Principles of Oil and Gas Production. By Roswell H. Johnson and L. G. Huntley. Published by John Wiley and Sons, Inc., New York. First edition, 1916. 371 pages, illustrated, 6 x 9 ins., cloth. Price, $3.75 net.

This is a book which will fill a decided want on the part of those who have been anxious to secure a work that would deal adequately with the subject in hand, namely, the production of oil and gas. The book limits itself to a discussion of the subject, with particular reference, in fact, almost chief reference, to conditions as they exist in America.

The book has chapters on such subjects as the varieties of oil and gas, the origin of oil and gas, the locating of oil and gas wells, classification of the attitude of geologic surfaces, the valuation of oil properties. A most interesting chapter is that devoted to the oil and gas fields of North America, occupying nearly 100 pages of the book, in which a very complete account of the various fields both in the United States and Canada is given.

The Heat Treatment of Tool Steel. By Harry Brearley. Published by Longmans, Green & Co., London and New York. Second edition, 1916. 223 pages, illustrated, 6 x 9 ins., cloth. Price, $3.50 net.

Books on the treatment of steel for various purposes are not any too common and this latest book will be found of considerable value to the mechanic whose particular business it is to produce steel objects and tools for various purposes. The author deals with the structure and classification of steel, the properties of ingots, forging tool steel and the hardening of steel.

The Principles of Electrical Engineering and Their Application—Vol. I. By Gisbert Kapp, M.I.C.E. Published by Edward Arnold, London. 1916 edition. 356 pages, illustrated, 6 x 9 ins., cloth. Price, $3.75 net.

This is Volume I. of a series of two books on the subject, Volume II. dealing with the application of the principles which are referred to in the volume under review. Not only can it be used as a text book for all engineering students, but as a handbook for the general engineer. While the subjects which the books treat come, rightly speaking, into the domain of the electrical engineer, yet engineers in general will find a great deal of information in such a book as this and they are more or less likely in the pursuit of their work to be thrown into contact with problems which a book like this can help solve.

Pocket Book of Engineering Formulæ. By Sir Guilford L. Molesworth, K.C., I.E., and Henry Bridges Molesworth; Electrical Supplement by Walter H. Molesworth. Published by Spon and Chamberlain, New York. Twenty-seventh edition, 1916. 936 pages, illustrated, 3 x 4 ins., flexible leather. Price, $1.50 net. (Reviewed by Alfred S. L. Barnes, Ontario Hydro-Electric Power Commission.)

When a pocket book has reached its 27th edition, there is no need to refer to its probable usefulness. Molesworth's Pocket Book, for its size, probably contains more practical useful information than any other publication of the kind, and its small dimensions make it extremely handy for carrying about anywhere. Though for many years this pocket book was confined mainly to civil and mechanical engineering, there is now an electrical supplement of 180 pages, which considerably extends its scope.

How to Build Up Furnace Efficiency.—A handbook of fuel economy. By Jos. W. Hayes, combustion engineer, Rogers Park, Chicago, Ill. Published by the author. Tenth edition, 1916. 154 pages, illustrated by charts, diagrams and tables, 5 x 7 ins., paper. Price, $1.00.

This is a book that will be sure to appeal to those who are concerned with the generation of power by means of steam. The purpose of the book is to show how, why and where fuel is wasted in the boiler room. The first edition of this book was published in 1908 and since its initial appearance it has gone through ten separate editions. The subject is presented in a most interesting and attractive way, and the book will, undoubtedly, appeal to all those who are concerned with steam power operation.

Canadian Trade Index.—Issue of 1916-1918. Compiled and published by the Canadian Manufacturers' Association, Incorporated, 1404 Traders Bank Building, Toronto. 560 pages, 7 x 10½ ins., cloth. Price, $5.00.

This well-known index has made its re-appearance. It is in three parts. Part I. contains an alphabetical list of manufactures. Part II. is a directory of manufacturers of Canada classified according to the articles made. Part III. is an alphabetical index in French of the headings in Part II. with the parallel English. The aim of the book is to provide all buyers of Canadian manufactured goods with a dependable list of the articles made in Canada and the name of the manufacturers making them.

PUBLICATIONS RECEIVED.

Mining Operations.—Report on the mining operations in the province of Quebec for the year 1915.

County Roads.—Appendix to the Annual Report of the Department of Public Highways of Ontario, 1916.

Concreting in Cold Weather.—A 15-page illustrated pamphlet issued by the Portland Cement Association, Chicago, Ill.

Road Material Surveys in 1914.—By L. Reinecke. Memoir 85, No. 71, Geological Series, Department of Mines, Ottawa.

Civic Improvement.—Report of conference of the Civic Improvement League of Canada, 1916. Issued by the Commission of Conservation, Ottawa.

Concrete Houses and Why to Build Them.—A 7-page illustrated pamphlet published by the Portland Cement Association, 111 West Washington Street, Chicago, Ill.

Bulletin of the American Railway Engineering Association, August, 1916.—Published by the American Railway Engineering Association, at 900 So. Michigan Avenue, Chicago, Ill.

Specific Gravity Studies of Illinois Coal.—By Merle L. Nebel. Bulletin No. 89, Engineering Experiment Station. Published by the University of Illinois, Urbana, Ill. 44 pages, illustrated. Price, 30c.

The Quebec Streams Commission.—Fourth report, November, 1915, 109 pages, tables and maps. Also 19 plates to accompany the report. Secretary, L. H. Charlebois, 803 McGill Building, Montreal.