

The characteristics of the Slav population are depicted by the author in lurid colours. The Slavs are, he asserts, clumsy, ignorant, drunken, superstitious, unclean and brutal. At the same time the Slav nature is good material to work upon. As the Slav comes in contact with Anglo-Saxons and learns their ways, his wants are increased and his tastes refined. The unsavoury details of squalor and vice among the Slav miners are certainly not understated by the author, who has naturally no sympathy with the ideas and aspirations of a people who, by adhering to their language and customs, remain unassimilated after years of residence in the United States. Similar statements are often made regarding the Slav immigrants in the coal-fields of Scotland and of Westphalia. Probably the Slav colliers of Pennsylvania are not more debased than the mining populations of many of the European coal-fields. If they are, the responsibility must rest largely with the coalowners, who provide habitations where self-respect and decency are unattainable luxuries.

The author's gloomy views regarding the social condition of the anthracite communities cannot be accepted without reserve. They are certainly not in accord with the views of the Anthracite Coal Strike Commission, who found that the social conditions obtaining in the communities made up largely of coalworkers were good, and that the number and character of the schools accessible in all these communities were fully up to the American standard. The number of churches in proportion to the population was rather above the average, and the opportunities generally for instruction appeared to be adequate.

The work is illustrated by twenty-eight half-tone plates, most of which are excellent, and there is a long bibliography of works consulted. The quotations in French, being printed without accents, are difficult for the ordinary reader to understand, and in one quotation, "Ellis il font diaque nuit," it is not apparent what language is used.

B. H. B.

OUR BOOK SHELF.

Elements of Water Bacteriology. By Samuel Cate Prescott and Charles-Edward Amory Winslow. Pp. x+162. (New York: John Wiley and Sons; London: Chapman and Hall, Ltd.) Price 5s. 6d. net.

This little volume is practical in its conception, and is concise in treatment. It, of course, presupposes a sound knowledge of general bacteriological methods, but the authors have undoubtedly produced a manual for laboratory use which will be of value to all intelligently engaged in the examination of water. It is up to date in the various methods described, and thirty pages are devoted to a careful index of the contents, a list of memoirs referred to in the text, and the names of authors. Perhaps the most interesting feature in the book is the "change in front," so to speak, which it indicates some water-bacteriologists are making in regard to the relative importance of the presence of typhoid and colon bacilli respectively in water. A third of the letterpress is devoted to the *Bacillus coli communis*, its detection and its significance in water, whilst the typhoid bacillus, so long the *bête noire* of sanitarians, is disposed of in a few pages. The attitude of, at any rate, American authorities is effectively summed up in the following paragraph:—

"On the whole it seems that since a positive result is

always open to serious doubt, and a negative result signifies nothing, the search for the typhoid bacillus itself, however desirable theoretically, cannot be regarded as present as generally profitable."

So, because the typhoid bacillus is difficult to find and the detection of specific organisms is being clamoured for in the estimation of the bacterial quality of a water, refuge is taken in the more easily discoverable and well-nigh ubiquitous colon bacillus, or its allied forms.

It will be interesting to watch the progress of opinion on this colon-standard of water-purity in the light which it is hoped further researches may be able to throw on the detection and significance of specific bacteria in water.

The Chemistry of Coke. By W. Carrick Anderson, M.A., D.Sc. Second edition. (Glasgow and Edinburgh: Hodge and Co., 1904.) Price 5s. net.

THIS little volume, which has reached its second edition, contains much practical information about the chemistry and chemical analysis of coal and coke which should be useful to scientific makers of coke.

But apart from its practical side, the book would justify its publication if it served the single purpose of showing how scientific method may be applied to the problems of a relatively simple industry. That different coals of the same composition, or *isomeric coals*, as the author calls them, behave quite differently on coking is well known. This must, of course, arise from the presence of different chemical constituents. Perhaps it would have been wiser to remain content with the statement (p. 64) that "so long as the composition of coal is unknown the peculiar internal reactions of coking will assuredly remain shrouded in obscurity" than to hazard the suggestion (p. 60) that "in coking, side-chains as well as the central part or radicle reacts."

The absence of any reference to the relation of composition to by-products seems a curious omission when, as the author himself says, "the manufacture of coke without recovery of by-products is to-day frequently regarded as scarcely any longer a payable industry."

The writer would like to offer the suggestion that a careful microscopic examination of coal, which has been found so useful in other directions, might lead to interesting information both as to coking qualities as well as the nature of the by-products of different varieties of coal. Perhaps this method of investigation has already been tried and found wanting.

J. B. C.

Praktischer Leitfaden der Gewichtsanalyse. Zweite Auflage. By Paul Jannasch. Pp. xvi+450. (Leipzig: Veit and Co.) Price 8 marks.

A SECOND edition of Prof. Jannasch's well known book treating of gravimetric analysis has now appeared, and contains considerable additions of new matter. It is obvious, even from the most cursory examination, that the book differs from most of its class in that it is in no sense a compilation of old and often obsolete methods.

Prof. Jannasch is well known as the author of many new methods in analytical chemistry, and the results of his own work and that of his pupils have been made great use of in preparing the present volume.

The contents of the book are divided into nine sections, each of which deals with analyses of a particular type; thus, starting from the determination of the constituents of simple salts in the first, the second treats of the analysis of simple alloys, whilst the third, fourth, and fifth sections deal with the quantitative separation of the various metals one from another. By far the greater number of the processes recommended for these separations are those with which the author's name is connected, involving the use of hydrogen peroxide, hydroxylamine, and hydrazine.