

tively in the highest form in schools. It is with genuine appreciation of the success Mr. Downing has achieved that we join with the editors in recommending this little book, high-priced for its size, "to the reading of ministers and laymen who are desirous of obtaining in untechnical language the results which scholars have arrived at in this modern attack upon the problem of evolution." The author is a competent biologist with a keen educational sense. From data drawn from trotting horses and distinguished human families he shows that race counts. Which is the more potent, environmental nurture or hereditary nature? "Such a question is about as sane as whether wind or water is the more important in the production of the waves that surge in along the ocean shore." From mandrake flower and frog's spawn the fundamental facts of reproduction and development are illustrated; the import of Mendelian inheritance and of the selection of mutations is made clear; the question of the transmissibility of individually acquired somatic modifications is dealt with wisely and practically, and the inheritance of good and evil qualities in mankind is illustrated without exaggeration. The book expresses a clear mind, a well-balanced judgment, a eugenic ideal, and a belief in education. We wish for it a great success, which it well deserves.

OUR BOOKSHELF.

A Map showing the Known Distribution in England and Wales of the Anopheline Mosquitoes, with Explanatory Text and Notes. By W. D. Lang. Pp. 63. (London: British Museum Natural History, 1918.) Price 2s. 6d.

THE map deals with the distribution of the anopheline mosquitoes (*Anopheles maculipennis*, *A. bifurcatus*, *A. plumbeus (nigripes)*) previously recorded as indigenous and proved to convey malaria. The text contains records relating to the distribution of these mosquitoes, and, like the map, is modelled on the publications of Nuttall, Cobbett, and Strangeways-Pigg (1901), "Studies in Relation to Malaria: i., The Geographical Distribution of Anopheles in Relation to the Former Distribution of Ague in England," *Journal of Hygiene*, vol. i.; and Nuttall (1905), *ibid.*, vol. v., a considerable number of additional data being supplied from records hitherto unpublished. The statement made by the earlier authors that *Anopheles* are likely to be found in suitable waters anywhere in this country is confirmed. The features whereby the species may be identified are described, and a brief account is given of their life-history. Taken in conjunction with the earlier papers cited and those by Nuttall and Shipley (1901-3), "Studies in Relation to Malaria: ii., The Structure and Biology of Anopheles," *ibid.*, vols. i.-iii., readers will find in these sources most of the information that is obtainable regarding the insects. Their importance is fully appreciated now that indigenous cases of malaria have arisen more frequently owing to the return to England

of soldiers with malaria, there being no reason why malaria should not become re-established and more widely distributed in this country if adequate precautions are not taken.

Wayfarings: A Record of Adventure and Liberation in the Life of the Spirit. By W. J. Jupp. Pp. 234. (London: Headley Bros., Ltd., n.d.) Price 6s. net.

THIS autobiographical study will interest many who have lived through the period of intellectual transition which had its keynote in the evolution-idea. It tells frankly, sometimes naively, of the author's "advance from the credulities of Calvinism to that liberty of open-mindedness which permits the continual readjustment of belief to the ever-widening experience of life." Greatly influenced by Wordsworth, Emerson, Thoreau, and Walt Whitman, he reached, after many wayfarings and much discipline, a serene faith in the orderliness, rationality, progressiveness, and purposefulness of the cosmic process. "The Universe must needs care for all its creatures." "The Spirit of the whole must surely be present and effective in all its parts." "The Creative Spirit of Life must be continually present and effective in all forms of its activity, in all creatures through which it lives and has its being." But what gives the book a special interest for us here is its disclosure of what the beauty of Nature—even in its most familiar expressions—may come to mean to a busy man in the way of "refreshment and inspiration and consoling grace." In the quietness of old age he went to a garden-city and continued to make his soul and to find "this world, with all its strangeness and apparent failure, a very homelike, habitable place." In the autumn, though he did not strain to listen, he heard the voice of spring. To many readers, especially of patient years, "Wayfarings" will give much pleasure.

Mathematics for Engineers. Part i., including *Elementary and Higher Algebra, Mensuration and Graphs, and Plane Trigonometry.* By W. N. Rose. (The Directly Useful Technical Series.) Pp. xiv+510. (London: Chapman and Hall, Ltd., 1918.) Price 8s. 6d. net.

THIS book contains a course on algebra, mensuration, and plane trigonometry for engineering students; the calculus, vector analysis, spherical trigonometry, differential equations, etc., being reserved for part ii., which is to appear shortly.

It is to be feared that a beginner may be somewhat confused by the arrangement adopted; thus Cardan's solution of the cubic occurs on p. 67, the rule for finding the area of a triangle on p. 79, and the definition of a circle on p. 90. Even the practical portions of the book are in places rather misleading: it must surely be easier to add logarithms vertically than horizontally. But doubtless the teacher will find the book a valuable mine for examples likely to interest the future engineer, as bearing on problems connected with his practical work.