former occurs in the absence of oxygen and in the latter oxygen is involved. Hence, the term does not differentiate the intimate role of oxygen.

Goddard,[2] on the other hand, believes we would do well to retain the word fermentation for reactions involving the degradation of an organic molecule into two or more simpler molecules by an oxidation and reduction occurring within the original molecule or its products. He points out that, if the term anaerobic respiration is used according to its usual meaning (*i.e.,* in the absence of oxygen), in many types of tissues, *e.g.,* some tumors, contracting muscles, certain yeasts and some seeds, carbohydrate degradation occurs without the intervention of oxygen, even though oxygen may be present.

Hence, the word anaerobic respiration, like the word fermentation, in itself does not give an accurate picture of the actual type of respiration prevailing. Therefore, these two words which seem to be competing in scientific usage both fail because of the same ills.

In my opinion, the opposing views can be resolved into satisfactory agreement which will banish confusion in the minds of students of biochemistry and others, and we can still retain the word anaerobic respiration in popular usage as it is at present. We need simply to qualify the term to mean the state of respiration or the release of energy from a substrate in the cell, in which oxygen is *not one of the reactants,* whether or not it is present. Therefore, anaerobic respiration may prevail either in the presence or absence of oxygen, but in either case oxygen is not the hydrogen acceptor.

Aerobic respiration on the other hand refers to the active participation of oxygen in the energy-yielding process.

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PLEA FOR PUBLICATIONS

WE, in Belgium, have been deprived of American publications since the beginning of the war; accordingly, we have not been able to refer to published works in which we should be particularly interested. At the suggestion of my friend and former coworker at this institute, Major R. Roseman, Sn.C., of the American Army, I am addressing an earnest plea to the readers of SCIENCE for any available reprints on the following subjects: proteins, bilirubin, clinical and experimental studies on burns and penicillin. Any information whatever furnished along these lines would be greatly appreciated.

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SCIENTIFIC BOOKS

COMMERCIAL ANALYSIS

Commercial Methods of Analysis. By FOSTER DEE SNELL and FRANK M. BIFFEN. vii + 753 pp. Illustrated. 13.5 × 21 cm. New York: McGraw-Hill Book Company, Inc. 1944. $6.00.

THE authors state in the preface that this book is for the student who has already become familiar with the tools of quantitative analysis and the routine methods, and who desires further training in this field by a study of commercial methods and may serve as a manual to the industrial analyst. The first eighty pages are devoted to elementary subject-matter such as a description of the tools of the analyst; beakers, flasks, burettes and filter paper, and a discussion of such general operations as drying, weighing and extraction. Thirty pages deal with inorganic qualitative micro analysis.

The balance of the text is given over to procedures for the quantitative analysis of many industrial materials, including minerals, water, cement, ferrous, aluminum, and copper-base alloys, fats, soap, greases, solvents, paint, rubber, coal, gas, paper, sugar and some others. Little theory is presented; hence, the book, if it has any pedagogical value, will be more useful in the training of chemical analysts than in the education of analytical chemists. Standard methods are drawn from those published by the American Society for Testing Materials, the Association of Official Agricultural Chemists and others. Frequent deviation from official and recommended procedures are given, but seldom are these departures indicated as such.

The value of this book as a reference work is greatly lessened by the almost complete absence of literature citations. The reviewer could locate no more than eighteen specific citations in footnotes together with a few general references within the text of the book.

In spite of these faults, this book will properly find its place on the shelves of technical libraries and on the desks of many chemical analysts. It will serve as a point of departure when the latter are called upon to perform analyses which fall outside the routine of their day-by-day experience.

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[2] David R. Goddard, SCIENCE, 101: 352–353, 1945.