

of loan system help to create a sense of realism about the value of university education—high or low as it may be—among university students, but this also seems to be the only realistic hope that the growth of the university system will be as buoyant as it should be.

POLITICAL PARTIES

Liberals Seek Policies

HARD on the heels of the symposium on science and technology organized by the Conservative Party (see *Nature*, 220, 633; 1968), the Liberal Party last weekend gathered at the University of Nottingham a group of its own members and of outside advisers to talk over the several reports on the proper use of scientific manpower. Unlike the political parties which can realistically hope to become a real government, the Liberals do not have to pretend that they must hammer out at their meetings a grand strategy to sustain an administration through five years or more of office. The result seems to be that discussions are at once sensible and practical. Many of the particular suggestions made at the conference last weekend will no doubt appear in the form of parliamentary questions or lobbying behind the scenes in the months ahead.

The conference was blessed at various times with the principal authors of the three reports on manpower problems which have appeared in the past two years—Professor Michael Swann, Dr F. Dainton and Dr F. E. Jones. The three speakers, and Mr Stephen Bragg of Rolls-Royce who presented the industrial case on scientific manpower, told collectively a gloomy tale. Dr Dainton, whose committee presented its views on the causes for the drift away from science studies in British schools just over a year ago, eloquently explained how it has come about that young people in the schools seem to prefer courses of study with at least some leavening of the arts and humanities to courses which consist exclusively of science and mathematics. The question which remains to be answered is how soon the committee's recommendations about the curriculum will find their way into current practice in the schools. Mr Bragg seemed to be more optimistic about the chances of remedying the unwillingness of science and technology graduates to work in British industry, and said that he had persuaded his own company that the time had now come "to stop sniping at the universities". He acknowledged that much of the unwillingness of graduates to enter industry could be remedied by better arrangement for the training of new entrants to industrial companies. It seems to be agreed that young people should be put into responsible positions as soon as possible. Mr Bragg's truce with the universities does not, however, extend to the PhD degree, which he described as quite unsuited to the needs of industry. The trouble, unresolved at the conference, is that the opposition to the present state of affairs may restrict the scale of postgraduate studies and not modify the quality of PhD courses in ways that would please the industrialists.

The most sombre tale was told by Dr Jones, whose committee was responsible for the report on the reasons why trained manpower tends to emigrate. For one thing, it now appears that the rate of emigration has increased—according to Dr Jones, the number of qualified engineers leaving Britain in 1967 was 50 per

cent of the number graduating, compared with 42 per cent the previous year. The chief cause remains what it has always been—that facilities and salaries are better overseas. Dr Jones argued eloquently for higher salaries for people beginning their careers. He was, however, depressed about the likelihood of striking an economic balance between Britain and the United States. The stagnation of industrial investment for several years was only one of the reasons why British industry was now less productive than its competitors elsewhere.

PESTICIDES

Strong Measures in Sweden

AFTER a meeting of expert advisers from several countries in Stockholm last week, the Swedish National Poisons and Pesticides Board (the Giftnämnden) has recommended strong measures for dealing with some organochlorine insecticides. Recommendations are that from January 1 next year the use of aldrin and dieldrin in Sweden should be banned completely. The use of DDT and lindane for domestic purposes—in home and garden—is also to be forbidden, and the agricultural use of DDT is to be banned for two years.

The initial two year ban on DDT is suggested as a way that the Swedes can assess their own contribution to the large concentrations of residues that have been found in wild life and soils throughout Sweden and in the Baltic. There will be a programme of special studies to find out how much of this contamination is a result of Swedish use of DDT, and how much comes as fall-out from abroad. At the same time there will be research into alternatives to the banned insecticides.

Although various other countries have banned aldrin and dieldrin, Sweden may take the lead as the first western country to recommend a ban on DDT. There is a great deal of public interest in pollution and other environmental problems in Sweden at the moment, and these recommendations should do something to influence opinions in other countries. In Britain they will no doubt be of interest to the Wilson Committee, which operates a pesticides safety precautions scheme and is now reviewing the organochlorine compounds.

TRANSPORTATION

New Highway Strategy

A 2,000 MILE network of inter-city motorways and dual carriageways that will determine the pattern of movement in England well into the twenty-first century is the way Mr R. Marsh, the Minister of Transport, described the green paper, *Roads for the Future* (HMSO, 10s 6d), which was published last week. Gone are the days of isolated improvements of roads where the congestion is worst or the accident rate highest. Instead there is to be a comprehensive national highway strategy on a hitherto unprecedented scale in Britain, which will take into account the endlessly ramifying consequences of improved road communication.

The cost of the network shown in the map, spread over 10 to 15 years starting in 1972, is estimated at £1,600 million at present day prices; added to this, the plan demands a further £600 million for improving crucial points on link roads outside the network proper. The ministry has not at this stage decided on any