## UNIVERSITIES AND UNIVERSITY COLLEGES IN GREAT BRITAIN

FOR its publication, "Returns from Universities and University Colleges in receipt of Treasury Grant for the Academic Year 1950-51"\*, the University Grants Committee has continued the small format introduced last year. While the record number of students of the previous year was not attained, the decrease was only slight-85,314 instead of 85,421-and the proportion of assisted students also remained high  $(\overline{72}\cdot 5)$  per cent compared with 72.8 per cent during 1949-50 and 73.7 per cent during 1948-49); the dependence on Parliamentary grants again increased and now represents 64.9 per cent of the recurrent income, 16.6 per cent coming from fees (compared with 17.7 per cent during 1949-50),  $5 \cdot 5$  per cent from endowments and  $4 \cdot 3$  per cent from grants from local authorities, as against 5.7per cent and 4.6 per cent, respectively, during 1949-50. The ratio of staff to students again increased, the full-time teaching staff being now 8,603 compared with 7,930 during 1949-50. Although the number of professors increased by 48 and of readers, assistant professors and independent lecturers by 62, the increase was mainly in the grades of lecturers (360), assistant lecturers and demonstrators (83) or other grades (120). Separate figures are now given for the Colleges and Schools of the University of London for full-time staffs, income and expenditure and libraries.

Of the full-time students, 67,743 were reading for a first degree, 6,244 for a diploma and 11,327, together with 4,158 of the 16,698 part-time students, were engaged in research or other advanced work; 64,180 full-time students were in England, 5,133 in Wales and 16,001 in Scotland, the decrease in Scotland thus offsetting an increase of 776 men and 247 women in England; in Wales there were 216 fewer men but 65 more women. Of the total, 15,098 were at Oxford and Cambridge, 18,412 at London and 30,670 at other English universities and colleges. Only at Bristol and Liverpool were there increases of more than a hundred students. The total for London colleges and schools increased by 913. Elsewhere there were decreases or slight increases. The North Staffordshire University College appears in the returns for the first time. The proportion of full-time students residing in colleges and halls of residence increased to  $24 \cdot \overline{3}$  per cent, but is still less than in 1938-39  $(25 \cdot 1 \text{ per cent})$ , although the number in residence is greater (20,732 compared with 12,555). The proportion of women in residence is still nearly double that of men (38.9 per cent compared with 20 percent); 39.1 per cent of full-time students were in lodgings and 36.6 per cent at home, compared with  $33 \cdot 2$  and  $41 \cdot 7$  per cent, respectively, before the War. There was a further slight increase in overseas students compared with 1949-50: 3,657 full-time and 1,628 part-time students came from within the British Commonwealth and 2,902 full-time and 1,290 part-time students from foreign countries. Of the 22,223 students admitted for the first time in 1950-51 (a decrease of 2,108 on 1949-50), 20,292 were reading for a first degree and 1,931 for a diploma, and, of those reading for a first degree, 1,836 were

\* University Grants Committee : Returns from Universities and University Colleges in receipt of Treasury Grant, Academic Year 1950-1951. (Cmd. 8638.) Pp. 44. (London : H.M. Stationery Office, 1952.) 28. net. less than eighteen years of age and 11,656 were nineteen or more.

Although the distribution of full-time students did not differ significantly from that during 1949-50, some of the changes in numbers are noteworthy. Arts students represented 43.1 per cent of the total; those in pure science 20.1, in medicine 16.6, in technology 12.4, in dentistry 3.4, in agriculture 3.1, and in veterinary science 1.3 per cent. Of the fulltime advanced students, 24.9 per cent were working for a diploma and, of the remainder, 38.8 were in arts, 34.0 in pure science, 11.9 in medicine and dentistry, 11.8 in technology, and 3.3 per cent in agriculture. While the number of full-time students in arts decreased by 455 to 37,243 and those in science increased by 251 to 17,168, there was a decrease of 342 in the students of technology. In spite of the slight increase of 54 in advanced students of technology, there is no evidence in these returns of any response to the call for more university-trained technologists sounded so urgently more than two years ago. Medical students were almost stationary at 14,201, and students in agriculture decreased by 167 to 2,606. An increase of 391 in veterinary science students was due to the incorporation in the University of London of the Royal veterinary College with 380 students. Of the full-time students, 37,714 out of 49,999 men and 9,627 out of 14,181 women in England were receiving assistance in the way of scholarships, exhibitions or other awards from public or private funds: for Wales, the corresponding figures are 3,314 out of 3,822 men and 1,095 out of 1,311 women; and for Scotland, 8,144 out of 12,010 men and 1,950 out of 3,991 women. The percentage of assisted students in England ranged from 77.9 per cent in the provincial universities, to 65.9 per cent in the University of London; Oxford and Cambridge with 75.7 and 74.3 per cent, respectively, thus came between the two. Of the 65,831 full-time men students, 37.2 per cent were in arts, 21.1 per cent in pure science and  $15 \cdot 8$  per cent in technology; for the 19,483 women students, the corresponding figures are 63.0, 17.0, 15.1 and 1 per cent. Medicine and dentistry claimed 44.6 per cent of the part-time advanced students, arts 30.4, technology 9.6 and pure science 8.7 per cent, compared with 45.1, 32.8, 10.8 and 10.8 per cent, respectively, in 1949-50.

The recurrent income of the universities and university colleges of Great Britain increased by £2,258,388 to £24,268,123, of which £15,767,002 was from parliamentary grants,  $\pounds 4,022,459$  from fees,  $\pounds 1,329,916$  from endowments and  $\pounds 1,040,037$  from grants from local authorities. Of the total income from public funds of £16,807,039 and £7,461,084 from other sources, the University of London received £5,075,985 from public and £2,070,651 from other sources; the University of Cambridge similarly received £1,043,657 and £1,080,845; for Oxford the corresponding figures are £945,830 and £729,499; for Manchester, £912,718 and £277,390; for Durham, £720,392 and £315,985; for Birmingham, £724,752 and £271,994; for Bristol, £633,976 and £299,369; for Leeds,  $\pounds700,876$  and  $\pounds245,261$ ; and for Liverpool,  $\pounds665,317$  and  $\pounds246,085$ . No other English university or university college, except Sheffield, with £607,415, had an income exceeding half a million pounds, though three universities in Scotland exceeded this

figure: Aberdeen, with £404,450 from public and £134,337 from other sources; Edinburgh, with £738,037 and £345,198; and Glasgow, with £835,650 and £361,388, respectively. The University of Wales, including the Welsh National School of Medicine, received £847,960 from public funds and £327,164 from other sources.

Of the total expenditure of £24,269,862, an increase of £2,501,952 on the previous year, administration accounted for 8.7 per cent, departmental main-tenance 69.7, maintenance of premises 11.1, and miscellaneous expenditure 9.4 per cent. Capital expenditure met from reserves amounted to £254,274 and allocation to reserves, £236,707; for 1949-50, these figures were £472,327 and £270,993, respectively. Departmental maintenance included salaries of teaching and research staffs and payments for superannuation, the running costs of laboratories, lecture rooms, libraries and museums, and the supply of materials, apparatus, books, specimens, etc. Salaries and superannuation amounted to £11,895,971, an increase of £1,349,625 on the previous year; this represents 49.1 per cent of the total expenditure, compared with 48.4 per cent in 1949-50 and an 8.5 per cent increase in full-time staff.

Library expenditure, excluding general maintenance of library buildings, rates, heat, light, repairs, etc., amounted to £891,385 compared with £788,402 in 1949-50, the percentage of total university expenditure remaining 3.7 per cent. Of this total, £473,087 was for salaries and wages, £197,062 on account of books and £103,305 on periodicals. The University of Oxford spent £32,095 on books, and Cambridge £10,102, while a total of £51,025 (including  $\pounds7,027$  on the Central Library,  $\pounds5,678$  at the London School of Economics and  $\pounds5,006$  at University College) was expended for this purpose in the colleges and schools of the University of London. Nine other universities, Birmingham (£5,102), Bristol (£5,467), Leeds (£6,638), Liverpool (£8,111), Manchester (£9,092), Aberdeen (£6,995), Edinburgh (£9,648), Glasgow (£8,933) and St. Andrews (£5,307), spent £5,000 or more on books, but only London (£30,496), Cambridge (£7,542), Glasgow (£7,263), Manchester (£5,228) and Oxford (£5,175) spent a like sum on periodicals.

While these returns show that university expansion in Britain has now been halted and afford signs, as in the increasing ratio of staff to students and the slight decrease in the proportion of art students, that the universities are already adjusting themselves to current requirements and seeking to maintain or raise standards, they also contain evidence of the vulnerability of such standards to extraneous pressure with the growing dependence of the universities upon State assistance. That in itself supports the contention of the Select Committee on Estimates in a recent report regarding the desirability of giving the fullest possible information to Parliament concerning the expenditure of the grant-in-aid of universities and colleges. A Treasury Memorandum included in the Eleventh Report from the Select Committee on Estimates for the Session 1951-52 (No. 289. London : H.M.S.O. 9d. net) accepts the recommendation of the Estimates Committee that a note should be inserted in the estimates reconciling the amount of the quinquennial grant proposed for the academic year with the total figure of recurrent grant shown in the estimates for the financial year, but the Treasury does not consider that the estimates are the most convenient vehicle for giving information

to Parliament on changes in recurrent grants. The Treasury proposes to consider the best way of making any specific changes known to Parliament, but rejects the Estimates Committee's further recommendation that the Comptroller and Auditor-General should have the right to inspect the books and accounts of universities in respect of non-recurrent grants for capital development. The Treasury considers that the existing audit of university accounts already ensures that the grant is used for the purpose for which it is intended. The detailed scrutiny of expenditure on the design and equipment of buildings inevitably raises questions of academic policy, and in the Treasury view goes far beyond the broad lines on which control should be exercised if academic freedom is to be unimpaired. The Treasury believes that such scrutiny is best left to the University Grants Committee, and it is satisfied that this Committee, with the help of its own works and buildings sub-committee and of the Ministry of Works, scrutinizes all plans for which aid is sought and requires the universities to accept the lowest tender for their work unless good reason can be shown to the contrary.

The Treasury's attitude on this point is evidence of how firmly entrenched in Great Britain is the desire to safeguard academic freedom; but the universities are now too vulnerable to external conditions for the position to be regarded with complacency. The Treasury memorandum indicates that in accordance with a further recommendation of the Estimates Committee the terms of reference of the University Grants Committee will be revised to remove the obligation to collect, examine and disseminate information on university education abroad. Approval is also expressed of the recommendation regarding continuity in the senior full-time posts of the University Grants Committee.

## ELECTRICAL ENGINEERING IN BRITAIN

THE inaugural address of Colonel H. B. Leeson, on taking office as president of the Institution of Electrical Engineers, was delivered on October 9, his subject being "Electricity and Current Affairs". The relationship of the electrical industry to the economic position and prospects of Great Britain was the central theme of the address, which presented not only a detailed picture of the situation of the industry in question, but also set this in perspective in its world background. "For generations," said Colonel Leeson, "cotton and coal have been the staple of our oversea trade; engineering is the staple of the future." In 1951 roughly 39 per cent, or just over £1,000 million, of the value of the exports of all kinds from Britain represented engineering products, and, of this, £189 million came from the electrical industry.

In tracing the growth of the industry during the past fifty years, Colonel Leeson pointed out that the value of the output of the electrical manufacturers, which in 1907 was £14 million, had been estimated for the year 1951 at £700 million and, in that year, nearly six hundred thousand people were employed. Although the electrical industry thus already plays a substantial part in the country's economy, it is destined to play a greater one in the future, and the further expansion of the industry must be considered