

*Outline of Modern Belief: Modern Science, Modern Thought, Religious Thought.* Edited by J. W. N. Sullivan and Walter Grierson. (To be completed in about 24 fortnightly Parts.) Part 1. Pp. viii+64. (London: George Newnes, Ltd., 1934.) 1s. each Part.

THIS much-advertised work is clearly printed, copiously illustrated, and makes effortless reading. Some small errors on points of fact are of secondary importance; so also is the quality of the writing, which is not of the high standard to be expected of the editors—though this defect is mitigated by the fact that the original part consists largely of short connecting-links between quotations. What concerns us most is the avowed object of the book. "The editors of this Outline try to fill the rôle of middlemen between the specialists on the one hand, and on the other the plain man who wants to get at the gist of the thing." Following this we read of "modern science—so unlike the dry-as-dust science of old". "The old astronomy told us about the sun, the stars, the planets, their place in the heavens, their movements, revolutions, their nature and peculiarities; the new astronomy goes far beyond that when it speaks about the birth and death of suns and stars, how they are born and why they die; about the mystery of the immense nebulae from which the stars are born, and about whence came the nebulae." "The old science of physics dealt with energies—light, heat, electricity, and gravitation, all a little boring to the general reader." "The recent development of Physics has been called 'the most exciting episode in the history of science'." We cannot help noticing that the alleged uninteresting subject-matter is all concerned with trustworthy knowledge, while the interesting things are matters of sheer speculation. The provision of excitement for minds bored by truth is not an undertaking likely to attract many scientific readers.

*An Introduction to Plant Biochemistry.* By Dr. Catherine C. Steele. Pp. viii+356. (London: G. Bell and Sons, Ltd., 1934.) 15s. net.

THIS book might be taken as affording a measure of how much chemistry the student of botany is expected to know. Somehow, chemistry does not as a rule find favour with botanists; it is perhaps too remote from the other sides of their subject, so that plant physiology is not nearly so developed a field as animal physiology. Indeed it has been largely left to the chemist, whose achievements in unravelling the constitution of the pigments, chlorophyll, anthocyan and carotene, of the alkaloids, sugars and what not else, are well known. But there remains so much to find out in the plant world, there are so many questions unanswered, that every encouragement must be given to any effort to impart and acquire knowledge in this field.

It is from this point of view that we welcome Miss Steele's monograph. It contains a neat and satisfactory summary of the present state of chemical knowledge of the various groups of substances of plant origin. As this information is largely available

elsewhere in the up-to-date monographs, in particular those of Dr. Plimmer's series, it has not been difficult for the author to ensure accuracy in its reproduction, and these have obviously been freely used. Superimposed on this framework are allusions to the plants in which the substances occur and there is an index of botanical names.

It should be understood that the material is an elaboration of a series of lectures given to students in biochemistry: the text is interspersed with a number of experiments.

*Byzantine Civilisation.* By Steven Runciman. Pp. 320. (London: Edward Arnold and Co., 1933.) 16s. net.

THIS welcome contribution to Byzantine literature gives an excellent introduction to the historical, social and intellectual atmosphere of the ten centuries during which flourished the eastern portion of the Roman Empire (330–1453). The Imperial constitution and administration, the status of religion and the Church, the organisation of the army, the navy and the diplomatic service, the characteristics of commerce and everyday life, and finally the legacy of Byzantium in the realms of learning, literature and art, are carefully analysed and surveyed in their historical setting.

Many institutions of the Empire can be compared with advantage to present-day ones. The manufacture of arms, for example, was a State monopoly. There was no unemployment. Middlemen were unnecessary, and there were practically no labour troubles. The growing competition of the West, however, hastened on the steady debasement of the coinage, which would appear to be the main cause of the decline and fall of Byzantium. Mr. Runciman gives very brief indications of the scientific and philosophical thought of the Byzantine Empire. What is mentioned, however, shows clearly that the disinterested pursuit of learning was one of the major characteristics of this important civilisation. T. G.

*Newnes' Chemistry in Commerce.* Advisory Editor: M. D. Curwen. (To be completed in about 32 weekly Parts.) Part 1. Pp. 56. Part 2. Pp. 57–104. (London: George Newnes, Ltd., 1934.) 1s. each Part.

THIS work has two main objects, first, to serve as an illustrated 'guide-book' to the chemical works which the articles describe, and secondly to deal with the industries not so much by discussions of the principles on which they depend, as by indicating how such principles are applied in practice.

The excellent illustrations play an important part in the achievement of the first object, particularly where they show 'close-ups' of the more intricate analytical operations; and so far as one can judge from Parts 1 and 2, the second is also being fulfilled. The work is therefore worthy of a wide sale among students, laboratory assistants and junior chemists in industry. If one may venture a criticism it is that occasionally the treatment is uneven; as an example, five out of the seven pages on routine tests for milk at cooling stations are devoted to the Gerber test.

J. G.