

EVALUATION OF DISINFECTANTS

AT the British Pharmaceutical Conference, held at Harrogate during September 10-14, the chairman, Prof. H. Berry, in his address entitled "A Review of Disinfectants and Disinfection", emphasized the importance of disinfection both to the public health and to pharmaceutical practice. This subject, he said, is studied in all its aspects only in schools of pharmacy, and the modern pharmacist should be qualified to give expert advice on disinfectants and to evaluate commercial claims made for them; he should be proof against "high-powered sales talk" about them. In his address, Prof. Berry discussed with refreshing vigour the question of what constitutes a good disinfectant. Controversy about evaluation of disinfectants revolves, he said, around the type of test represented by the Rideal-Walker test and its product, the so-called phenol-coefficient. This biological test is still misunderstood and is often "misused in advertisements to gull the uninformed layman", but it has turned useless disinfectants off the market. Prof. Berry discussed its defects and explained why he considers that it is a badly designed test which "cannot by any stretch of the imagination be translated into terms of therapeutic activity or practical applicability or utility". Some disinfectants, such as 'Lysol', cctrimide and acriflavine, do not need a biological test; they can be, and are, controlled by chemical or physico-chemical specifications, such as those that are given in the British Pharmacopoeia and its Codex.

The real problem, however, is the evaluation of the utility of a disinfectant after it has been standardized. For this the results of many diverse tests are required, and Prof. Berry discussed these. In Great Britain there is no official body which will adjudicate on new disinfectants, nor is the existing legislation for the control of claims made for them effective, although many of the British Dominions and the United States have attempted their legislative control. Prof. Berry commended, however, the Medical Research Council's valuable Memoir No. 11, entitled "The Control of Cross-Infection in Hospitals" (revised edition; pp. 49; London: H.M. Stationery Office, 1951; 1s. 9d. net), which gives in its Appendix A advice to hospitals on the disinfectants to be used for various purposes; he expressed the hope that the Ministry of Health will adopt a similar method of dealing with disinfectants on the open market.

The remainder of Prof. Berry's address was devoted to a useful discussion of the valuable properties, and also the limitations, of the quaternary ammonium compounds, which are challenging, in certain fields of use, some of the established disinfectants. The address concluded with a brief, but interesting, account of the discovery that some substances which were believed to kill micro-organisms quickly do not, in fact, kill them, but merely inhibit them, so that they can be revived by treatment with 'revivors', among which are ammonium sulphide and certain thiol compounds. Substances have been found which will revive organisms treated with iodine, hypochlorites and formaldehyde, but none is yet known that will revive organisms treated with phenol. Certain thiol compounds, such as glutathione, occur naturally in the body, and there is evidence that, if pathogenic organisms treated with mercury compounds are injected into the body, they may be revived and may become infective. The evaluation of disinfectants must take account of developments

of this kind. Revivors can be used to find out whether disinfectants have, in fact, killed organisms.

In conclusion, Prof. Berry urged that the older disinfectants should not be lightly given up. The hypochlorites are, he said, very valuable, and he had great confidence in the phenolic preparations, 'Lysol', 'Black Fluid' and 'White Fluid', the wide non-specific action of which makes them very reliable. He made a special plea for 'Lysol', but added that the hospitals do need a non-toxic, non-irritating phenol preparation the other properties of which are not inferior to those of 'Lysol'.

CARNEGIE UNITED KINGDOM TRUST

THE thirty-seventh annual report of the Carnegie United Kingdom Trust, 1950*, covers the completion of the Trust's first post-war quinquennium, and by the end of the year the grand total of grant payments by the Trustees had reached £4,065,555. During its thirty-seven years, the Trustees have thus been able to distribute to beneficiaries more than twice the amount of the original endowment of the Trust of £2 million, and at the same time to increase the income from the original £100,000 a year to rather more than £130,000. More than a third of the total expenditure has been on the development of library services which, as explained in last year's report, will now continue without further financial assistance from the Trustees. Nearly £250,000 has been devoted to playing-fields, mostly within the period 1926-40; but the combined effect of the Physical Training and Recreation Act of 1937 and the Education Acts of 1944 has been to place responsibility in this matter on the local education authorities. Under the same Acts, central and local authorities are now responsible for grants to village halls, to which, if all outstanding promises are taken up in full, the Trust has contributed more than £180,000.

More than £150,000 has been provided for community centres and the like, and about £110,000 on schemes of land settlement, operated by the Land Settlement Association, which, under the Agriculture Act of 1947, is now responsible to the Ministry of Agriculture. Some £450,000 has been provided for youth services and nearly £50,000 for the development of museum services, while on the Bureau of Current Affairs, now to be terminated, £123,344 has been expended. While the Bureau has not been able to establish itself as a self-supporting institution, the Trustees state that they do not regret having made the experiment to find out whether a method that had proved outstandingly successful during the War could be made economically self-supporting in time of peace. The Trustees also terminated at the end of 1950 their support of youth hostels, but the allocation to the National Federation of Young Farmers' Clubs is being spread over six years, instead of the five years originally contemplated. An individual survey on behalf of the Trust is now being undertaken by Mr. John Mack, Stevenson lecturer in citizenship in the University of Glasgow, of agencies and activities concerned with juvenile delinquency, with the object of directing attention to any gaps which might be filled by the action of either statutory or voluntary bodies in furthering existing schemes or initiating new ones.

* Carnegie United Kingdom Trust. Thirty-seventh Annual Report, Pp. viii+49. (Dunfermline: Carnegie United Kingdom Trust, 1950.)

Plans for the quinquennium 1951-55 include an increase in the allocation for the development of museum services from £30,000 to £40,000, in part with the object of strengthening the administration of the Museums Association itself. For the Councils of Social Service of England, Scotland, Northern Ireland, and Wales and Monmouthshire, £27,750 has been allocated, and a sum of £30,000 for family case-work by the Family Welfare Association and Family Service Units. With allocations of £45,000 for music and drama and £5,000 for the visual arts, the total allocation for the new quinquennium is £147,750, and there is thus some three-quarters of the Trust's funds for the period still available for allocation.

RECURRENT LONG LEAVE FOR UNIVERSITY TEACHERS

THE seventeenth issue of *Communication* contains the report of the International Association of University Professors and Lecturers on recurrent long leave. By this is meant the recurrence of substantial periods of leave over and above ordinary annual vacations; the most usual arrangement is that every seventh year is recognized as a year of leave of absence from the place of normal occupation. It is well known that some universities have such schemes, while others have not. It has not been generally known precisely which universities fell into which category, nor has there been any clear knowledge as to what variations of the typical scheme there might be in universities which operate recurrent long leave schemes. A suitable questionnaire was therefore sent to fifty-eight countries where universities exist. Thirty-seven of these have replied, fifteen of them reporting that they have no regular system for long leave. These are Sweden, Finland, France, Switzerland, Belgium, the Netherlands, Austria, Hungary, Czechoslovakia, Germany, Eire, Italy, Mexico, Chile and Bolivia. This does not mean a notable lack of interest on the part of either staff or authorities. Eire (Trinity College, Dublin), for example, though having no system, does occasionally give long leave when a member of staff is invited to spend some time in another university. In the University of Brno, a professor or his associate is occasionally granted leave with full salary for study for a period of, say, three months to a year. Similarly, the University of Chile has provision for granting leave for, say, six months on full salary for study purposes—each case being considered on its merits. In Finland, the University of Abo grants leave of absence with full salary and superannuation, the recipient usually having the obligation of paying a deputy.

The other twenty-two countries have recognized systems for recurrent long leave, although in some of the countries, like Canada, Great Britain and the United States, by no means all the universities have any definitely established systems; it is in the British Commonwealth of Nations and in the United States that the practice is most firmly rooted. The list of countries in which some or all of the universities have systems for recurrent long leave is as follows: Australia, Burma, Canada, Ceylon, China, Denmark, Egypt, Greece, Iceland, India, Israel, Lebanon, Malaya (Singapore), Norway, New Zealand, Philippine Republic, South Africa, Trinidad, Turkey,

United Kingdom, the United States and Yugoslavia. From the data supplied it is clear that there is a widespread desire among the universities of the world that a regular leave system should operate. Many individuals, both members of the teaching staff and administrative authorities, of several universities, have expressed their views strongly in support of the system. The general aim would appear to be a scheme on 'sabbatical' lines in the sense that approximately every seventh year should be available for leave. The majority, however, both of those who give it and of those who take it, prefer that the leave be spent usefully in study or research, while travel and rest are not excluded.

Although on paper some of the schemes appear to be satisfactory, they may not be completely realistic. In the Hebrew University of Jerusalem the scheme would appear to be working well, a high percentage of members of staff taking advantage of it. In Egypt and Ceylon advantage is taken of the opportunities offered. The New Zealand schemes which have been quite recently financed by a special grant from the Department of Education are likely to prove very attractive. On the other hand, there would appear to be a good deal of imperfection in the machinery of some of the others which considerably reduces their effectiveness.

In most cases full pay is continued during leave, although in some there is a downward adjustment. On the other hand, Egypt and Lincoln (New Zealand) add a cost-of-living bonus. Generally, the staff-strength of a department provides for leave to a teacher without the need for a substitute; but where a substitute is required, in some cases the institution provides for the payment and in others it is the individual who pays in part or in full. One of the major expenses attending leave is that of travel. Long-distance passages are covered or partially met by a grant-in-aid by about half the universities who have replied; in other cases the whole cost falls on the member. In the latter event only teachers in universities where the salaries and other emoluments are relatively good can avail themselves of the leave or attempt to undertake long-distance travel. Another difficulty which arises in some cases is that, if a man is to take his wife and family with him, it naturally adds a good deal of expenditure, whereas if he leaves them behind he has two establishments to finance. Interesting examples in this connexion are Ceylon, Egypt, Western Australia and Yugoslavia. In Ceylon a travelling allowance is made for a wife, in Egypt for both wife and children, in Western Australia a larger house allowance is made in the case of a married man on leave, and in Yugoslavia the needs of the family are arranged for by paying to them the member's salary, the member on leave receiving instead his living and travelling expenses.

In reviewing the replies to the questionnaire, the Association recommends that a system of long leave at recurrent intervals should be established in all university institutions of the world. Where such a system cannot be established, all facilities for *ad hoc* refresher or study leave should be granted. Such leave should be with full pay and superannuation and adequate travelling allowances. If it should be necessary to pay for a substitute, funds should be provided by the institution for this purpose. The leave should be devoted to research, travel, rest or any other purpose to which the academic authorities could take no reasonable objection.