race, or merely an aggregate of tribes, possibly of varied physical characteristics, more or less closely united by a common tongue and a common culture. Anthropology and archæology may in time throw light, he suggests, on their habitat in the Stone Age, "although it will always be difficult to determine from the examination of a skull or a stone axe what language their owner spoke in life." Again, we have only grave furniture to guide us, and the consideration of broad or long skulls is of little help, because the cephalic index " is merely a ratio," and " among the living Chinese or in the Neolithic graves of Europe long skulls are nearly always found with short skulls, and vice versa."

Environment, again, affects the cephalic index, and the Scandinavians, supposed by some authorities to represent the primitive Indo-European type, "owe their long heads, not alone to race, but partially, at least, to hyperthyroidism and ultimately to the iodine of the seas near which they have lived, and from which they have obtained a considerable part of their food." The most novel point raised is that of the newly discovered Tocharian language in East Turkestan, a centum language, possibly introduced from the west, the home of languages of this type. Mainly on the evidence of philology the author reaches the conclusion, held by many scholars, that the primitive home of the Indo-Europeans was the great plain of Central and South-Eastern Europe, including the present Poland, Lithuania, Ukraine, and Russia south and west of the Volga. There is not much original matter in this little book, but the points are well put, and it will be useful as a guide to the study of a problem which has not yet been finally settled.

## The Journal of the Institute of Metals. Vol. 27. Edited by G. Shaw Scott. Pp. viii+621. (London: The Institute of Metals, 1922.) 315. 6d. net.

THE increase of research in non-ferrous metallurgy is so rapid that succeeding volumes of the Journal of the Institute of Metals show a rapid growth in size. Volume 27 contains some interesting papers on recrystallisation and grain growth. The paper by Mr. Adcock, containing a beautiful series of photographs illustrating recrystallisation in cupro-nickel, an alloy which proves very suitable for the purpose of this study, will be of material assistance in advancing the subject, which has been studied with such good results by Carpenter and Elam. Major Smithells' paper on grain growth in tungsten filaments makes use of the hypothesis of varying vapour pressure. Condenser tubes are considered from two points of view, the experience of the Corrosion Committee being utilised as a basis for recommendations as to their care in practice, while a second paper from the Research Department at Woolwich deals with the prevention of season cracking by the simple process of removing stress by low temperature annealing. The revision of the alloys of aluminium and zinc clears up some difficult points in the behaviour of this curious system, one of the most interesting in respect of its changes in concentration of solid solution with temperature. Several other papers deal with questions of practical importance, and the volume contains a very large number of abstracts of work published elsewhere.

Arab Medicine and Surgery : A Study of the Healing Art in Algeria. By M. W. Hilton-Simpson. Pp. viii+ 96+8 plates. (London : Oxford University Press, 1922.) 10s. 6d. net.

In this volume Mr. Hilton-Simpson describes the medical and surgical methods of the Shawia of the Aurès Massif of Algeria. His record is the result of careful inquiry pursued in the course of a number of visits to the country, and possesses a peculiar value in that it deals with practices which must inevitably disappear before the advance of civilisation. Although some of the treatment prescribed by Shawia medicine is derived "from the sorcerer's defensive armour against Jenun," the demons or spirits which cause disease, medical practice is not here synonymous with magic, as among most primitive peoples. The medical practitioner is regularly apprenticed, usually to a member of his own family. The medical treatment would appear to be derived from the medicine of the medieval Arabs. The origin of their surgery is more obscure, and it has been suggested, on account of the primitive character of their instruments and the prevalence of the operation for trepanning, in which they take much pride and show much skill, that it may possibly go back so far as the Neolithic age. The trepanning operation is usually successful, a fact which is due perhaps as much to the remarkable vitality of the people as to the skill of the surgeon.

A Naturalist's Calendar, kept at Swaffham Bulbeck, Cambridgeshire. By L. Blomefield. Second edition, edited by Sir Francis Darwin. Pp. xviii+84. (Cambridge: At the University Press, 1922.) 3s. 6d. net.

THE Cambridge University Press was well advised in adopting Sir Francis Darwin's suggestion to republish this Calendar. Lists such as those compiled by Blomefield not only assist the amateur naturalist, but are of real value as contributions to the science of phenology. A collection of such Calendars embodying the notes of some of the scores of observers scattered over the British Isles, and based on a consecutive series of years, would probably add not a little, in the hands of a central receiver, to our knowledge of the movements of birds, the awakening of vegetation, and other phenomena dependent upon the seasons.

Woodland Creatures: Being some Wild Life Studies. By Frances Pitt. Pp. 255. (London: G. Allen and Unwin, Ltd., 1922.) 12s. 6d. net.

"STUDY any animal, even the most common, carefully, and you will find out something that has hitherto escaped notice." Repeatedly did this sentence spring to mind as we read the pages of this charmingly written and beautifully illustrated book. The author, whether writing of the furred or the feathered creatures of our woodlands—of badgers, foxes, dormice, rabbits and squirrels, or of woodpecker, bullfinch, kestrel, sparrowhawk, owl, magpie and jay,—tells us something of habits or of adaptation of structure to habit that we have not met elsewhere; and not infrequently has shrewd criticism to offer on plausible theories of armchair origin. Her photographic illustrations bear comparison with the very best.

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