tration and with the military at every level, so that the scientists were not merely considering purely scientific problems but putting forward their ideas on many aspects of strategy and challenging the established views, there was little comment on this aspect in the debate. Mr. N. Birch expressed serious misgivings about the continuance of the office of Chief of the Defence Staff, preferring a secretariat organized rather on the lines of that established by Lord Hankey and Lord Ismay: Mr. Aubrey Jones also appeared to hold rather similar views, referring to Lord Hankey's staff of the Secretariat of the Committee of Imperial Defence. Apart from this doubt as to whether the Minister of Defence and also the Cabinet Office might not require strengthening on some such lines, it was left for Sir Harry Legge-Bourke to stress the importance in the new structure of the Chief Scientific Adviser. However, he was more concerned that effective control should be political, though he thought that the changes were in the right direction and, like Mr. R. T. Paget, welcomed the prospect of bringing scientific and technical skill into all Government departments, believing that this would facilitate speedier action. In replying on the debate, Mr. J. Hay, the Civil Lord of the Admiralty, strongly upheld the importance of scientific advice being available at all stages of the policy-making process in defence.

Potential Scientific Manpower

In a written answer in the House of Commons on December 11 the Financial Secretary to the Treasury, Mr. A. Green, gave the number of full-time students in universities at the beginning of the autumn terms in 1961–63 as 111,385, 116,610 and 124,002, respectively. Of these, 12,209, 13,273 and 15,323, respectively, were in social studies; 28,082, 30,791 and 33,212 in pure science; 16,934, 16,652 and 18,183 in applied science; 12,424, 12,875 and 12,892 in medicine; and 2,028, 2,101 and 2,013 in agriculture and forestry. Full-time students in colleges of advanced technology on courses leading to recognized qualifications in the same terms numbered 9,098, 10,346 and 11,871, respectively; of these, 5,451, 6,138 and 7,205, respectively, were in technology; 3,040, 3,602, 4,103, respectively, in science; and 607, 606 and 563 in arts and social studies. Of 35,109 first-degree and first-diploma students entering universities for the first time in October 1963, 4,915 were in social studies, 9,416 in pure science, 5,357 in applied science, 2,726 in medicine, and 560 in agriculture and forestry. For October 1962, the corresponding figures were: 10,470, 4,121, 9,060, 4,872, 2,717 and 594; and for October 1961, 10,180, 3,932, 8,433, 5,118, 2,530 and 560. Of the 4,481 first-year students in the colleges of advanced technology in October 1963, 2,523 were in technology, 1,542 in science and 416 in arts and social studies; for October 1962, the corresponding figures are 4,081, 2,326, 1,422 and 333; and for October 1961, 3,458, 1,983, 1,165 and 308.

The Plant Varieties and Seeds Bill

The Plant Varieties and Seeds Bill, which received its second reading in the House of Lords on November 26, deals first with the rights of plant breeders and, secondly, regulates transactions in seeds and seed potatoes. As Lord St. Oswald, Joint Parliamentary Secretary to the Ministry of Agriculture, Fisheries and Food, explained in moving the second reading, the Bill as a whole originated in the reports made by the Committee on Transactions in Seeds in 1957 and 1960. The first part provides essentially a scheme for encouraging plant breeding and also derives from the International Convention for the Protection of New Varieties of Plants, to which the Government was signatory two years ago, subject to ratification after discussion in Parliament. The provisions of the Bill follow closely the arrangements proposed in the Committee on Transactions in Seeds report (Cmnd. 1092) of 1960 and grants the plant breeder a form of proprietary rights in his new variety. These are such that when the breeder has succeeded in registering the variety and has given it a distinguishing name, he alone, during the period of protection, has the right to grow it for producing seed or other reproductive material for sale, and the right to sell such material, except under licence from the breeder. The Bill also provides wide co-active powers by means of the issue of compulsory licences to prevent unreasonable restriction. Consent of the breeder will not be required for use of his variety for further breeding or research. For these purposes the Bill establishes the Plant Variety Rights Office as a semi-autonomous body standing in much the same relation to the Agricultural Departments of the United Kingdom as the Patent Office does to the Board of Trade.

The second part of the Bill is largely concerned with measuring, entrusting to regulations certain of the details written into the Seeds Act, 1920, and making the statutory control more flexible. The essential principle that the seller of seeds should give an adequate and reliable description of his goods to the buyer is retained and strengthened, particularly by the civil warranty provisions of Clause 17. A further Clause enables the Agricultural Ministers to make regulations controlling the import of certain kinds of seed, when necessary, to safeguard Britain's indigenous strains against deterioration by admixture and cross-pollination, or to prevent the import for sale of seed unsuitable for growing in Britain. The Agricultural Ministers are also empowered jointly to prepare an index of names of plant varieties for use in connexion with the sale of seeds and to require new varieties of plants to undergo performance trials before they are put on the market. In replying on the debate, Lord St. Oswald referred to the valuable work of the National Institute of Agricultural Botany and said that the Bill, which was generally welcomed in the debate, was an attempt to support the Institute's work.

"New Courses for New Students"

An address, "New Courses for New Students", delivered by Prof. H. Rée, of the University of York, at the annual conference at Margate to a meeting of Grammar School Teachers, has been issued as a booklet by the National Union of Teachers (*New Courses for New Students*. Pp. 12. London: National Union of Teachers, 1963). Prof. Rée was concerned with the effect on the universities, particularly the new universities, of the immense increase in the demand for university education, and he believed the reason for changes in university courses, as well as in sixth-form courses, lay largely in the attitude of the sixth-formers themselves. The new sixth-former was much less dependent, either on his parents, or on teachers, or on any of the older generation, than in the past, and Prof. Rée believed that the sixth-former resisted the compartmentation of his studies and the barrier between arts and the science sides. The new universities were attempting to deal with this situation and to provide world citizens rather than local citizens. At York the aim was to limit the number of studies offered and students were encouraged to take one main subject and another subsidiary to it—about two-thirds of the time being spent on the main subject and one-third on the subsidiary. Where this subsidiary course was education, it was not designed for those necessarily becoming teachers but rather to help introduce the undergraduate to the world in which young people were growing up—the youth clubs, the youth employment service, the juvenile courts, etc. This was a general feature of the new universities: another was the determination to ensure direct contact with teachers and eliminate the "nine to five" students. While it was hoped to secure that all students had at some time in their university life the experience of living together in groups in colleges or halls of residence, it was not intended to eliminate living in 'digs' or flats. Another problem which the new