

theory that the gods of Homer were manifestations of nature powers adapted to the local geography and the traditional history. This was followed in more recent times by the suggestion that the Iliad represents a reflex of combats fought, not in the Troad, but of tribal battles in Asia Minor between Eubœan-Bœotian colonists and Locrians or South Thessalians, or between Locrians and Bœotians on the Greek mainland.

Such speculations Dr. Leaf has little difficulty in confuting. He has now carried out an exhaustive survey of the text mainly on the basis of geography, and from this inquiry startling results emerge. In his last book on the subject he confined himself mainly to the Trojan side of the question. He proved that the Catalogue of the Trojan forces was a historical document of the highest value. Following Thucydides in his pregnant remark that wars in ancient as well as in modern times were based on trade rivalry, he made it at least highly probable that the war of Troy represented an attempt by the Achæan Greeks to gain possession of a great commercial *entrepôt* controlling the trade routes to the Black Sea and the hinterland of Asia Minor. The war was therefore a historical event, fought, not by faded survivals of nature deities, but by living soldiers and their generals.

The second important document in the Iliad is the Catalogue of the Greek ships, which is now found to stand in a very different position from that of Troy. It is full of discrepancies, such, for instance, as the fact that the Bœotians who figure largely in it were still in Thessaly in the time of the Great War. Besides this, the unsuitability of Aulis as a rendezvous for a fleet acting against Troy, and the impossibility of reconciling the domains of the Achæan princes with geographical facts, are now clearly demonstrated. The document, in short, was an attempt by a later hand to make its contents correspond with an altered condition of Greece.

This fruitful survey of Homeric geography and Greek tradition makes it possible to link the world of Homer with Gnossos and Mycenæ as they have been revealed to us by the excavations of Sir A. Evans and Schliemann, and the review of the historical and geographical situation which forms the introduction to this fascinating work is perhaps its most interesting feature.

We have no space to deal with the new light which Dr. Leaf has thrown on the problem of the Odyssey. He shows clearly that while the eastern Egean was familiar to the Achæans, the west was a land of mystery, the home of a series of folk-tales, and he follows Dr. Dörpfeld in his remarkable demonstration that the modern Thiaki is not the Ithaca of Odysseus, whose home was Leucas.

We have said enough to show the importance of Dr. Leaf's work. The book is a course of lectures intended to be delivered at the Northwestern University, Evanston, Illinois, a project which fell through on the outbreak of the war. They are now published by the courtesy of the

Norman Wait Harris Lecture Committee. To use Dr. Leaf's words: "It may at least serve as a protest, faint and feeble enough, against the extinction of intellectual interest in the flood of barbarous materialism which has been let loose upon Europe." It is much more than this, a statement of the problem defined with logical precision and grace of style, which commend it not only to the trained scholar, but to all who are interested in one of the most vital questions of literature.

OUR BOOKSHELF.

A Manual of Soil Physics. By Prof. P. B. Barker and Prof. H. J. Young. Pp. vi+101. (London: Ginn and Co., 1915.) Price 3s.

PROFS. BARKER AND YOUNG have done well to collect the laboratory exercises which for the past ten years have been in use in the College of Agriculture of the University of Nebraska. In this region, where soil physics is so important, one may feel reasonably certain that survival for ten years is a sound test of value, and therefore teachers who are trying to introduce the subject into their courses will welcome the book.

All agricultural courses are modified by their surroundings. Nebraska is fortunate in possessing considerable areas of loess soil well provided with all the elements of fertility, but apt to suffer from drought at critical times. There is, however, sufficient rainfall to supply the needs of the plant if it is properly husbanded, and this is done by maintaining a fine layer of earth on the surface of the soil to act as a non-conductor and protect the bulk of the soil from the sun's rays. The study of the water relationships of soil forms a great part of soil physics, and in one form or another comes into a large proportion of the exercises here.

The authors have modestly had the book turned out in the form of a biflex binder notebook, so that loose pages can be taken out. This makes it difficult to handle, and it deserves something better. We hope that in later editions it will appear in proper book form so that it can be kept for permanent use. E. J. R.

The Journal of the Institute of Metals. Vol. xiv. Edited by G. S. Scott. Pp. ix+289. (London: Institute of Metals, 1915.) Price 21s. net.

THIS volume contains the papers which were read at the autumn meeting of the Institute of Metals in 1915, an account of which has already appeared in the columns of NATURE, together with the discussion and written communications. So far as these papers are concerned, the chief place in technical importance must certainly be given to that by Mr. Parker on specifications for alloys for high-speed superheated steam turbine blading, which drew an important contribution from the president, Sir Henry Oram, the engineer-in-chief of the Navy. One of the special merits of this paper is that it makes a point of stating what are the chief requirements in modern specifications