

filament; it therefore produces a continuous spectrum, red being prominent, but lacking in blue. The resultant colour is yellowish. A mercury lamp depends on the excitation of vapour and consequently emits a light with a broken spectrum, red rays being almost completely absent and blue being very pronounced. If the two light sources are mixed in the proper proportions, we get an approximation to white light. The effective application of this to shop lighting depends on the type of goods displayed; so no definite ratios of the two lights can be fixed and each installation is examined experimentally. In the case of drapers, furnisiers and outfitters, where fabrics are displayed, the proportion of tungsten lumens to mercury lamp lumens is generally in the proportion of three to one. In practice, this means utilizing one 80-watt mercury lamp with two 200-watt tungsten lamps. When this is done, the colours of the fabrics appear much the same as with daylight. Black appears of a richer lustre, and red shades do not appear mauve as they do under mercury light. Although the consumption of electricity might have been expected to be less than if only tungsten lamps were used, it is found that owing to the amount of tungsten light required to blend with the mercury light, the consumption is much the same. In most of the main town shopping centres, blended light installations present a striking contrast to competitive windows in the same area, being much more prominent and displaying the goods more effectively.

#### Bureau of American Ethnology, 1937-38

ALTHOUGH the normal activities of the Smithsonian Institution have been curtailed of recent years owing to economic conditions in the United States, the Bureau of American Ethnology has been able to maintain its operations in the field, and even to extend them in archaeology, owing to the provision of Federal finance and the supply of labour made available by measures for relief. A summary statement of the research carried out by members of the staff in the period 1937-38 is given in the fifty-fifth annual report (Washington, D.C., 1939. Pp. 8) covering that statistical year—an exiguous document in comparison with the more elaborate accounts familiar to anthropologists in earlier years. A major work of archaeological excavation was that of the Lindenmeier site in Colorado, where Dr. F. H. H. Roberts, jun., has continued the work of exploration of the habitation site of Folsom man which he initiated in 1934. His operations in the summer of 1937 uncovered an area of 2,800 sq. ft., and 735 specimens were obtained, including a number of new types of stone implement. Early in the season 1938 evidence of the artistic effort of Folsom man, "one of the earliest known of New World inhabitants", came to light in the form of pieces of bone with attempts at engraved design. An interesting investigation approaching completion is Dr. John R. Swanton's research on behalf of the United States De Soto Expedition Commission, of which he is chairman. It involved one field expedition in the year, when Dr. Swanton visited Alabama for the purpose of examining old Indian town sites which might possibly be

identified with those mentioned by De Soto. An extended ethnological exploration of western South America has been planned, which was initiated when in April last Dr. J. H. Steward left Washington for Ecuador, where he has since been at work among the highland Indians.

#### Britain in the Dark Ages

THE northern sheet of "The Map of Britain in the Dark Ages" (Ordnance Survey Office, Southampton, 1939. Pp. 43. Price 5s. net) is, if possible, of even greater interest than the southern sheet issued by the Ordnance Survey in 1935. This is not least, perhaps, because it serves to emphasize the imperfections in the material, while affording suggestion of the more urgent provinces to which further research should be directed, if any substantial advance in knowledge is to be made. Thus, for example, brochs and earth-houses do not appear here, being reserved for future separate treatment, owing to the difficulty of determining their chronological relation to the period covered by the map. This period, roughly, is from A.D. 440 to 840, an approximation to the date of the union of the kingdom of Picts and Scots under Kenneth, son of Alpin. In regard to technical details, the scale of the map is 1:1,000,000. The practice in the use of symbols of archaeological maps previously issued by the Survey is maintained, the form of the symbols suggesting the objects, additions being made to the symbols already in use as required, as, for example, in indicating the distribution of Pictish symbols. An expository introduction deals with certain broad questions—the extent and location of the British, Scottish, Pictish and Anglian regions, the distribution of tribes, the lines of early roads, and the like. The section in which the roads are traced is a particularly instructive synthesis of geographical and archaeological argument, although the editor modestly disclaims any attempt at original research and professes to do no more than record existing knowledge. The discussion of the range of distribution of the ethnic groups brings out very markedly the need for both a systematic survey of Scottish place names and of systematic excavation, directed to specific ends, mainly chronological.

#### Tribute to the Memory of Sir Victor Horsley

SIR VICTOR HORSLEY was far from being merely a great surgeon. His death while still in the full plenitude of his powers deprived the world of a remarkable personality which expressed itself effectively in many fields, and his old friend and fellow-worker, Mr. C. J. Bond, has done well to place on record personal notes ("Recollections of Student Life and Later Days", 1939. H. K. Lewis and Co. Pp. 48) of an association lasting forty years. Neuro-psychical phenomena held an irresistible attraction for both men, and in elucidating Horsley's share in some of their conjoint work, Mr. Bond outlines some of the conclusions to which he was led by these and other independent researches the scope of which is indicated by his query: How has it come about that the neural machinery exists for the carrying out of neuro-psychical activities in a dual manner while on the psychical side the more

highly organized, later evolved responses are perceived and executed by a unified consciousness and a single will? Of Horsley's activities in the political and sociological sphere he observes, "He clearly realized that what the world sorely needs is a deeper and wider recognition of the fact that selfishness and the aggressive spirit, although they no doubt had some survival value among primitive peoples and savage tribes, yet under modern conditions of so-called civilization they act as brakes on the wheels of human progress".

### School Natural History

PESSIMISTS who lament the alleged lack of interest shown by the modern schoolboy in natural history should read the current annual reports of two famous school natural history societies—the reports for 1938 of the Marlborough College Natural History Society and of the Rugby School Natural History Society. Each of these societies has existed long enough for its usefulness to be thoroughly tested, for the Marlborough report is the eighty-seventh, the Rugby one the seventy-second, and the internal evidence is that enthusiasm abounds and observations are made over a wide range of natural history subjects. The two societies seem to be run on quite different lines. At Rugby, activities centre in thirteen specialist sections, which arrange their own discussions and excursions, and meet in common only at the general lectures given by outside speakers. At Marlborough, there appear to be no lectures by outsiders, the members themselves are the lecturers, and there are but two sections, archaeological and natural science. This arrangement, while encouraging more general distribution of interests, has not affected the specialist labours of the members, for it is a remarkable record that from the pages of successive reports no fewer than seven hand-lists have been published, giving a wonderfully complete conspectus of the fauna and flora of the Marlborough district.

### The Science Library

THE first part of a fifth edition of the "Hand List of Short Titles of Current Periodicals in the Science Library" (H.M. Stationery Office. 9s. net) has recently been issued. The new edition contains about nine thousand main entries with about four thousand cross references from alternative headings, as against four thousand titles in the fourth edition, issued in 1926. Publications of learned societies and institutions are entered under the names of their permanent seats, and publications of Government departments and other bodies under the name of the countries from which they derive their denominations, or, for want of such denominations, under the places whence their acts are issued. The Hand List is not intended as a bibliographical catalogue; it gives merely brief titles of the publications with details of the Library holdings. The List is being issued in two parts, of which the first is arranged alphabetically. It is hoped later to publish a second part with a subject arrangement. The preface to the List gives a very brief but lucid description of the Science Library and its development.

### New Medical Journals

THE first numbers of two new scientific journals have been received. (1) *Anais da Faculdade de Medicina de Pôrto Alegre*, Universidade de Pôrto Alegre, Brazil, Fasc. 1, pp. 1-303. This is handsomely produced and well illustrated, and the papers, in Portuguese, Spanish, Italian, French, German or English, have summaries in French, German and/or English. It opens with an account of the medical centre of the University, and contains papers, among others, on detachment of the retina (Arruga), hereditary ophthalmic diseases (Meyer), and feminine types (Gomes). (2) *Anales de la Escuela Nacional de Ciencias Biologicas*, Mexico, vol. 1, No. 1, pp. 1-178. This also is well produced and illustrated, and contains articles in Spanish on the cultivation of *Rickettsia* of typhus fever (Siegfried), histology of the poison gland of a spider, *Crypsidromus* (Ancona), calcium chloride in the treatment of scorpion poisoning (Varela), a new species of *Phlebotomus* (Dampf) and some Mexican textile fibres (Huerta and Ancona) and others. Summaries in English and German are provided. In both journals, the printed matter on a page measures about 8 in. × 5 in.

### Journal of the Royal Agricultural Society

THE ninety-ninth volume of the *Journal of the Royal Agricultural Society of England* has now been published (price 15s.). It includes, as in the previous volume, "The Farmer's Guide to Agricultural Research", which this year contains an additional section on pests and parasites. As usual, the subjects of the special articles cover a wide field of interest. Agricultural long-term credit facilities in Great Britain are discussed, and farm organization on the silt soils of Holland, Lincolnshire, described. A detailed account is also given of the life-history, distribution and control of bracken, from which there can be no doubt as to the need for urgency in undertaking means for its eradication. The starling is the subject of a further article, and at present it seems uncertain whether it should be regarded as a friend or enemy of the farmer. The Warnford Farm Estate, where pig breeding and bacon production are carried out on a vast scale, has been selected as this year's "Notable Farming Enterprise".

### Durban Museum and Art Gallery

UNDER the directorship of E. C. Chubb this combined institution continues to make steady progress, reflected in an increase of visitors, who in the year ending July 31, 1938, numbered 123,771. The educational value of the collections is increased by the lectures to the public and to school children delivered by the staff, and modern developments are shown in the appointment of a guide-lecturer, through the generosity of the Carnegie Corporation of New York, the extended use of cinematograph films to illustrate museum lectures, and the scheme which enables assistants to visit other South African museums for the purpose of gaining experience in museum technique, a scheme sponsored by the South African Museums Association.