

Short Reviews

(1) *Logarithmica Britannica: being a Standard Table of Logarithms to Twenty Decimal Places.* By Dr. Alexander John Thompson. Part 5: *Numbers 50,000 to 60,000.* (Tracts for Computers, No. 17.) Issued by the Biometric Laboratory, University of London, to commemorate the Tercentenary of Henry Briggs' publication of the *Arithmetica Logarithmica*, 1624. Pp. iv+100. (Cambridge: At the University Press, 1931.) 15s. net.

(2) *Primes and Factors.* Computed by Emma Gifford. Pp. vi+94. (Manchester: Printed by Abel Heywood and Son, Ltd., 1931.)

(3) *The Nomogram: the Theory and Practical Construction of Computation Charts.* By H. J. Allcock and J. Reginald Jones. (The Specialists' Series.) Pp. viii+209. (London: Sir Isaac Pitman and Sons, Ltd., 1932.) 10s. 6d. net.

(1) PART 5 (the fourth to be published) contains the logarithms of the integers from 50,000 to 60,000. The frontispiece is a photographic reproduction of the title page of Briggs' "*Arithmetica Logarithmica*" (1624).

(2) Every prime number which is greater than 10 is included in the form $N = 6x \pm 1$. This volume gives all values of N from $x = 2$ to $x = 16,731$ together with the factors, if any. The table therefore contains all primes between 11 and 100,379. The terminal digits of each group of eight consecutive numbers are 1, 3, 7, 9, 3, 9, 1, 7 in this order. Each column of the table contains 56 numbers. With this arrangement, all numbers N in the same horizontal line have the same terminal digit. It is thus easy to find and factorise any number which falls within the limits of the table. The pages are well arranged and clearly printed. The volume should prove very useful.

(3) Alignment charts and other forms of nomogram are now widely used for rapidly obtaining approximate values of a number which is given by means of a formula containing several variables. The present volume combines successfully a study of the theory with practical directions for the construction and use of computation charts. The theory is based upon the determinant, the evanescence of which expresses the condition of collinearity of three points. The method is easily apprehended and readily applied. L. M. M. T.

My Life and Thought: an Autobiography. By Albert Schweitzer. Translated by C. T. Champion. Pp. 288+8 plates. (London: George Allen and Unwin, Ltd., 1933.) 10s. 6d. net.

THIS book makes large demands on the reader, who is left to discover for himself the real eminence of Schweitzer alike as preacher or theologian, as musician, as doctor and as philosopher. In spite of the wealth of material for a romantic and heroic biography, there is little of the wide appeal of Schweitzer's narratives of his work in Lambaréné—"On the Edge of the Primæval Forest"

and "More from the Primæval Forest". Apart altogether from the interest which any such attempt to face the fundamental problems of civilisation, to relate ethical and moral with material progress and values must possess, a rare and unmistakable honesty pervades the book which should give it added interest to the scientific worker. Here is a man of fourfold eminence facing frankly some of the fundamental problems of this generation, and, in his exposition of philosophy, giving us the clue to the understanding of the preacher, the musician, the physician.

Schweitzer's consideration of the relations between civilisation and ethics and attempt to discover the causes of the world catastrophe in a false world view, or sense of values, is somewhat pessimistic and leads him to conclude that there is no natural order of life values which man can discover. He adopts in consequence the principle of reverence for life as the only guide, and attacks the spirit of the age for its disdain for thinking, for the discouragement given to the individual to arrive at his convictions by his own thinking. "Renunciation of thinking," he declares, "is a declaration of spiritual bankruptcy. Where there is no longer a conviction that men can get to know the truth by their own thinking, scepticism begins." He attributes the difficulties of the machine age to the absence of a world view capable of counteracting tendencies destructive of civilisation. A challenging note, an almost passionate effort for honesty and sincerity of thought, breaking through the pessimism of the thought, like the inspiration of the man's personality no less than of his achievements, relieves the sombreness of what is near to being a disappointing book. Schweitzer writes shrewdly on problems involved in the relations of the backward races of Africa and European civilisation and his sense of service and missionary outlook are never allowed to deflect his scientific observation or judgment. R. B.

(1) *Ergebnisse der kosmischen Physik.* Herausgegeben von V. Conrad und L. Weickmann. Band 1. (Gerlands Beiträge zur Geophysik, Supplementband 1.) Pp. xi+448. (Leipzig: Akademische Verlagsgesellschaft m.b.H., 1931.) 46 gold marks.

(2) *Atmospheric Electricity.* By Dr. B. F. J. Schonland. (Methuen's Monographs on Physical Subjects.) Pp. vii+100. (London: Methuen and Co., Ltd., 1932.) 2s. 6d. net.

(3) *Die Aufrechterhaltung der elektrischen Ladung der Erde.* Von Prof. Dr. Egon Schweidler. (Probleme der kosmischen Physik, herausgegeben von Prof. Dr. Christian Jensen und Prof. Dr. Arnold Schwassmann, Band 15.) Pp. iv+68. (Hamburg: Henri Grand, 1932.) 5 gold marks.

(1) THE title of the first of these books is somewhat misleading, its subject being geophysics, and having