

given this Museum when the Chicago radion station broadcast a unique feature programme presenting the work of the Museum 'behind-the-scenes'.

In this review, which has been written primarily to show how highly valuable museum services can be under keen administration and modern methods of presentation, it is not possible to note with adequacy the vast amount of work (research and otherwise) which was carried out by individual Departments of the Museum during the year. This section of the report, however, cannot be passed over without reference to a special exhibit prepared in the Department of Geology. This illustrated the production of uranium, and it was arranged with a map of the world bearing the sub-title, "Sources of Energy for the Atomic Bomb". "The map," to quote the report, "brings out the fact that the United States and Canada are favoured among the nations in their possession of major deposits of Uranium ore, but emphasises that they by no means enjoy a monopoly of it. In fact, the rather general distribution of the ore stresses the ultimatum that Science has presented to the peoples of the world: 'Unite or perish'."

Attention must be directed to the photographic production that takes place in the Chicago Natural History Museum: during 1945 there was an output of 19,792 items. These included negatives, prints, enlargements, lantern slides, transparencies and colour films, and were made for the various Museum departments, outside institutions, the Press, book publishers, and for sale to the public.

Compared with the American museum movement, that of Great Britain has still far to travel. The time for large-scale reorganisation and the introduction of new ideas and new methods is long overdue. The slight movement that was being made in this direction before the War was brought to a standstill when hostilities broke out in 1939, and now 1947 is on the horizon. During these seven years many British museums (those which escaped destruction and those that were partly destroyed) have made a valiant effort to overcome their difficulties and to render useful service. These museums are now slowly struggling back to their pre-war aspect. Collections are returning, or have returned, to buildings which before the War were already overcrowded and often unsuitable for the execution of museum services in keeping with modern needs and modern developments. Some museum authorities, looking to the future, have schemes in plan for reconstruction or new buildings, but it does not appear likely that museum accommodation will be built in Britain in the near future. A further factor which stems progressive action is the non-recognition of the educational potentialities of museums in those official quarters which would otherwise be the most helpful. Furthermore, governing authorities themselves far too frequently see nothing more in the museums under their control than repositories for municipal and collectors' treasures. Any extra expenditure on these, therefore, is considered unnecessary. Nevertheless, the claim of the British museums is a strong one, for collectively they house a great wealth of material which, in relation to the education and cultivation of the ordinary people, has, as yet, scarcely been tapped. The improvements looked for, however, may not come without some form of outside impetus—a vigorous central body to press their claims and with powers to prevent the opening of new museums if funds sufficient for their efficient maintenance are

not in sight; a greater and more practical interest in their functioning on the part of the national institutions, and the recognition of all other educational institutions, are what British museums need at the present time.

NUTRITIONAL INVESTIGATIONS IN MAURITIUS

IT is encouraging to find that even the smaller territories are now taking an interest in nutrition, but they will have to do better work and produce better reports than that surveying investigations in Mauritius during 1942-45, which has recently been issued.

At first reading, one supposes it is merely a case of careless checking; for example, in Fig. 1 all nutrients and also calories are said to be given in terms of grams (actually they are expressed in a most odd variety of units, calcium being in centigrams and thiamin and riboflavin in hundredths of a milligram); in Appendix 2 the values for "vitamin B₂" are said to be in I.U. (the figures appear to be for riboflavin expressed in milligrams), and no indication at all is given of the units used for nicotinic acid and ascorbic acid. There are also major differences between values given in the appendix and those in other parts of the report, and the general atmosphere of confusion is added to by strange phrases such as, "This is, of course, expectable" and "not to any consequential degree".

On closer examination, however, it is evident that the faults go much deeper. The introduction and the discussion on pages 28-30 of the report deal with the total food supplies available (based on imports, exports and local production), and an attempt is made to relate them to the requirements of the population. The only satisfactory way of doing this is on a 'per head' basis (the method adopted by the United Nations Food and Agriculture Organisation); but the author has preferred to use the long-discredited 'man-value coefficients' based on calories alone. For the requirements of his standard 'man' he uses the original (since modified) *nutrient* recommendations of the U.S. National Research Council for a moderately active male living in a temperate climate and eating an American type of dietary, but he supplies a *calorie* recommendation of his own. He shows no appreciation of the factors which determine requirements or of the interrelationship between different nutrients and between some nutrients and calories.

Table 1 compares "per man-value" daily intakes in different years, and shows considerable fluctuations which are duly 'explained' in the text. But these fluctuations are much greater than can be accounted for by changes in the supply position as detailed in Appendix 1. Only one set of figures relating to the intermediate step (amount of each *food* per man-value) is given, and this tallies neither with the amounts of foods given in Appendix 1 nor with the amounts of nutrients given in Table 1. Either the figures in the appendixes were not, in fact, used for the calculations (though it is stated that they were), or there have been errors in arithmetic; whichever way it may be, it makes it difficult to know how much

* Colony of Mauritius. Final Report on Nutritional Investigations in Mauritius, 1942-45. Pp. iv+89. (Port Louis: Gov. Printer; London: Crown Agents for the Colonies, 1946.) 1 Re.

value to set on the report at all, since the greater part of it is based on these evaluations.

Another part of the report deals with the influence of feeding on malarial infection and the experimental feeding of school-children. The first describes the feeding of dietary supplements to children suffering from malaria, but here again arithmetical anomalies make it impossible to judge the value of the work, since the figures given under the heading "nutrients supplied" are not in agreement with the analytical values given in the text for the foodstuffs used, and show discrepancies even in the comparison of one supplement with another.

The experimental feeding of school-children is not described in sufficient detail for any assessment of its significance; but it appears certain that it was carried out without adequate supervision, since it is stated that "owing to the large variation in amounts given per child in the different schools it was impossible to record actual nutrients supplied". It is suggested, however, that each meal should have supplied about 200-300 calories. As the main item was soup, it is very probable that even this calorie value may not have been reached on all occasions, and (as is recognized) school meals are often a substitute rather than a supplement. In view of this and the fact that the experiment only lasted three months, the failure to obtain spectacular proof of the great value of school meals is not so "extraordinary" as the author thinks. No observations seem to have been made on any changes other than weight, or of the initial nutritional state of test and control groups. Those wishing to embark on school-feeding "experiments" would save themselves (and others) a lot of trouble if they would study Cory Mann's report before they begin.

Other sections deal with laboratory investigations (chiefly analyses of local foodstuffs), and with recommendations for the preparation and use of autolyzed yeast and of green Alga. Here also there are examples of arithmetical discrepancies and arguments based on false premises.

Clearly this report should have been submitted to more critical consideration prior to publication. If recommendations are to be made, and possibly action taken, on such foundations, the end result may be a worse state of malnutrition than at present exists.

M. W. GRANT

NORTHERN POLYTECHNIC JUBILEE (1896-1946)

THE Northern Polytechnic, London, was opened on October 3, 1896, following the approval given by Queen Victoria on August 5, 1892, to the scheme of foundation. It celebrated its jubilee by an exhibition of students' work on October 24 and 25, and by a luncheon attended by the Minister of Education, the Rt. Hon. Ellen Wilkinson, M.P.

Miss Wilkinson, speaking of the Polytechnic, directed attention to the fact that the chairman of the governors, Mr. R. L. Roberts, and his father had been associated with the foundation and development of the Polytechnic since 1892, and that a member of the third generation had, at the last meeting, joined the governing body; this indicated a commendable family association. It was interesting to note the wide vision of the founders, who had

included in the scheme not only educational and technical studies, but also cultural and recreative activities. Under the Education Act, 1944, it became a duty for the local education authority to secure the provision of these facilities; the Government would support the development, but was also anxious at the same time to preserve the best of the old voluntary spirit which had contributed much to the Polytechnic. One proof of the vitality of the Polytechnic was that its home had never been big enough. It was to be regretted that before the War greater effort had not been made to put up more capacious buildings. At present the lack of building and shortages of labour and materials were obstacles, and the Polytechnic would for a time have to house as best it could its 1,000 full-time day students, 3,000 part-time students, and 1,000 non-student social members. The provision of social and recreative activities for the latter members was a vital influence which went far beyond the walls of the Polytechnic.

The Northern Polytechnic, Miss Wilkinson remarked, was a pioneer in at least two respects. It had opened the first department for musical instrument technology—and this still appears to be the only one of its kind in the world—and it had inaugurated the first courses in rubber technology. In the case of the course in rubber technology, the Ministry of Education is anticipating a further development in the establishment of a National College of Rubber Technology to provide advanced courses and to serve the rubber industry of Great Britain.

During the War, the Northern Polytechnic, with its existing radio course, was called upon early in October 1939 to train men in radio for the Services, and more than 2,000 Service men and women received instruction to meet the urgent demand for technically trained personnel. The demand continues in this world of rapid industrial and scientific change, and the Polytechnic with its great past and its wonderful traditions is fully conscious of the great opportunities for future service to the locality and to the country.

Mr. R. L. Roberts, chairman of the governors, said in reply that he could look back over almost the whole of the jubilee period, for he was an evening student in 1898, when the Northern Polytechnic provided numerous courses on a large variety of subjects. It is no longer a polytechnic in that sense. It is now a college of technology, as its activities had been concentrated into four main sections: first, architecture, surveying and building; secondly, science and rubber and plastics technology; thirdly, radio and musical instrument technology; and fourthly, domestic science.

In all the courses the governors have pursued a policy of effective contact with industry through influential advisory committees. The close association for more than forty years with the University of London through the 'recognized teachers' is of benefit to both the staff and the students. A similar close contact is maintained with the professional organisations, such as the Royal Institute of British Architects, which has recognized the five years full-time course in architecture at the Polytechnic. The main difficulty in the Polytechnic is still one of accommodation, and the governing body hopes that when the building industry is able to direct its activities to national needs other than housing, an extension will be built worthy of the Polytechnic and capable of meeting its needs for some time. There is one further difficulty, which other similar institutions must feel, namely, staffing. The Burnham