

dealt with in a symposium session which covered aspects of general and hospital practice. A contribution to the latter session gave a more widespread picture of the subject and illustrated the remarkable expansion of knowledge achieved since the general discussion on penicillin at the 1946 Conference.

Other developments in the field of pharmaceuticals included the successful use of infra-red radiation for drying a wide variety of products. Bacterial survival in systems of low moisture content was further reported upon, namely, the effects of increasing moisture content on heat resistance, viability and growth of *B. subtilis* spores. The determination of quality of surgical dressings had been further investigated, on this occasion being concerned with their water retention.

S. B. CHALLEN

FISHERIES RESEARCH UNIT OF THE UNIVERSITY OF HONG KONG

THE need for a Fisheries Research Station in Hong Kong has long been realized; but the various plans for one which have been put forward from time to time have for various reasons been found impracticable. However, a satisfactory scheme was recently worked out by the University of Hong Kong in conjunction with the local Government, and a Fisheries Research Unit commenced work recently in the University's Department of Biology. The University has provided approximately a thousand square feet of laboratory accommodation for the Unit, and the director is reader in marine biology on the University's staff. The association between the Unit and the Department of Biology resembles that existing between various agricultural research units which are attached to a number of universities in Great Britain, for example, the Bureau of Animal Population and the Department of Zoology in the University of Oxford.

The director, Mr. Alan Tubb, who was formerly director of fisheries in the Colony of North Borneo, will take up his duties in April next year; meanwhile, Prof. D. Barker, professor of zoology and head of the Department of Biology in the University, is acting director. The director will be assisted by a chief scientific officer and three assistant scientific officers; so far, two assistants have been engaged. The rest of the staff establishment consists of a laboratory steward and attendants, and the skipper and crew of a research vessel at present under construction. The laboratory accommodation includes marine aquaria supplied with running sea-water, and a laboratory suitable for chemical and biological work. There is a considerable library of books and journals on fisheries research, and the Unit has access to the University's scientific library. Provision has been made for equipping the Unit's laboratory with the appropriate research facilities and apparatus. The cost of establishing the Unit is being met out of Colonial Development and Welfare funds, while recurrent expenditure is being met by the local Government; in each case the government contribution is by means of block grants made over to the University for its administration.

The research vessel is a 66-ft. diesel-powered otter trawler. The keel is now being laid and she should be in commission by the summer of 1953. She will be equipped with a laboratory, echo

sounder, radio telephone and wireless telegraphy, bottom sampler, bathythermograph, and various other apparatus required for oceanographical work. The vessel will work in waters up to a hundred miles distant from Hong Kong, and the longest trips will be of from seven to ten days duration.

From the point of view of marine research, Hong Kong is very favourably situated, being at the extreme south-east corner of Asia almost at the junction of temperate and tropical waters and within easy reach of ocean and estuarine fishing grounds. The Fisheries Research Unit is the most easterly of a chain of Commonwealth fisheries research stations, and its researches and findings will not only be correlated with those of Ceylon, Malaya and India, but will also be of value to the Dominions of Canada and Australia and to other countries which border on the Pacific Ocean or the China Sea. It is expected that the research carried out by the Unit will lead to improvements of catch in the immediate neighbourhood of Hong Kong and will contribute substantially to general fisheries research in the Indo-Pacific region. Under the auspices of the Indo-Pacific Fisheries Council, the Unit will pool its results and collaborate with similar stations in the Philippines, North Borneo, French Indo-China and Malaya in research projects relating to the China Sea. Among other problems the Unit will aim at undertaking the following research: survey the existing fishing grounds around Hong Kong, map them, and determine their species population and production; survey the sea-bottom, salinity and plankton in local waters; study ocean currents and the effect of such currents and prevailing winds on the movement of fish, with the possibility of discovering new fishing grounds; determine the influence of the Pearl River on the fishing around Hong Kong; study factors influencing the yield of catch in the local fishing grounds with the view of forecasting production; investigate the movement and feeding habits of fish, and, wherever possible, locate spawning grounds, etc., with the aim of trying to initiate control; make studies in relation to the extension and improvement of salt, brackish and freshwater fish-pond culture.

UNESCO INSTITUTE FOR EDUCATION, HAMBURG

UNESCO has recently sponsored an unusually interesting experiment in West Germany, on a smaller scale than those activities with which Unesco is popularly associated. The experiment consists of the establishment of three Institutes, each of which began work during 1952. One is for Social Sciences, at Cologne; one for Youth, at Munich; and one for Education, in Hamburg.

These Institutes are remarkable in two respects. First, each has an international governing board consisting of seven non-German and six German members, the funds of which are derived not from the general Unesco budget but in response to an appeal by the Director-General to individual nations. Secondly, the Federal Republic of Germany has agreed to and encouraged the establishment within its own territory of institutes over which it has not a controlling majority, but which it is prepared to finance up to a minimum of twenty per cent of their budgets. Perhaps equally noteworthy is the fact that among those nations which have contributed small

amounts to the Institutes are to be found India and the Philippines; and the United Kingdom is not to be found among the principal contributors, France, Germany and the United States.

With regard to the Institute of Education at Hamburg, the objects are briefly: (1) to foster international study of educational problems (particularly to enable German educators to meet educators from other countries); (2) to carry out research into educational aims and methods; and (3) to participate in action undertaken by Unesco in its campaign for the maintenance of peace and in its programme of education for international understanding.

The Governing Board determines policy from time to time and is responsible for framing an annual budget. The Board consists of representatives of Germany (six), Canada, Denmark, France, Italy, Switzerland, the United Kingdom and the United States of America (one each), together with a representative of the Director-General of Unesco. From among the members of the Board, a Standing Committee of five has been appointed, again with a marginal majority of non-German members.

The Governing Board decided that the first item on the programme of the Institute should be a seminar on "Adult Education as a Means of Developing and Strengthening Social and Political Responsibility". This seminar opened on September 8 and continued for one week. Thirty-five participants from fourteen countries (including three from England) were the guests of the Institute. The physical atmosphere of the Institute provided assurance of a favourable meeting place. The introductory remarks of the director of the Institute, Prof. Walther Merck, and of the chairman of the Governing Board, Prof. J. Novrup (but in his capacity as an ordinary participant), led the seminar along the road of realistic discussion of some of the problems of adult education. The five groups into which the members divided (two English-speaking, two German and one French—but with a wide distribution of nationalities) discussed aspects of political responsibility, social responsibility and special methods in adult education. It was generally agreed that nothing really new had emerged, or indeed could be expected to emerge, but that for the first time the issue of political responsibility had been squarely faced. A full report will be published later in English, French and German.

Anyone attending the Institute's social evening, with cold supper and wines served in the Institute House, and joining the subsequent gathering in the library, would have found it difficult to believe that such a diversity of nations could behave and indeed think and act with such bon-accord, despite difficulties of language.

The Institute received many valuable suggestions for further action, and these are now being examined to find out how far they can be implemented, and whether some of them can be pursued in co-operation with the Youth and Social Sciences Institutes.

The second major item on the Institute's programme will be a seminar on "The Factors of Pre-School Education which influence the Development of a Personality creatively able to participate in a World Community". The date of this seminar has not been finally decided; but it will be held in the first or second week of January 1953. In the light of experience of these two seminars and the activities which they inspire, the Governing Board will, when it meets this month, plan a programme of work for 1952-53.

HUGH MILLER, 1802-56

COMMEMORATION AT CROMARTY

By SIR EDWARD BAILEY, F.R.S.

COMPARATIVELY few now remember the stir attending the centenary of Hugh Miller's birthday, celebrated in 1902. Some 1,500 pilgrims from far and near assembled under the great column and statue which already commemorated Cromarty's most distinguished son. Sir Archibald Geikie was that day chief among a dozen speakers, including Principal Rainy, of the United Free Church, Prof. Clarke, of Albany, U.S.A., Dr. John Horne, of the Geological Survey, and Sir James Grant, president of the Royal Society of Canada. Geikie gave of his best in love and gratitude to the memory of the man who had introduced him, and many others of his generation, to the wonderland of geology. In doing so he remarked, a little pathetically, that he found himself the last survivor among geologists who could lay claim to intimate friendship with the erstwhile stone-mason. Fortunately, his beautiful address is fully reported in *Nature* (66, 426, 1902), while the ceremony as a whole is detailed in a valuable booklet entitled "The Centenary of Hugh Miller" (Glasgow, 1902).

Carnegie was among those present at the centenary gathering, and shortly afterwards he generously presented Cromarty with a Hugh Miller Library and Institute—a further fitting memorial. Then, in 1938, the National Trust of Scotland, which meanwhile had come into existence, took over from the Town Council the cottage where Hugh Miller had been born, already functioning as a shrine. The occasion was marked in *Nature* (142, 696; 1938) by an appreciation of Hugh Miller's work.

On October 14 of the present year, on the invitation of the Earl of Wemyss, chairman of the National Trust, a small gathering of about fifty met in the paved courtyard of Hugh Miller's cottage to celebrate the hundred and fiftieth anniversary of the great man's birth. After the chairman had explained the Trust's need for additional memberships and subscriptions to carry on its vitally important tasks of conservation, he asked Sir John Erskine, general manager of the Commercial Bank of Scotland, to recall a significant episode in Hugh Miller's career. Sir John reminded us how, after fifteen years as stone-mason, Hugh Miller, in 1834, accepted an offer of the accountantship of the Commercial Bank's agency at Cromarty; and how he held this post until, at the beginning of 1840, he agreed to edit *The Witness*, a militant newspaper launched to represent the views of an important section of the Presbyterian Church of Scotland. Sir John cited contemporary evidence of Hugh Miller's speedy adaptation of himself to a totally new style of endeavour, which brought him not only increase of money—very welcome to a man in love—but also increase of opportunity for study and writing.

Subsequent speakers were the Rev. J. H. Baxter (University of St. Andrews) and the Rev. John Macleod (University of Aberdeen). Both stressed the intensely religious outlook of Hugh Miller and his extraordinary (and also successful) introduction of geological discovery into the pages of *The Witness* from the very start of his editorship.

The anniversary meeting was blessed throughout with perfect weather. An additional delightful feature