LONDON.

Royal Society, May 8.—Sir Archibald Geikie, K.C.B., President, in the chair.—A. D. Waller: The various inclinations of the electrical axis of the human heart. This paper is in substance the direct continuation of a communication made to the society in 1889 (Phil. Trans., p. 169), in which it was shown (1) that the electrical effects accompanying the beat of the human heart can be demonstrated and studied by "leading off" from the mouth and from the extremities; and (2) that in consequence of the oblique situation of the heart in the thorax these "leads" are to be classified as favourable and unfavourable or strong and weak. Of the six possible leads from the four extremities, three are strong (transverse, axial, right lateral) and three are weak (inferior, equatorial, left lateral). Of the four possible leads from the mouth and one extremity, one is weak (right superior) and three are strong (left superior, right and left inferior). The electrical equator is an imaginary line of zero potential across the chest from left shoulder to right side. The electrical current axis is from right shoulder to left side, at right angles to the equator.—Surgeon-General Sir D. Bruce, Majors D. Harvey and A. E. Hamerton, and Lady Bruce: Trypanosome diseases of domestic animals in Nyasaland. III., *Trypanosoma pecorum*.—T. Goodey: The Encystation of *Colpoda cucullus* from its resting cysts and the nature and properties of the cyst membranes. The ectocyst ruptures and sets free the transparent endocyst. Both ectocyst and endocyst are composed of carbohydrate substances and are resistant to acids, weak alkalis,