

refrained from attending this meeting, as well as that preceding it at Strasbourg.¹

In view of the forthcoming meeting of the International Research Council, the Australian National Research Council has asked that this question shall be reconsidered. The Royal Academies of Science of Holland, Denmark, and Sweden, and the Société Helvétique have definitely purposed to amend the statutes by omitting all references to Article I. of the Resolutions of the Conference of October 1918. This change would, it is presumed, permit any nation to be admitted to the International Research Council and the scientific organisation attached to it on a vote of a majority of not less than three-quarters of the countries already included. Switzerland, however, would, by an additional provision, confine the privilege to countries forming part of the League of Nations.

Holland and Denmark wish, on the other hand, to rescind the provisions of the addition to the statutes in 1922, and thus permit a country to be admitted to a Union without previous admission to the Council. The Executive Committee will not support this proposal, but suggests an amendment, providing that a country which has joined the International Research Council has the right to be admitted to the Unions connected with it.

It is to be hoped that the International Research Council will not maintain the present exclusion of subjects of the former enemy powers; for we believe that this position is opposed to the wishes of the vast majority of the scientific men of the allied countries, and, needless to say, to the unanimous convictions of those of neutral lands.

If the Swiss amendments are carried, no distinction will remain between allies, enemies, or neutrals. The only condition of admittance will be membership of the League of Nations and the vote of the Council. This would permit of the admission of Austria at once. Germany would probably be eligible in a few months, but would have to wait for actual admission until the next General Assembly three years hence, unless of course she could be admitted conditionally on her joining the League of Nations. Russia would presumably be excluded, as she is not likely to join the League.

The simplest course would undoubtedly be to leave the question of admission to the uncontrolled discretion of the International Council, retaining, if it is thought desirable, the necessity of a three-quarters majority for a favourable decision. We are hopeful that the General Assembly at Brussels next week will alter a situation which is both unsatisfactory and unreasonable.

¹ Reference may also be made to the letter on this subject by Prof. G. H. Hardy, president of the National Union of Scientific Workers, published in some leading daily newspapers on May 30, 1924.

College Courses and University Examinations.

A BOLD policy has been adopted by the Senate of the University of London with the view of solving one of the oldest and most difficult questions in relation to the organisation of University education in London—the question of establishing a close association between college courses of study and the examinations for university degrees. The college selected for this experiment is the Imperial College at South Kensington, comprising the Royal College of Science, the Royal School of Mines, and the City and Guilds (Engineering) College. Of these Colleges, the Royal College of Science has always adopted a distinctive method of training its students, based on the intensive study of one subject at a time. The impracticability of completely adjusting the degree examinations of the University to this system of training, conjoined with a general desire on the part of the College for freedom in framing curricula, led to a prolonged and somewhat embittered controversy between the College and the University, in the course of which the College authorities adopted the extreme measure of applying for the status of a separate University. This failed, as other attempts of the kind had previously failed; but the fundamental problem remained unsolved.

The history of the controversy as to relating University examinations to college teaching is as old as the University itself. Established by Royal Charter in 1836 for the purpose of examining for academic degrees students of University College, King's College, and other affiliated colleges, the University in course of time adopted an attitude of aloofness to all colleges, though it was no part of the original conception of the University of London, as the Selborne Commission pointed out, that it should be a mere examining body, without any direct connexion with teaching institutions. In those early days great importance was attached to the independence of the examining authority. University College welcomed the Royal Charter for the University, on the ground that the professors of the College would not have to confer degrees on their own students. There were, however, some connected with the College who raised the objection that the examinations would interfere with the independence of College teaching, both by determining the course of study and by affecting the method of instruction; and the College manifesto admitted that "this argument has weight." It is a tribute to the fairness and efficiency of the University examinations that this objection was not pressed for so many years. In 1884 the "Association for Promoting a Teaching University for London" was formed. This was the

first step leading to the reconstitution of the University of London as a teaching University. The Senate and the Convocation—since shorn of some of its privileges—were not unfriendly to the general idea of a teaching University; and the Senate was even prepared to accept college examinations for pass degrees.

It is of interest to note that the College to which the new scheme is to be applied is the College with which Huxley was connected as dean and professor, and that the policy adopted harmonises with his general views. Huxley had a fine conception of the University which London ought to possess. In his evidence given before the Gresham Commission in 1892—a model for soundness of judgment and clearness of expression—he severely condemned the attempt of University College and King's College to “corner” university education in London. As an alternative to the creation of a separate teaching university, he urged that the title and prestige of the University of London should be retained, and the University reorganised in such a manner as to secure uniformity and efficiency in all university work, with freedom and elasticity. “In short, unify without fettering.” As to the conduct of university examinations, he urged the Commission to leave the question quite open. Degree-giving was a subsidiary matter, not an end in itself. While Huxley was in favour of trusting a college to organise and test the training of its students, he considered that some outside control was desirable, because every man has a “list,” as they say at sea.

The working of this experiment in relating college teaching to university examinations will be watched with interest, and its success may produce important results throughout the Empire in the direction of greater variety and elasticity in all our educational arrangements. Let us hope, too, that it may tend to reduce the fervour of some of the worshippers of the examination-fetish. The internal results should be not less valuable. The Imperial College has not only closed a barren controversy, but also in the process has been selected for a position of special privilege in the University. *Noblesse oblige*. The University, faced with many other difficult problems, is entitled to the full co-operation of all its affiliated colleges. Only last week the partial failure of the Bloomsbury site scheme was announced by the publication of some uninspired correspondence between the Treasury and the Principal Officer of the University. This partial failure is due to the Government's arranging for the transfer of King's College to Bloomsbury without taking the elementary precaution of ascertaining whether this great College wished to move. The problem of providing a home worthy of the University of the metropolis of the Empire still remains.

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Crop-Production in India.

Crop-Production in India: a Critical Survey of its Problems. By A. Howard. Pp. 200. (London: Oxford University Press, 1924.) 10s. 6d. net.

IN recent years some of the lustre of what Disraeli in a flamboyant phrase described as “the brightest jewel of the British crown” has been dimmed by political happenings. In the less spectacular sphere of economic improvement it might be said that new facets continue to be added to the jewel. The most rabid of Swaraj fanatics must acknowledge that, if British rule has accomplished nothing else, it has, at least, given their country material benefits in fullest measure. Of these no better example can be found than the achievements of the small band of scientific workers who, during the last twenty years, have been applying scientific methods to Indian agriculture.

The most distinguished of these pioneers sets out the amazing story in the volume before us, and it is one calculated to excite the envy of his scientific colleagues all over the world. He presents a record, not only of scientific achievement, but also of an organisation under which the public support of science is not limited to the grudging provision of doles in aid of scientific research; for in India we see in operation a system of government under which the supreme power, when satisfied that scientific work has been successful, straightway by administrative and legislative measures sets a seal on that work. One example will suffice. Mr. Howard and his colleagues establish that an improved cotton (that is, a plant yielding a better fibre and more of it) cannot be effectively introduced unless steps are taken to prevent cross-fertilisation with inferior varieties; thereupon an Act is passed by the Legislature sanctioning the prohibition of the sowing (say in a district of 2000 square miles) of any variety of cotton other than that prescribed by expert plant breeders. But it must not be thought that peaceful penetration is not practised also. The poor *rayat* of India (whose life has been aptly described as “a long-drawn question between a crop and a crop”) is as fully alive to the value of good seed as his fox-hunting cousin in the shires; witness such figures as these. The area under Pusa 4 and Pusa 12 (two of Mr. Howard's new wheats) in the United Provinces is now 500,000 acres, and in the North-West Frontier Province 200,000 acres. In the Panjab colonies a new wheat known as Panjab 11 now occupies upwards of 750,000 acres. The achievements of the workers on cotton improvement are equally striking. In the Central Provinces the area under a new variety of this crop, introduced by the Agricultural Department, amounts to 700,000 acres, giving an additional profit to the cultivator of 20s. per acre.