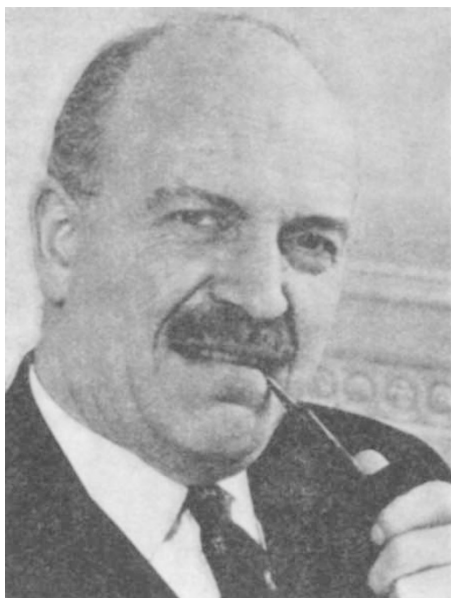


pastiche of nineteenth century Homeric translation, written by a boy of eleven.

These are, however, minor points. Perhaps the most serious difficulty that would arise if the syllabus came into wide service would be the shortage of teachers knowledgeable enough to take the course.

## New Man for Porton

IN March 1968, Mr Gordon Neville Gadsby will take over as director of the Chemical Defence Experimental Establishment at Porton, near Salisbury. He will succeed Mr E. E. Haddon, who is retiring. Mr Gadsby, who is the present deputy chief scientist (Army), was an honours graduate in chemistry and a Cadbury Prize winner at Birmingham University and before the war was senior chemistry master at Waverley High School in Birmingham. After service in the Army and as a lecturer at the Royal Military College of Science, he moved into operational research. In 1960 he became director of operational science and research and, later, director of the Army Operational Research Establishment. In 1965 he became director of biological and chemical defence (Army).



Despite its fearsome image, the establishment at Porton is responsible for a great deal of useful work. Mr Gadsby is not yet ready to suggest any changes which he may favour when he becomes director, but makes it clear that he does not want to give the impression of being a new broom.

## Improving Traffic Flow

TRAFFIC delays throughout Britain are estimated to cost £750 million a year. This figure is clearly one reason why the Road Research Laboratory is spending £0.5 million on a large scale experiment in traffic control by computer. The experiment, taking place in Glasgow, is described in a recent report from the laboratory.

A similar experiment carried out in West London was devised to solve a particular problem, but the Glasgow experiment is designed to test and compare

eight different systems of traffic control. The experiment started on May 10, and results so far are said to be encouraging. The experiment is controlled by a Marconi Myriad computer which has been used to link 80 traffic signals controlling a square mile in the centre of Glasgow. The systems under test do a variety of things, from minimizing the delay in networks controlled by fixed time signals to arranging for equal saturation on all branches of a crossroad. Each system is assessed by measuring the average journey time over standard routes with instrumented cars. Five of the systems under test have been tried previously, either in this country, Europe or the United States; the other three have been newly devised. As far as the RRL knows, this is the first time that a fully comparative experiment has been conducted. Traffic delays in central Glasgow, the RRL estimates, cost £2 million a year—if only 5 per cent of this can be saved, a reasonable estimate, the experiment would pay for itself in five years.

## Following Parasites

THE Ministry of Overseas Development has made a grant of £45,000 to establish a new headquarters for what is called—somewhat alarmingly—the Blood Meals Service. This is a unit financed by the government to analyse the stomach contents of blood-sucking insects carrying malarial and other parasites. Smears of the stomach contents are sent from abroad, and their analysis provides clues to the feeding habits of vectors, and other information of importance to foreign workers and authorities such as the World Health Organization. Until now this has been done at the Lister Institute of Preventive Medicine, Elstree, but work has now begun on the new centre at Silwood Park, near Ascot, the field station of Imperial College, and it is hoped that the service will be able to move there early next year.

The Ministry's grant also covers the cost of the service for the next three years, and the new director of the unit, Mr Peter Boreham, is hoping to be able to carry out research on the pathogenesis of trypanosomiasis as well as operating and improving the service itself. The unit will be an important addition to the research teams at Silwood under the direction of Professor T. R. E. Southwood. The Blood Meals Service was founded in 1948 by Professor Bernard Weitz, who continued as director until this September, when he left to direct the National Institute for Research in Dairying at Shinfield, Berkshire.

## European Forestry

FORESTRY cannot keep pace with the marked growth of industrial production. This is one of the important findings of a report called *Cost Studies in European Forestry*, published by the Royal College of Forestry in Stockholm.

Conditions in forests and forest industries are considered in detail for each country, and the results include the share of forestry in the gross national Product, total roundwood balances, external trade in forest products and wage development. Data for Sweden served as a standard for the work in other countries and analysis of material was carried out at the Royal College of Forestry in Sweden. For the purpose of the study, Austria, Finland, Norway and

Sweden were considered to be timber exporting countries, while Denmark, Germany and Switzerland were classified as timber producing and timber importing countries. Britain was considered to be the sole timber importer.

The report shows that the share of forestry in the gross national product between 1953 and 1962 was highest for Sweden and Finland, but that a declining trend is evident everywhere. Despite this, net production value of forestry in absolute figures has remained approximately constant. In some cases, declining timber prices have been compensated by increased timber output. Germany is the largest consumer of forest products and in 1960 use of forest products in Britain amounted to only half the consumption in Germany. Wood consumption per head has increased in Sweden, Austria, Germany and Switzerland and decreased for Finland and Norway.

One of the most important purposes of the study was to compare the prices of roundwood in the different countries, because these prices determine the revenue which the forest owners receive from timber sales: the distance which the saw logs have to be transported to the consuming centres seems to have a decisive influence. Prices for saw logs are highest in Switzerland and the highest prices for pulpwood are also paid in Switzerland.

Administrative or overhead costs in forestry are highest in Germany and lowest in Norwegian crown forests. And the report suggests that a systematic levelling of the standard of living of the workers is taking place. Finally, the report concludes that Switzerland makes the biggest profits from forestry.

## MRC Appointment

SIR HAROLD HIMSWORTH, who has been secretary of the Medical Research Council since 1949, is to retire at the end of September or earlier. His successor will be Dr J. A. B. Gray. When Dr Gray, previously professor of physiology at University College, London, was appointed second secretary of the council in May 1966, it was widely understood that he would succeed Sir Harold.

Sir Harold Himsworth became secretary at the age of 44. After a distinguished academic career, also at University College, he was appointed professor of medicine at London University and director of the University College Medical Unit. He was knighted in 1952 and elected to the Royal Society in 1955. Under his aegis the budget of the MRC has grown from £1.6 million in 1949 to £14.2 million in 1967-68. During the same period, the number of staff has increased from 1,401 to 3,529.

## Parliament in Britain

### Nuclear Stations

THE Minister of Technology, Mr A. Wedgwood Benn, put the total expenditure on the development of the Magnox system for civil use at about £20 million, just over half relating to the development of fuel elements, in respect of which appropriate surcharges were included in fuel prices. If charges were imposed, sufficient when discounted to 1967 to cover the remaining cost of development of the reactor system itself, the average cost of generation from Magnox stations

would rise by about 0.007d. per unit, assuming 20 years' life and 75 per cent load factors. The expenditure to March 31, 1967, on the development of the Advanced Gas-Cooled Reactor system amounted to £89 million. Whether a royalty of 0.014d. per unit would recover these costs in full depended on how many such stations were built and how much electricity they generated. (Written answers, December 11 and 12.)

### Students

MRS S. WILLIAMS, Minister of State, Department of Education and Science, estimated that the annual cost to public funds of a student who completed his course at a college of education was about £785, and that the estimated annual cost to the Exchequer was about £510. Non-graduate entrants to courses of initial teacher training numbered 29,058 in 1965 and 33,378 in 1966; the provisional figure for 1967 was 36,500. Most of these students are following 3 year courses; of the students who entered in 1961, 1962 and 1963, about 90 per cent completed their courses satisfactorily. About 4 per cent of entrants did not continue in training beyond the first year of the course. For 1966-67 the technical colleges admitted to advanced courses some 27,000 full time and sandwich students, 36,000 part-time day and 28,000 "evenings only" students. It is estimated that in the academic year 1971-72 total recurrent expenditure by universities (other than expenditure on research contracts and other self-balancing items and local authority rates) will be about £200 million with student numbers between 220,000 and 225,000, giving an average expenditure per full-time student of about £925, compared with £835 in the academic year 1966-67. The fourth annual report of the Universities Central Council on Admissions gives a total of 13,535 admissions by universities in Great Britain to first degree and first diploma courses in pure science starting in October 1966, and estimates that places could have been found for about another 1,000 if more suitably qualified candidates had come forward. (Written answer, December 14.)

### Oceanography

IN an adjournment debate in the House of Commons on December 11, Mr T. Dalyell raised questions about the development of the marine sciences and environment and the general state of British oceanography. Replying for the Government, the joint Parliamentary Secretary, Minister of Technology, Dr J. Bray, concentrated on the technological rather than the scientific aspects. The integration of the Ministry of Aviation with the Ministry of Technology had facilitated the combination of those parts of the defence research problem and the civil research programme which fall in this field. Following the Harwell Conference a working party had been asked first to review research and development in progress on all aspects of marine science and technology in the United Kingdom, and secondly, to identify areas of marine science and technology which are likely to be the most profitable economically and to consider what further research and development would be necessary to exploit them. Thirdly, the working party was asked to advise on a programme of action and on means of co-ordinating the existing and proposed programmes of research and development.