

number of institutions. Control engineering, for example, would be supported principally in Cambridge, Imperial College and the University of Manchester Institute of Science and Technology. There would in addition be a number of second-tier departments in which specialized lines of research could go on, but the SRC could not support any other department on the scale of the top three unless its programme "turned out to be of outstanding brilliance and industrial importance, and unless arrangements for collaboration and sharing of expensive equipment have been made". Meanwhile, he suggested that the favoured centres should remember that they have a special responsibility to less well supported departments.

## Sciences in Parliament

THIS week the scientific section of the House of Commons Library celebrated its second anniversary, and it is more than a little sobering to realize that the section is such a recent innovation. It seems also to be still possible for the needs of some 630 members to be served by a scientific section of two within the larger research section of the library. Dr John Poole is in charge of the scientific section and is assisted by Dr Diana Holden. So far they seem not to be grossly overworked, but it is clear that if the growth of enquiries continues at present rates, the staff will have to be increased. At present, the section deals with about 400 enquiries a year, although there are only a few members—perhaps no more than twenty—who take an intelligent interest in science.

The work of the Select Committee on Science and Technology and the Select Committee on Agriculture has clearly acted as a great stimulus to the library. In this sense, though the staff of the library would be far too polite to say so publicly, the scientific section could help to repair the deficiencies in the machinery of the House of Commons described two weeks ago by the clerk of the house, Sir Barnett Cocks. Sir Barnett criticized the Treasury sharply for not allowing the house to increase the number of clerks from thirty-six to forty-six. The clerks are now very seriously overworked, and new ones are hard to recruit. The library staff naturally occupies a rather different position from the clerks, but its members have been sitting in on sessions of the select committees, analysing documents and providing information. Library staff try to adopt an unbiased position, and leave the political interpretation of the information they provide to the whim of the individual member. Thus they provide all information short of actual advice—a position they apparently find neither difficult nor frustrating. Actually, there is probably less scope for work of this sort during the present select committee investigation into defence research, as there is far less documentation available for analysis. The sub-committee investigating coastal pollution, on the other hand, is overburdened with documentation and would be wise to take full advantage of help from the library staff. Without it, there is a distinct danger that all the literature gathered together simply languishes in boxes.

## Veterinarian Vaccinators

THE British Veterinary Association, which only four months ago maintained that vaccination against foot

and mouth disease was a policy of despair, has in the aftermath of the 1967 epidemic changed its mind. It has now become convinced that vaccination is the only way to prevent epidemics of the disease. In its evidence to the Northumberland Committee, the association says that "if, for political reasons, carcase meat is still to be imported from infected countries, the only way to ensure that epidemics do not occur is to supplement the present measures with a well organised programme of systematic vaccination". The association considers that imported infected meat is the major source of infection, and it believes that the risk of airborne infection is steadily diminishing because of better control of the disease on the continent. Increased international trade and travel is tending to make the world a single ecological unit, but it is impossible to judge how serious this risk is, although it is certainly less than that from tainted meat. Only one outbreak of foot and mouth disease, in Canada in 1951, has been traced to a human carrier.

If meat imports from South America are to continue, the association now firmly believes that vaccination should be used as an adjunct, not an alternative, to slaughter. In its evidence, the association discounted the arguments against vaccination in the Gowers report. Modern vaccines give better and longer protection and, as French experience shows, it is possible to prevent epidemics even though calves and sheep are unprotected. Moreover, vaccines which are effective for pigs are expected to be available soon. The association estimates that the cost of vaccinating all cattle and sheep in Britain would be £3 million a year, which is probably less than the average real cost of the slaughter policy even in good years.

Under the association's scheme, all adult cattle would be vaccinated once a year and calves would be vaccinated twice within a three month interval once they had reached four months. Lowland sheep and pedigree pig herds would also be vaccinated, but hill sheep and other pigs might be left unvaccinated. Keeping unvaccinated pigs on the same farm as large cattle herds would be prohibited. In the event of an outbreak, all stock in the infected area would be given a booster dose of monovalent vaccine against the appropriate sub-type of the virus.

The association believes that several factors contributed to the breakdown of control in the recent epidemic. It claims that methods of livestock production have changed more in the fourteen years since the Gowers report than in any previous century. Larger herds, increased movement of cattle and new farming methods, all help the spread of the disease. The association draws the obvious parallel between foot and mouth disease and Newcastle disease or fowl pest, which, with the increased sophistication of the poultry industry, could not be controlled by slaughter, with the result that vaccination had to be introduced in 1962. The association accepts the meteorological evidence that wind and rain were important factors in the spread of the epidemic (see page 121); it suggests that danger of windborne spread could be minimized if slaughter immediately followed prompt reporting of the disease instead of being delayed, sometimes for two to three days, while the cattle are valued. Why not base this valuation on the corpse of an animal?

The association also proposes that control measures need to be tightened and an advisory board established,