A Human and Humorous Geography

The Home of Mankind: the Story of the World we Live In. Written and pictured by Hendrik Willem Van Loon. Pp. 506 + 32 plates. (London, Sydney and Bombay: George G. Harrap and Co., Ltd., 1933.) 12s. 6d. net.

THIS is an amazingly clever and stimulating book. The author, who won fame by a short "Story of Mankind", is a much-travelled journalist who, born in Holland, has made America his home and English his most familiar tongue. In this brilliant volume he has much improved on his first performance, for his knowledge of the world is made vivid by his travels, while the actuality of his history is a little dogmatic and tendencious from the same cause. Nationalism, for example, finds no more mercy at his hands than it does at those of Mr. H. G. Wells. But on the objective, geographical side of his subject he is well informed, well balanced and most instructive. His account of the evolution of the map and the calendar, and of the effects of climate and natural resources on the evolution of nations, could scarcely be bettered

within its limits. There are, of course, lapses; a very curious one represents, in a picture, the English Channel as a sort of Colorado cañon; but on the whole the zest, vivacity and humanity of the book are irresistible.

Either for an intelligent child, or for an adult, as a preferable substitute for a novel, this geographical story of mankind should have a world-wide circulation. It is written from that point of view, as a lively homily on the text that "the importance of any given piece of land depends entirely upon the sum total of the contributions the inhabitants of that particular territory have made to the sum total of human happiness in the form of science or commerce or religion or one of the arts". The illustrations are delightfully crude and arresting. Every one of them contains some point to be remembered, and they are drawn as a bright child might draw them who wished to visualise something in the text. The whole thing is fascinating; in its way a work of genius; and, in the sanity of its internationalism, its pathos for the inhumanity of the past and hopefulness for the future, very much a sermon for the times.

F. S. MARVIN.

Short Reviews

- (1) *The Principles of Electromagnetism.* By E. B. Moullin. Pp. viii + 279. (Oxford: Clarendon Press; London: Oxford University Press, 1932.) 17s. 6d. net.
- (2) *Electric and Magnetic Fields.* By Prof. Stephen S. Attwood. Pp. xi + 314. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1932.) 21s. 6d. net.

THESE two books are of similar type and are intended for the use of electrical engineers. Both lay stress on the calculation and representation of fields in a great variety of cases and are characterised by the excellence of their diagrams.

(1) Mr. Moullin's book is intended as a preliminary volume and companion to a more technical book on the dynamo. The electromagnetic theory is developed along classical lines, but the need of the electrical engineer is always kept in view. Thus, the chapter on induced electromotive force ends with a detailed discussion of eddy currents and energy losses under various conditions. The usual account of iron in the magnetic field is continued into a discussion of the effects of various gaps, and of the forces between the magnetic poles which occur in dynamos and motors. Magnetic shielding is treated, and the current in the neighbourhood of faces of masses of iron. The last chapter deals with Maxwell's theory, retarded functions and radiation from oscillators.

(2) The field of Prof. Attwood's book is wider

than that of the former, the magnetic field not being introduced in the first half of the book, which deals at great length with electrostatic fields and their plotting. The British student will find the nomenclature peculiar, as the names of the practical units are taken, with various prefixes for the absolute and electrostatic units. The word 'potential' is used where we use electromotive force, and magnetic potential is called magnetomotive force.

The Catalytic Oxidation of Organic Compounds in the Vapor Phase. By L. F. Marek and Prof. Dorothy A. Hahn. (American Chemical Society Monograph Series No. 61.) Pp. 486. (New York: The Chemical Catalog Co., Inc., 1932.) 9 dollars.

AN impressive idea of the extensive studies and applications of catalysis in recent years is afforded by this volume. In it the authors have summarised and reviewed critically an enormous range of literature and patents dealing with the special field of catalysis concerned. The main sections are arranged under such headings as the catalytic decomposition of alcohols; reactions involved in the synthesis of hydrocarbons and alcohols from water gas; the production of hydrogen from methane; surface combustion; the cause and suppression of knocking in internal combustion engines; the oxidation of alcohols, saturated and unsaturated aliphatic hydrocarbons, petroleum