

numerous other subjects supposed to be included within the domain of natural hygiene. The second part of the book is devoted to what are called the sanitary properties of Eucalyptus-trees, of pine-trees, and of camphor forests. At first sight the general character of the work impresses the reader favourably. He is disposed to read it for the sake of acquiring information on subjects which force themselves on public notice in every large town. These are: the purification of water; the relations existing between micro-organic life and the so-called infectious or contagious diseases; the measures to be adopted for the disposal and treatment of sewage, and the relative value of certain antiseptics and disinfectants. The author devotes to these subjects numerous pages of information more or less relevant to them. At p. 217, however, the author arrives at the matured conclusion that "the only disinfectant which, while possessing all these characters, also acts upon anaërobic and aërobic forms of life alike, of which I have knowledge, is that known as —, for the existence of which I am proud to take credit." Besides this disinfectant, there is an equally good "fluid," an equally good "oil," and an equally good "powder," for all of which, no doubt, the writer has also pride in taking credit. There are in all some thirty references to these specifics.

The concluding chapters, in which *Eucalyptus globulus* and other species of Australian gum-trees are credited with wonderful powers as "fever-destroying trees" on account of "the aromatic vapours which emanate from the trees, and the preservative powers of the branches and leaves which fall on the ground," repeat a well-known but scarcely established doctrine of hygienists. It is probable that any fast-growing tree, suited for swampy districts, would produce exactly the same or similar results. But, granted for the moment that the essential oil given off in a vaporous condition from Eucalyptus or pine-trees is disinfectant in character and conducive to health, we fail entirely to see how this can apply also to camphor-trees. Yet we are told that "the natural history of camphor forests affords us another and remarkable feature of Nature's hygiene; . . . that atmospheric oxygen is constantly being absorbed by the essential oils that are continuously evolved into the air, and this simple process gives rise to the production of a number of active chemical substances, including peroxide of hydrogen and soluble camphor, all of which purify the air and enhance the healthful influences of the climate." Those who are at all acquainted with camphor-trees will admit that this is a very fanciful picture indeed. In common with most members of the *Laurineæ*, the emanations from camphor-trees are neither agreeable nor balsamic. The author brings no evidence whatever to establish his position, and we beg leave to doubt the healthful influences of camphor-trees on the grounds stated until we have something more tangible than the mere assertion of the author of this work.

OUR BOOK SHELF.

Elementary Inorganic Chemistry. By A. Humboldt Sexton, F.R.S.E., F.I.C., F.C.S. (London: Blackie and Son, 1889.)

THE chief part of this manual of 320 pages is specially prepared for students who are guided by the elementary

division of the Syllabus of the Department of Science and Art. In addition there are twenty-five pages about the metals and their compounds, a chapter of nine pages on what is called "Organic Chemistry," twenty-three pages of "Experimental Illustrations," a chapter on "Chemical Arithmetic," a series of questions, an "Elementary Course of Qualitative Analysis" occupying thirty pages, and a few less important matters.

The main part of the book is pretty much what one is accustomed to in elementary treatises: it is clear and calculated to be useful; but the chapters on the metals and on organic chemistry are obviously meagre to a degree. The organic part deals with those substances mentioned in the alternative course of the above-mentioned Syllabus, but it would have been much better for the book and the students who use it if these few pages had been omitted. The analytical course refers to eight metals and four acids. It is not stated why these substances are specially favoured.

It is a pity that those who write on a subject like elementary inorganic chemistry, which has been so prolific of text-books that practically speaking no exertion or thought is needed in the selection of topics or the manner of their treatment, should not more often concentrate a little attention upon the exactness of their expressions. The statement, for example, that "If hydrogen and oxygen or air be mixed, and a light be applied, they will combine with a violent explosion," is open to much censure. Do hydrogen and air ever combine? Will a mixture of hydrogen and oxygen as a matter of course explode under the circumstances described? Again, the statement that "Potassium and sodium only expel one-half of the H from water" may be legitimately described as untrue. The equation " $\text{Na} + \text{H}_2\text{SO}_4 = \text{NaHSO}_4 + \text{H}$ " is more likely to deceive than instruct the student. These are not isolated examples.

A Class-book of Geography. By C. B. Clarke, F.R.S. (London: Macmillan and Co., 1889.)

THIS is a new and revised edition of Mr. Clarke's well-known class-book of geography, which was first published in 1878. The populations of towns have been brought up to date, as also the political geography of Egypt, Turkey, &c. The names of places which have lately become of importance in consequence of commercial enterprises, such as Baku, have also been added. Perhaps the most important addition, however, is a chapter on astronomical geography, which is very clear, though necessarily not very detailed. An excellent outline of cartography has also been added. The particulars given relating to each country are of the usual character. They include an historical sketch of each country, manufactures, minerals, animals and plants, languages, religions, and forms of government. At the end of each section is a condensed statement of the principal features of each country. A short description of the different races of animals might have been given with advantage, as at present the student can only gather the meanings of such terms as "Pachyderms" and "Chiroptera" from the examples quoted. The omission of the word "species" in such a sentence as: "England possesses one dormouse and one squirrel," is rather apt to make one inquire as to the location of those favoured animals.

There are eighteen excellent double-page maps, but of course they are not so full of detail as is necessary for a complete study of the subject. This, however, is no great drawback in these days of cheap atlases.

Travel-Tide. By W. St. Clair Baddeley. (London: Sampson Low, 1889.)

THE writer of this volume has visited many different parts of the world, and here he sums up the impressions produced upon him by the most remarkable of the scenes with which he has made himself familiar. There is