towards placing the student in some appropriate employment. "With the development of personnel procedure," says Dr. Robertson, "including greater attention to the analysis of individual abilities and achievements, there has come a desire to have useful occupational information. . . . When the world's work has been analysed and the skills and qualities required for particular jobs have been specified, the schools and colleges can shape their curricula and methods of instruction to attain more quickly and effectively the objectives of education as they pertain to vocations." This passage is significant of the trend of much of recent American research in the field of higher education. Attention is focused more on brains and service, and less on bricks and mortar.

Meristematic Tissues of Plants.

IT should be unnecessary to emphasise the importance of focusing attention on plant meristems, and yet the subject is one which is either sadly neglected or receives but scant attention. Botanists with a progressive or inquisitive turn of mind will therefore read with interest Prof. J. H. Priestley's paper on plant meristems (*Biological Reviews*, vol. 3, No. 1).

Different types of meristem are passed in review from a 'causal' viewpoint, and an attempt is made to show that each stage in development depends on preceding events, and releases in turn a system of internal correlating factors which control the progress of growth. The author draws a sharp distinction between shoot meristems, which are superficial, and root meristems, which are deep-seated, and gives some tentative reasons why their continued developments are markedly different. Repeated microchemical tests have confirmed his conclusion that the walls of the root meristem cells are in a more undifferentiated state than those of the shoot, being still impregnated with fatty and protein materials.

Now, postulating the passage of nutrient substances along differentiated cellulose walls, Prof. Priestley considers that most of the divisions in root meristems are internal because food material has some difficulty in passing to the outermost layers of cells. At the same time, divisions occur for the most part in a plane transverse to the root axis, giving the *Rippenmeristem* of Schüepp. Both of these factors are used to explain why the root grows mostly in length. In the shoot meristem, on the other hand, sap passes readily along the more differentiated cell walls, with a resulting greater division of cells in the superficial layers. Thus the primordia of bud-scales, leaves, and flowers are laid down. The repeated tangential divisions of cambium cells, contrary to Errera's Law, are explained by the fact that cambium cells are never in equilibrium with the surrounding cells, lying as they normally do across a hydrogen ion gradient between phloem and xylem.

Some interesting suggestions are put forward regarding the position of the cambium elements formed just behind the root tip. In a former paper by Dr. Pearsall and Prof. Priestley, it was shown that the reaction of cambium (in terms of hydrogen ion concentration) is intermediate between the relatively alkaline phloem and the relatively acid xylem. This reaction is approximately the reaction at which most plant proteins are isoelectric, and in the vicinity of which most protoplasmic synthesis takes place. In the young root, the protophloem groups and the protoxylem groups, on alternate radii, exude their saps respectively alkaline and acid, and in the regions where these saps intermingle, the hydrogen ion concentration necessary for the formation of cambium obtains.

Orientalists at Oxford.

NOT only was the Seventeenth International Congress of Orientalists, which was held at Oxford on Aug. 27–Sept. 1, the first meeting of that body since the War, but it was also the largest gathering that had ever taken place. It is an encouraging sign of the position of orientalists' studies at the moment that, in addition to the ordinary members, there were present two hundred official delegates, who represented the principal governments and universities of the world. Notwithstanding the fact that the meeting took place in mid-vacation, Oxford provided ample entertainment for her guests in the form of garden parties, etc. An official luncheon was given by the British Government in the hall of Christ Church on the opening day, at which Sir William Marris, member of the Council of India, presided. In welcoming the delegates he paid an eloquent tribute to the work of Sir George Grierson in the Linguistic Survey of India. A banquet was held on the evening of Aug. 31.

The Congress met in eight sections, each with its own chairman, Lord Chalmers presiding over the whole. The sections with their presidents were as follows: (1) General, Prof. J. L. Myres; (2) Assyriology, Prof. S. P. Langdon; (3) Egypt, Prof. F. Ll. Griffith; (4) Central and Northern Asia, Prof. F. W. Thomas; (5) the Far East, Prof. W. E. Soothill; (6) (*a*): 1. Ancient India, 2. Modern India; (*b*) Iran, Armenia, and the Caucasus, Prof. F. W. Thomas; (7) Hebrew and Aramaic, Prof. G. A. Cooke; (8) Islam and Turkey, Prof. D. S. Margoliouth; (9) Oriental Art, Sir Michael Sadler.

The proceedings covered a wide range, as may be gathered from the fact that one paper even dealt with the languages of Australia. Perhaps Assyriology held pride of place in attracting attention, and justified the title applied to it by Prof. Langdon when he called it the "Queen of modern Historical Research." In his survey of recent developments in the subject, he emphasised the value of the German discoveries in Hittite Boghaz Keui, the extension of our knowledge of Sumerian, the recovery of the lists of early dynasties at Ur, and the "astonishing" discoveries in the Indus Valley. Mr. Woolley's account of his excavations at Ur and the evidence for human funerary sacrifice aroused much interest; but perhaps the most appropriate of all the items in the programme was the opening of this section on the first full day of the proceedings of the Congress with a paper by the veteran scholar, the Rev. A. H. Sayce, now in his eighty-third year.

It was significant of the breadth of interest of the Congress as a whole that the chair in the Section of Oriental Art was taken by Sir Michael Sadler, Master