

## OLD WORLD

### EXPERIMENTS ON ANIMALS

## Report Debated at Last

THE House of Commons last week resolved "to take note of the Report of the Littlewood Committee on Experiments on Animals". As over six years have elapsed since the late Sir Sydney Littlewood presented his report to Parliament, this was surely the very least expected of the House. Yet in opening the debate on the report, the Under Secretary for State for the Home Department, Mr Mark Carlisle, observed that "The Government have not yet finalized their attitude to the report in the sense of assuming a commitment to legislate".

The debate, a commendably objective affair free from unwarranted calls on the emotions, centred around three chief issues. As experiments on living animals seem necessary and inevitable, how are these to be limited and controlled? Are there feasible alternatives to the use of living animals for medical research? And how relevant are the six year old recommendations of the Littlewood committee to the present (and future) situation? What emerged was a prospect of more investigation before legislation and a suggestion that commercial interests may be charged for their experimenter's licences to subsidize the watch kept on their operations.

Mr Carlisle said that the Home Secretary recognized the key role of the ministry's inspectorate in checking that the existing legislation for animal experiments is observed. He showed that in 1963, when the Littlewood report was commissioned, there were 5,932 people licensed to carry out experiments on living animals and only six inspectors. By 1965, the strength of the inspectorate had risen to eight, but the number of licensees had increased to 7,053. By 1969 there were 9,252 active licensees marshalled by thirteen inspectors, or about 712 licensees to each inspector. The present inspectorate includes a chief inspector, two superintendent inspectors and five inspectors with veterinary qualifications. Mr Carlisle accepted, however, that their number is still eight short of the strength recommended in the report, but that "the ratio is such that the inspectors are carrying out their work adequately", a view which Mr F. A. Burden felt was "either very optimistic or very foolish". If funds were the obstacle, said Mr Burden in rejoinder to Mr Carlisle's claim that it was not a shortage of qualified people which prevented further appointments, then perhaps a charge might be made for

licences awarded to commercial undertakings, an idea which Mr Carlisle said he would bear in mind. Mr Kenneth Lomas, who has pressed the Government to establish an institute to examine methods of medical research which do not involve living animals (see *Nature*, 230, 347; 1971), suggested that the number of licensees is nearer 14,000 than 9,000. Carlisle agreed but explained his figure included only those operators which the experimental returns showed to be active.

In 1964, the total number of experiments reported was 4.49 millions. There were 4.61 millions in 1966, and the estimated total for 1970 is 5.65 millions. Seventy per cent of these experiments involve mice, fifteen per cent rats and ten per cent guinea-pigs. All other species combined make up the other five per cent. These figures include all experiments involving "disease, discomfort or disturbance of normal health". In other words, the experiment need not necessarily mean pain to the animal. Furthermore, each animal used in an experiment counts as one experiment. Mr Carlisle observed that the Littlewood report, from evidence obtained in 1963-65, found that "the risk of unnecessary repetition of experiment is small" and that there "is no evidence of serious wastage of animals in recent years".

Mr Elystan Morgan, while paying tribute to the merit of the Cruelty to Animals Act of 1876, which sets the conditions in which experiments may be performed on living animals in England and Wales, felt that new legislation is called for after 95 years. New developments in medical and biological research require fresh regulations. Of the 83 recommendations in the report, 48 would require legislation. Mr Burden took up the question of the Advisory Committee, the body which advises the Ministry on the administration of the 1876 Act. Why, he wanted to know, has the committee decreased in number from 11 in 1965 to 9 in 1969? Does the committee serve no useful purpose? How many times a year does the committee advise the Ministry, and what are the nature of its recommendations? Mr Carlisle said that the only difficulties found in filling the committee's ranks were administrative ones. The committee had been consulted every year since 1963 except for 1969. Twelve cases had been referred to the committee between 1964 and 1968, and nine of these experiments had been allowed.

Almost as much time during the debate was given to soul searching over the delay in bringing the report before the House as to the recommendations of the report itself. Mr Richard Body detected a sense of unreality in the debate because of two

changes since the report was published: the increase in the number of animals used annually, and advances in alternative means of research. Mr Carlisle agreed that many factors could have altered since 1965 and that "a further review might be necessary if legislation were to follow". On the question of alternative methods of research, Mr Carlisle said that this was a matter purely for the Department of Education and Science, and that the Medical Research Council view is that "the use of animals remains essential for the advancement of medical and biological research".

Mr Carlisle could offer no solution to the three unanswered questions which lie at the heart of the Littlewood report: Who can say if satisfactory alternative tests might not be developed if certain animal experiments were banned? Who is to say if medical research, with its emphasis on animal experiments, is on the right road? And who takes responsibility for the ethical judgment to use animals for experimental purposes? He thought that a legislative response to these questions would require "a tremendous act of faith or a comprehensive Measure providing for evaluation and direction of all biological and scientific research".

### MAGNET RESEARCH

## Higher Fields for Oxford

WITH a typically British combination of the old and the new, the Science Research Council is about to take a cautious step forward in the field of ultra-high magnetism by providing the funds (£79,000) for a 16 Tesla (160 kG) magnet to be built over the next year at the Clarendon laboratory. So far, the Oxford group has been able to utilize steady fields of up to 11 T in its experiments on the electrical properties of semi-conducting and insulating materials and in work on the magnetic ordering of solids. For one brief moment, a machine at the Royal Radar Establishment (RRE) recently achieved a field of 17.8 T, and this same machine can produce reasonably steady fields of 15 T regularly, as can comparable systems in other European laboratories. But the achievement of a steady 16 T field in an experimental chamber 5 cm in diameter will certainly represent a small step forward.

The nature of the hybrid machine planned does to some extent limit the field obtainable. A new superconducting magnet using the latest materials and techniques will be constructed, and this alone should produce a very steady field of 7 T in a bore 24 cm in diameter. The old part of the equipment, a copper solenoid powered by the