Vegetables reconstituted after electronic dehydration may be cooked and served in the same way as fresh vegetables. Reconstitution is accomplished by soaking the vegetables in water. They then return to their original colour and consistency and retain their normal taste and aroma. The vitamin content of electronically dehydrated vegetables is especially high, due apparently to the much shorter processing time. The exact method of dehydration cannot be disclosed at present. Briefly, however, 80 per cent of the moisture is removed by conventional methods, leaving the vegetables pliable but without formation of 'case hardening'. The vegetables are then compressed into bricks and the remaining moisture is removed electronically, after which they are ready to be wrapped in paper, wax coated, packed and shipped. The whole procedure is well adapted to automatic straight line production. Laboratory results show that one pound of water may be removed electronically with less than one kWh. of energy, a figure which is economically good in comparison with other methods. In addition to vegetables, dried whole milk also has had its moisture content reduced electronically from two per cent to one per cent. This small difference makes it possible to ship dried whole milk without danger of its butter fat content becoming rancid. Unlike dried skim milk, dried whole milk can be reconstituted to be as palatable and nutritious as fresh milk. Apart from the importance of this electronic dehydration achievement, the process represents another of the many outgrowths of fundamental research and development in industry. Electronic dehydration of foodstuffs was undertaken by the Federal Telephone and Radio Corporation as a co-operative and non-remunerative project to aid in the war effort.

Recent Advances in Public Health Measures

FROM the *Fight Against Disease*, 31, 1943, issued by the Research Defence Society, we learn that six anti-vivisection societies reported in the last pre-war year an income of more than £50,000. The Research Defence Society, on the other hand, got along vigorously in 1942 on about £500. Its report for 1942 gives interesting details about the prevention of a wide outbreak of smallpox when it appeared in Scotland in May 1942. Some of us who had to pass through Glasgow in July of that year remember well the encouraging spectacle of the people crowding to the vaccination centres. About 500,000 people were vaccinated and by July 31, thirty days after the vaccination campaign had begun, the last case of smallpox was reported. The report also deals with the remarkable results of immunization against diphtheria. There must be few intelligent people who will refuse their children this inestimable benefit. If any are still disposed to do so, they should read W. T. Russell's report, published by the Medical Research Council, on the epidemiology of diphtheria during the last forty years.

The Ministry of Health, Ministry of Information and Central Council for Health Education send us samples of the publicity material issued by them for use in the campaign against diphtheria. Sir Wilson Jameson calculates that diphtheria kills someone in Great Britain every three or four hours and every twenty minutes sends a child to hospital. The number of children who have been protected is not enough. Children under five are most likely to suffer. It is astonishing that parents can still fail to take their children to receive this safe, simple treatment, obtainable free through any medical officer of health. It should be obtained now, before the winter comes.

The Medical Research Council sends us another valuable memorandum (War Memorandum No. 10) entitled the "Medical Use of Sulphonamides". This deals with the chemistry, pharmacology, dosage, toxicity and supply of these drugs and with the treatment of specific infections with them. They have been given so many names that the lists here given of the alternative names of each compound will help to prevent confusion. Appendixes deal with the estimation of the concentration of sulphonamides in the body fluids, with tests for sulphonamide-resistance in bacteria and with the sterilization of sulphanilamide powder.

Authority in Medicine

IN the Linacre Lecture delivered at St. John's College, Cambridge, on May 6, 1943, Prof. Major Greenwood, after a graceful tribute to previous lecturers including Sir Thomas Watson, Sir Humphry Rolleston, Sir George Newman and Dr. W. W. C. Topley, dealt at length with the doctrine of Galen, with whom Linacre was familiar, and particularly his work on epidemiology, general hygiene and medical psychology. Prof. Greenwood regards Galen's epidemiological influence as bad because he overrated the creative power not of Nature but of his own intelligence, and never considered alternative hypotheses as was done by John Graunt fifteen hundred years later. Galen's work on personal hygiene, which Prof. Greenwood regards as the most readable of his books, contains an admirable description of practical dietetics, physical training and the Horation philosophy of life. As regards medical psychology, according to Prof. Greenwood, Galen was in advance of any medical writers of the Renaissance. Passing on to the subject of experimental epidemiology, in which he was associated with Dr. Topley for more than fifteen years, Prof. Greenwood points out that in acute infectious diseases like typhus pure laboratory work has created an applied science of immunology which owes nearly everything to the experimental method. The lecture ends with an encomium of the late Sir Walter Fletcher, secretary of the Medical Research Council, of whom he says that "he fought for and secured a scientific freedom in state-aided medical research".

Archæological Research in Ulster

IN 1935 the Government of Northern Ireland agreed to pay 60 per cent of the wages of unemployed labourers engaged for the purpose of archæological excavation, up to a total sum of £500. Later the percentage was raised to 80. This method of dealing with the then acute problem of unemployment was to some extent copied from that already in operation in the Irish Free State. As a result, much valuable excavation was undertaken in 1935 and succeeding years, and important information has come to light. More particularly have the various museums and archæological societies, which have taken advantage of the opportunity, concentrated on the study of the North Irish megalithic monuments. Ireland's geographical position is such that the island was a very important area in the days when the megalith builders were wandering about parts of western Europe. Northern Ireland has its full share of these

monuments. Then again, Northern Ireland has yielded important Mesolithic industries, the study of which is still incomplete. Nor must relics of later periods be forgotten, and crannogs, earth-forts, etc., have received attention. Further, it has been realized that excavation without subsequent publication is of little worth.

Naturally, much of the new information has found its way into the older well-known archæological journals and proceedings, but special reference must be made to the *Ulster Journal of Archæology*, which has just published its sixth volume, containing an account by the editor of the archæological achievement of the last ten years. The reader will certainly find this publication eclectic in its interests, and much curious and interesting information on subjects ranging from prehistoric to modern can be culled from its pages. It is to be regretted that England, during the periods of acute unemployment, did not follow the lead given by Ireland. Of course, here, as indeed in Ireland too, museums and local archæological societies make grants for the purposes of excavation. But direct Government aid of the kind mentioned above gives an immense fillip to such work, and there is a direct return to the body politic, which is scarcely the case when the money is merely spent in 'doles'. The Irish method at least means that more becomes known of the country's past.

Labour in the Building Industry

A RECENT broadsheet (No. 212) issued by Political and Economic Planning contains a close analysis of the organization of the labour force in the building industry in Great Britain, nationally, on the site and in the trade unions, which represents part of a wider study of industrial relations which was undertaken before, but was interrupted by, the War. The analysis covers all sizes and types of unit, from the very large firms down to the small firms and their groups. It gives a clear picture of the organization of labour on the site including the organizing personnel, the recruitment of foremen and the part played by the trade unions, as well as of the organization of labour in the unions, including the federation branch, the executive committee, the National Joint Council, the rates of wages and payment by results. In the post-war period the latter question will be linked with the questions of prefabrication and of new and more flexible types of training, and the essential changes of practice are unlikely to be secured without a sense of urgency and without Government intervention which can be visualized only as part of a great plan of guaranteed employment for the building industry. With guaranteed employment all sorts of technically desirable changes may well become more acceptable, but the goodwill of the trade unions is indispensable, and this can only be obtained by full and frank consultation, and by democratic discussion both at the national level, in the localities and on the site.

Scientific Societies of North America

THE U.S. National Research Council has produced a fourth edition of its "Handbook of Scientific and Technical Societies and Institutions of the United States and Canada" (Bull. 106, Jan. 1942. Washington, D.C.: National Academy of Sciences). This well-bound volume of 389 large pages contains information relating to 1,269 bodies in the United States and its dependencies, and 143 in Canada, which "contribute to the advancement of knowledge through their meetings, publications or other resources", and are included in the wide fields of natural sciences, technology and more general organizations supporting scientific research. Agencies of the Federal Government, organizations directly controlled by universities, bodies which act through grants rather than direct by conducting research, and industrial research laboratories are excluded. In each case there are given the name and address of the organization, the chief officers, a brief history, its objects, particulars of membership, meetings, research funds and medals, and serial publications. The data have been compiled from information received from the bodies concerned. The entries are arranged alphabetically in two sections, one for the United States and one for Canada. There are subject and personnel indexes for each section. The only comparable publication in Great Britain is the "Official Year-Book of the Scientific Societies of Great Britain and Ireland", published by Messrs. Charles Griffin and Co., Ltd., for many years, but discontinued since the beginning of the War. Such reference books are of much value in the library and elsewhere.

Rare Scientific Books

CATALOGUE 8 (Spring 1943) issued by Schuman's, 20 East 70th Street, New York, contains 485 items, the great majority of which are of medical interest, but including a number of non-medical scientific works as well. Special mention may be made of the following: several works by Vesalius including the third edition of the "Fabrica", the first edition of Casserio's "Tabulæ Anatomicæ" (1627), Fallopio's "Institutiones Anatomicæ" (1585), the first edition of Acosta's "Herbal" (1578), Cesalpino's "De Plantis" (1583); Fracastor's "Opera Omnia" (1555), the first edition of Conrad Gesner's "Surgical Tracts" (1516–65), Hans Sachs' folk poem (*c.* 1550), the first edition of Guido Guidi's work on surgery (1544), the first edition of Cockayne's "Leechdoms" (1864–66), the first edition of Morgagni's "De Sedibus et Causis Morborum" (1761). The non-medical works include the first edition of Goethe's "Metamorphose der Pflanzen" (1790), the first edition of Lyell's "Geological Evidence of the Antiquity of Men" (1863), the first edition of Newton's "Optics" (1704) and the first edition of the "Origin of Species" (1859), and Francis Hauksbee's "Physico-Mechanical Experiments on various Substances" (1709).

Announcements

A SPECIAL meeting to commemorate the life and work of Nikola Tesla will be held at the Institution of Electrical Engineers on November 25, at 3 p.m. At the meeting a lecture, with examples of Tesla's experimental work, will be delivered by Dr. A. P. M. Fleming, director and manager, Research and Education Departments of Messrs. Metropolitan-Vickers Electrical Co., Ltd.

IN reviewing Prof. J. C. Slater's "Introduction to Chemical Physics" in NATURE of October 30, p. 488, the price of the book quoted was that of the time of issue, namely, 33*s.*; we are informed by the McGraw-Hill Book Co., Inc., that the current price is 35*s.*

ERRATUM. In NATURE of November 6, p. 535, col. 2, line 1, for "flies is not due to mechanical inability to reach the goal", read "flies is due to mechanical inability to reach the goal".