widespread that there is almost certainly not a single chemist under forty years of age in England who has not either studied direct from it or been taught by one who has.

That the book has only needed complete revision, in spite of its enormous sales, three times during four decades of organic chemical advance is an indication of the genius and scientific foresight of the original authors. Would that more textbooks were so conceived.

The sad reflection that one of the original authors, who approved in 1929 of this latest complete revision, did not live to see the work completed, is partly counteracted by noting that the son of the other author now collaborates with his father in bringing up to date one of the most valuable weapons in the hands of British chemists; a good textbook is surely no less than that. On the production side there is little to criticise, save the absence of a general title page for both parts and a combined list of contents at the beginning of the book.

Some of the greatest chemical advances of our time could doubtless be traced by comparing the 1894 and 1931 editions of "Perkin and Kipping". They would comprise whole areas of organic chemistry—the structure of the sugars and higher carbohydrates, the syntheses of polypeptides, investigations into the complex structures of alkaloids, sterols, and anthocyanins, the discovery of hormones and vitamins, and the steps taken towards isolating them and certain enzymes; indeed, these constitute but a small part of the investigations that will entitle the present century to be known as the age of organic chemistry. Perkin and Kipping should beyond a peradventure take no small part of that credit. A. L. B.

The Science Masters' Book. Part 1: Physics. Part 2: Chemistry, Biology, Conversazione Experiments. Experiments selected from the *School Science Review* by a Committee of the Science Masters' Association. Edited and arranged by G. H. J. Adlam, with the assistance of W. H. Barrett, F. Fairbrother, T. Hartley, O. H. Latter, E. J. Moore, G. N. Pingriff, V. T. Saunders, E. G. Savage, A. Vassall. Part 1. Pp. xvi + 256. Part 2. Pp. xvi + 267. (London: John Murray, 1931.) 7*s.* 6*d.* net each Part.

THE provision of lecture experiments to illustrate and emphasise scientific teaching is a matter of great importance, and the Science Masters' Association, in producing these two books, has succeeded in filling a marked gap in the literature. The volumes have been built up from the notes on apparatus and experiments which have appeared from time to time in the *School Science Review*. Members of the Science Masters' Association have contributed many of the experiments, and a number have been selected from the demonstrations given at the annual meetings of the Association. In this work are to be found more than four hundred experiments, distributed over the different branches of physics, chemistry, and biology. The descriptions are excellent, and a commendable feature is that, in many cases actual figures obtained in the experiments show the reader what type of accuracy can be obtained. As appendices are given some very useful notes and experiments for conversazione use; also an excellent summary entitled "First Aid in the Laboratory", as well as information concerning the obtaining of duty-free spirit. The work is admirably balanced, well produced, illustrated with many diagrams, and is to be highly commended.

Principles of Electricity: an Intermediate Text in Electricity and Magnetism. By Prof. Leigh Page and Prof. N. I. Adams, Jr. Pp. xii + 620. (London: Chapman and Hall, Ltd., 1931.) 21*s.* net.

To any student with a good knowledge of mathematics and physics, and desirous of obtaining a sound basis of the principles of electromagnetism, this book can be recommended. It is clearly written and the symbols used are sufficiently close to the international symbols to be readily interpreted. The authors have decided that magnetic induction B and magnetic intensity H are measured in the same units (the gauss). Thus the permeability is a dimensionless ratio. If all teachers in Great Britain would agree, this would simplify teaching.

To introduce symmetry into the fundamental equations, Lorentz and Heaviside suggested a system of units which the authors call the h.l. system. The h.l. unit of charge repels an equal like charge at a distance of one centimetre away with a force of $1/(4\pi)$ dyne. We are told that the h.l. system of units is used almost universally by writers on electromagnetic theory at the present time. Future students will apparently have to learn not only the electromagnetic and the electrostatic systems of units, but also the h.l. system. We notice that 'capacity' is used and not 'capacitance'. We have difficulty in separating what the authors mean by 'proximity effect' from what they mean by 'skin effect'.

The Secret of the Golden Flower: a Chinese Book of Life. Translated and explained by Richard Wilhelm, with a European Commentary by C. G. Jung. Translated into English by Cary F. Baynes. Pp. ix + 151 + 11 plates. (London: Kegan Paul and Co., Ltd., 1931.) 12*s.* 6*d.* net.

THIS is a most welcome contribution to an understanding of Chinese spiritism. The "Golden Flower" epitomises the Chinese vision of the secret of the powers of growth latent in the psyche; while Jung's striking commentary gives a transcription of these same powers as they reveal themselves in the Western mind. In brief, the "Secret of the Golden Flower" attempts to show that the spirit must lean on science as its guide in the world of reality, and that science must turn to the spirit for the meaning of life. This main theme is developed in the Chinese version with all the poetical and mystical characteristics of Eastern wisdom. The running explanations and notes of Richard Wilhelm, who first translated this work from the Chinese, throws much light on its meaning and value. T. G.