

touches to the last pages, in which I endeavour to secure in advance the interest of my readers for the subsequent portions of this work. To all these friends I wish to express my sense of obligation and my sincere thanks. I find it impossible to express how much this book owes to my beloved wife, my constant helpmate on the long course of this arduous enterprise.

It is unnecessary for me to lighten the work of my critics by pointing out the many defects of which I myself am painfully conscious; but, in the case of the last chapter on "The Development of Mathematical Thought," I wish to say that this is—so far as I know—the first attempt to give to this abstract region of thought a place in a general history of intellectual progress. I sincerely hope that it will be followed by other and more successful attempts to perform this very difficult task. It is now abundantly clear that mathematical thought will play an increasingly important part in the progress of science and culture, and it is no longer permissible to consider it merely an interesting specialty apart from the general course of intellectual development. A due appreciation of its importance and power will in future be expected, not only from the practical thinker who applies science, but likewise from the philosopher who assigns to science its place in the comprehensive scheme of human culture.

J. THEO. MERZ.

THE QUARRIES,
NEWCASTLE-UPON-TYNE, *October 1903.*