

in the first number (1, Part 1; January-March 1958. Pp. ii + 78) is a paper on brain disorders and language analysis by Prof. A. R. Luria, of the University of Moscow.

A Folk-lore Survey

In the *Museums Journal* of May, Mr. J. M. Dodgson describes in detail the procedure adopted in connexion with a survey of English folk-lore which he is carrying out from University College, London. The object of the survey is a classified index of English folk-traditions, comparable with that of Swedish folk-lore in Sweden or of Irish and Scottish folk-lore in Dublin and Edinburgh. The survey is being conducted in a scholarly and critical manner and is an attempt to reduce to methodical order a subject which up to the present has not been dealt with on a scientific basis. The co-operation of museum curators is invited, and Mr. Dodgson looks forward to the time when every district of England will possess a well-ordered folk museum.

Federation of British Industries

THE forty-first annual report of the Federation of British Industries, covering the year ended December 31, 1957 (pp. vi + 43. London: Federation of British Industries, 1958), displays the wide range of the Federation's interests. During 1957 the Federation continued to be greatly interested in the problems involved in Britain's possible entry into a European Free Trade Area, and its studies of the implications of this proposal led to a general survey for industrialists and a joint report, with the Association of British Chemical Manufacturers and the National Union of Manufacturers, to the Government on the kind of convention it should seek in the negotiations for a Free Trade Area, and a study of comparative taxation in European countries. In November the Grand Council of the Federation finally recorded its opinion as being, on balance, in favour of the Government's policy, provided certain safeguards and conditions were secured. Evidence was submitted to the Radcliffe Committee inquiring into the working of the monetary and credit system, and to the Trade Effluents Sub-Committee of the Central Advisory Water Committee, which is considering the law affecting the disposal from trade premises of liquid effluents; much statistical information was collected for another sub-committee considering the growing demands for water, and the Federation pioneered a scheme whereby the Department of Scientific and Industrial Research will undertake, on behalf of industry, research on the fundamental problems of the treatment and disposal of trade wastes and the purity of rivers. In education, links with the universities, technical colleges and schools were further consolidated, and a memorandum submitted to the Minister of Education in August supported particularly the proposal of the Willis Jackson Committee for a staff college for senior teaching staffs in technical colleges. Among topics considered by the Industrial Research Committee were the establishment of a National Lending Library for Science and Technology and British official overseas scientific representation.

Scaling-up of Chemical Plant

THE Institution of Chemical Engineers, in co-operation with the Chemical Engineering Group of the Society for Chemical Industry and two similar Dutch organizations, arranged a two-day symposium

in London in May 1957 on "The Scaling-up of Chemical Plant and Processes". Previously, the literature on the subject had been very scanty, but the recent text-book by Johnstone and Thring (see *Nature*, 181, 1094; 1958) and the proceedings of the symposium (pp. 136. London: Institution of Chemical Engineers, 1958. 60s.) together form a sound basis for a study of the subject. One of the major decisions to be taken in developing a new process is whether or not to carry out pilot-plant tests and how best to interpret the information so obtained. The papers presented at the symposium cover a wide field and illustrate many of the problems involved. The first session was devoted to fundamental aspects: introductory ideas on scaling-up and the principles of similarity are discussed, together with the design of reactors, with special reference to the economics of batch, tubular and continuously stirred tank reactors. The first session ended with a discussion on the relation between the cost and the size of plant. The following three sessions were devoted to scaling problems related to specific processes and equipment, including the rotating-disk contactor, cyclones, air-separation plant, continuous-filtration equipment, and solvent extraction and gas absorption. The discussion at the end of each session is also reported. About 60 per cent of the papers were from England and 40 per cent from Holland.

Pharmacopœias, Dispensatories and Formularies

HUMAN societies, as it seems, have long had an inherent urge towards the possession of a *materia medica*. In this connexion, the biological journal, *Lloydia* (20, 1; 1957. Lloyd Library and Museum, Cincinnati, Ohio), contains an article of somewhat unusual interest, namely, "A Catalogue of the Pharmacopœias, Dispensatories, Formularies, and Allied Publications (1493-1957) in Lloyd Library". As the authors explain, John Uri Lloyd, who founded the library in 1864, began to collect these literary materials in the same year. This effort has evidently been continued with zeal, so that the collection now contains more than 1,000 titles, dating from 1493 to the present time, from all parts of the world. The arrangement of the catalogue is alphabetical by countries and chronological by dates of publication. Among the illustrations, one may note reproductions of the title pages of such works as "Pharmacopœa Dogmaticorum Restituta" (Paris, 1607) and "Pharmacopœa Persica" (Paris, 1681).

Metabolism of Marine Flagellates

THE products of photosynthesis of two marine flagellates have been examined and compared with those of *Chlorella pyrenoidosa* with the use of radioactive carbon and chromatographic techniques by R. G. S. Bidwell (*Canad. J. Bot.*, 35, 945; 1957). The alcohol-soluble products were different in each alga, many of the compounds produced by the marine forms being unidentified. The principal soluble product of photosynthesis of a member of the Heterokontae, *Olisthodiscus* sp., was identified as *D*-mannitol. Those of a dinoflagellate, *Amphidinium carteri*, include glycosides of glucose and mannitol. The main insoluble carbohydrate produced by all three organisms gave rise to glucose on hydrolysis; this only contained about 10 per cent of the total fixed carbon. The radioactive compounds released from the alcohol-insoluble residues by acid hydrolysis were similar in the three algae and consisted mainly of amino-acids.