fundamental; that is to say, the author has an intelligible view to put forward; they are chiefly a matter of looseness and carelessness of expression. The most glaring error, though in its context it is trivial, is the statement that ". . . the principle of entropy was not known to nineteenth-century physics" (pp. 9-10).

Another example of careless expression is seen later on where the question of 'values' is being discussed. The author in stating his æsthetic theory deals primarily with the subject of music-an interesting and, to the reviewer at least, an illuminating discussion. Having explained that music is not properly concerned to represent or symbolise either objects of the physical world or human activities or relations, and that it is therefore in a quite definite sense meaningless, he then produces the startling definition that music which produces its proper and intrinsic effect is to be called 'significant music' (p. 285). The definition is harmless if the reader keeps in mind that the word 'significant' does not mean significant, in fact does not mean anything; but it is very careless. The reason for the use of this unsuitable word appears to be that Mr. Joad has been bemused by that catchword of the second-rate art critics, 'significant form '(pp. 299-304). Lastly, the book as a whole is too long for the amount of matter it contains, and many passages are rambling and diffuse.

Mr. Joad is a Platonist, as many English philosophers have been. He is generally at his best when he is most purely Platonic; his ideas then are clear and firmly developed. But when he draws on the theories of modern thinkers—and he does this in a curiously promiscuous way from Schopenhauer, Bergson, Whitehead, and Bernard Shaw—the reader gets the impression of confusing eddies and cross currents breaking up a smooth current of thought. It is as though he cannot bear to let go any philosophical idea that appeals to him, but must add it to his collection, however incongruous it may be.

A. D. R.

## Our Bookshelf.

A School Certificate Chemistry. By G. H. J. Adlam. Pp. x+334. (London: John Murray, 1929.) 4s. 6d. net.

DURING the last few decades much attention has been given to the methods of teaching science, especially chemistry. Definite courses of instruction have been framed for educational purposes, and they have tended to become stereotyped in conformity with the requirements of examining bodies. The subject matter of the science, however, has not received a similar careful scrutiny,

and, whilst in the outside world epoch-making advances have been made, they have passed unheeded in the classroom. There is thus a danger that a distinction may soon be drawn between chemistry and 'schoolmaster's chemistry'. It is with this in mind, evidently, that Mr. Adlam has written his volume for elementary students, in which recent industrial methods receive preference over the obsolescent, uneconomic preparations of the average elementary text-book.

Mr. Adlam sees no reason why the newer, largescale methods of producing inorganic substances should not be adapted for teaching purposes. Thus, the steaming of red-hot iron is preferred to the action of zinc on sulphuric acid for preparing hydrogen. For lecture purposes this is excellent, but for a class of young students it is impracticable. Oxygen is prepared (p. 18) from sodium peroxide and water, whereas the usual laboratory method, by decomposing a mixture of potassium chlorate and manganese dioxide, is only mentioned incidentally, emphasis being placed upon the fact that it affords a good example of catalytic action. Again, the synthesis of ammonia from nitrogen and hydrogen (from water gas) is simple enough in theory to take its place beside the decomposition of ammonium salts with lime. Nitric oxide and nitrogen peroxide are now made synthetically as intermediates in the manufacture of nitric acid, so that the complicated reactions of nitric acid with various metals are only given a subsidiary place in Mr. Adlam's book.

From a perusal of this work, it is readily apparent that the author has endeavoured to turn to account for teaching purposes the modern large-scale methods for the manufacture of common chemicals. The traditional laboratory methods, which are also included, are relegated to the background.

In African Game Tracks: Wanderings with a Rifle through Eastern Africa. By F. L. Puxley. Pp. 320+8 plates. (London: H. F. and G. Witherby, 1929.) 12s. 6d. net.

ONE is frequently being reminded that the reading public cares little for precision of detail. So long as it seems interesting and the author's style makes for easy reading, any book on African sport or travel has apparently a successful life, while one dealing with actual fact and truly related incident is a slow seller. The book under notice is probably to be placed in the former category. Its author has had a long and varied experience in many spheres of African life since 1896, mainly, as he says in his foreword, in regions lying between the Sudan and the Cape, but from what he says about "Sese Island in Lake Victoria and the sitatunga, which he spells sitatungu, he writes of one place at least which he has not visited. The islands of the Sese group are for the most part fairly high and wooded, not surrounded with wide and deep papyrus swamps, as he states, nor are they suited to the sitatunga, which inhabits a small island much farther out in the lake.

The first half of the book deals with incidents, things, and people belonging to South African his-