

these changes will outweigh the disadvantages. No doubt readers will appreciate the preselection of articles which separate publication makes possible. To set against this may be a slight increase of the time-lag before publication and the possibility that important articles will not reach as wide a readership as they deserve. Although it is known that the British society would like to see a wider integration of scientific journals on a European basis, the splitting of the journals is not directly related to developments of that kind.



The society has also in the past few weeks lost through retirement Dr A. C. Stickland, editor and deputy secretary. Dr Stickland joined the staff of the Physical Society twenty years ago. She has been appointed managing editor of the *Annals of the International Years of the Quiet Sun* under the auspices of the International Council of Scientific Unions.

### Making the Most of Manpower

A POLICY conference on highly qualified manpower held in September 1966 is agreed to have raised more problems than it solved, but the report just published by the Organization for Economic Co-operation and Development (OECD), which ran the conference, includes an impressive list of recommendations.

Means of adapting educational systems to meet economic needs were discussed, together with the use of manpower by employers. In an age when science and technology are expanding quickly, education and training are vital and must be continued throughout the working life of each individual if accumulated knowledge is not to become obsolete—this is a familiar theme of OECD. The report lists five areas in which research must be done if the problems involved are to be pinned down. These cover improvement and standardization of statistics of personnel and the reasons why different people chose various academic subjects, training and jobs. Only by following individuals through various stages in their careers will the important influences be discovered.

The conference recommends to the member countries that they should develop systematic policies for the training and efficient employment of highly qualified manpower to meet their economic needs. The aim should be to provide education at school, university and

in the job which adds up to a coherent whole for each individual, as well as providing a complete information service on employment situations and possibilities so that the best use is made of qualified workers. National bodies would have to be set up to organize the required research and put results into effect. On an international level, OECD members were asked to continue the present work by referring back to the governments concerned. A further conference is proposed.

### Foot and Mouth Disease

MORE than 21,000 animals have so far been slaughtered during the fastest moving epidemic of foot and mouth disease for nine years in Britain. The number slaughtered includes 7,614 cattle, 6,709 sheep and 7,335 pigs. There have been 87 separate outbreaks.

The causative agent is a spherical RNA virus, 22 millimicrons in diameter and designated sub-type O1. Of the seven immunological types so far characterized, foot and mouth disease in Britain is usually attributable to the three types O, A and C. There is no reason to believe that type O1 is particularly virulent, and it has indeed occurred in several European countries during the past few years. The most recent alarming outbreak of the disease in Northumberland and Southampton in 1966 was also caused by type O1.

The present outbreak was confirmed on October 25 at a farm near Oswestry in Shropshire, at a time when a large animal market was being held in the vicinity. There seems, however, to be no link between these cases and outbreaks in other counties. The veterinary service of the Ministry of Agriculture fears that there may well be an undisclosed source of infection in the area. It is possible, but unproved, that this epidemic is the result of infected meat imported from abroad. The virus can survive for days outside the animal body. It can be transmitted mechanically by direct contact from one animal to another, on cars or on the beaks and feathers of birds; transmission can also be airborne. As long as trade continues with infected countries, sporadic outbreaks in Britain will occur.

Another feature of the virus is its tendency to undergo antigenic variation. A vaccine incorporating the three types O, A and C is already being used on cattle in France, Belgium and Holland with encouraging results. The cost of such a vaccination scheme in Britain is said to be prohibitive—far greater than the cost of slaughter—and would, in any case, be impracticable. This is why there is a tendency to believe that charity begins abroad. Vaccine produced at the Animal Virus Research Institute, Pirbright, is exported to Turkey, Bulgaria and Greece. The institute also serves as the world reference laboratory for typing foot and mouth virus and for collecting information about epidemics.

### How to Deal with Oil

“THE greatest peace-time operation ever mounted in the United Kingdom.” This is how the recent report compiled by L. R. Beynon, British Petroleum Company, describes the efforts to fight the oil pollution after the Torrey Canyon incident. Far from being a mere account of events, the report includes the action which was taken and its effectiveness, and possible