

Educational Topics and Events

BIRMINGHAM.—The Huxley Lecture is to be delivered on December 10 at 5.30 p.m. in the Medical Theatre of the University, by Prof. A. M. Carr-Saunders, professor of social science in the University of Liverpool, who has chosen as his subject "The Population Problem in Great Britain".

CAMBRIDGE.—The Vice-Chancellor gives notice that the professorship of animal pathology is vacant by the resignation of Prof. J. B. Buxton. A meeting of the electors will be held on January 19. The Council of the Senate has determined that at this election preference shall be given to a candidate whose experience and interests lie chiefly in scientific investigation rather than in veterinary practice, and that a professional veterinary qualification, though undoubtedly advantageous, shall not be regarded as essential.

EDUCATIONAL films have been produced in such numbers and variety and are in such wide demand as to justify the publication by the Central Information Bureau for Educational Films (103 Kingsway, London, W.C.2) of a "National Encyclopædia" and of bi-monthly bulletins, entitled *Film Progress*, for keeping it up to date. Bulletin No. 4, issued in September, reviews the work of the Bureau from 1932, the year in which it was formed. It published in the following year a "Guide", which was brought up to date and re-issued as the "National Encyclopædia" a year ago. Through the medium of *Film Progress* it keeps in touch with schools in all parts of the Empire and in many foreign countries, including China, Chile, Holland, Latvia, Rumania, the U.S.A., and the U.S.S.R. It has advocated the formation of a school and parents film society to aid in the installation of projectors in schools, an object which is also attainable through the formation of local branches of the British Film Institute. The current issue of *Film Progress* includes several reviews of books, descriptive lists of new films and detailed practical suggestions on how to train members of the school staff and selected students in the handling of projectors. Very many of the new films described appear to be admirably suited for inclusion in cinema entertainment programmes but for the supposed prejudice of cinema-goers against everything admittedly educational. Among them is "Citizens of the Future", a survey of public education claiming to show how the schools are fitting children to employ their leisure time in useful occupations and preparing them to take their proper place in a world demanding high standards.

PROFESSORS of "Things in General" are needed to cope with the undergraduate situation in American universities to-day. This is one of a number of interesting conclusions reached by Prof. H. G. Merriam of Montana in a recent address on "The Liberal Arts College in State-supported Universities". The ancient ideal of making a scholar and gentleman as the aim of a university education was long ago given up, but the idea of making scholars continues to influence university instruction. Now it is recognized that among the myriads that pass on from high school to college, very few have the stuff from which scholars can be made, and a vast amount of

instruction, lacking the integrating power of a clearly defined goal, is a futile hodge-podge. The primary function of instruction during their first two years in college should be, in State-supported, if not in all institutions, to train the students for worthy citizenship. Real problems of the individual and of society must be dealt with realistically and frankly, even when this involves breaking away from the American tradition that a college professor should avoid themes of popular contemporary interest lest he should be quoted in newspapers. The youth of to-day are impatient of theory except as manifestly applicable to live issues. The content and technique of instruction must be based on a consideration of such questions as: "What does the individual need to know about the fundamentals of the good life; about what good reasoning is and what its value; about the uses of emotion and the control of it; about society, its composition and working; about what factors in politics can be and should be controlled?"; and developed in the light of the conception of education as a gradual slow lifting of the people of a democracy to as high a level of thinking and feeling as possible.

Science News a Century Ago

Electric Currents in Metalliferous Veins

WRITING from 4 Clarence Street, Penzance, on December 6, 1836, to William Sturgeon, W. J. Henwood, the Assay Master of Tin in the Duchy of Cornwall, dealt with the subject of "Electric Currents observed in some Metalliferous Veins". In his communication he described briefly the geology of Cornwall and the methods of making his experiments, discussed the results obtained, and examined the various theories which had been put forward to explain the phenomena. Experiments were made by pressing plates of sheet copper 12–20 inches long and 3–4 inches wide closely against such portions of the metallic contents of the veins as were thought proper for examination. Copper wires 0.05 inches in diameter were connected to the plates and to a galvanometer. In some cases, 600 feet of wire were required. Copper, pyrites, vitreous copper ore, black copper ore, galena and blende were among the contents of the veins, but it was only from the metallic parts of the veins that currents were obtained. Henwood had assisted Robert Were Fox in the first experiments of the kind made, and he had then extended them to mines in all parts of Cornwall (*Sturgeon's Annals*, 1, 124).

Graham's Work on the Constitution of Salts

At a meeting of the Royal Society held on December 8, 1836, Frances Baily being in the chair, the second part of a paper by Thomas Graham was read. It was entitled "Inquiries respecting the Constitution of Salts of Oxalates, Nitrates, Phosphates, Sulphates and Chlorides". "In the third section," said the report on the paper, "he discusses the constitution of the phosphates. Phosphoric acid, he observes, is quite peculiar in being capable of combining with bases in three different proportions; forming besides the usual class of monobasic salts, containing one atom of acid to one atom of protoxide as base, two other anomalous classes of salts, in which two or three atoms of base are united to one atom of acid, namely