BOOK REVIEWS.

Publications reviewed under this heading may be secured in Canada from the Smith Publishing Company, 62 Church Street, Toronto, who are the publishers in this country of the books published by The Norman W. Henley Publishing Company, of New York.

Henley's Twentieth Century Book of Recipes, Formulas, and Processes.—Edited by Gardener D. Hiscox, M.E., New York: The Norman W. Henley Publishing Company. 6½ x 9½, pp. 787. Cloth, \$3.00.

A recipe book of any kind, provided it can be relied upon, is a valuable asset to those interested in the subject with which it deals, even if it only contains information on that one special line of work.

This volume may be considered of exceptional value, containing as it does some ten thousand recipes, covering almost every known subject. It is a book that meets the demands of everyone in every day life, and in its pages may be found information of value regarding the processes that are used in the manufacture of the countless articles in common use. It contains selected recipes and formulas of compounds that almost everyone must need at some time, and from its pages may be readily secured information that will meet the requirements at hand. The preparation of nearly every substance employed in art and manufacture is fully explained. Directions for mending almost everything that one can think of are given.

The housewife, painter, carpenter, metal-worker, farmer, soap and candle maker, the photographer, jeweller and watchmaker, the electroplater, tanner, mechanic, engineer and manufacturer will find valuable information in its pages; information that has been gathered from almost every corner of the globe, and translated from the many languages in which the recipes were first written.

There is practically no limit to the scope of the book, and many of its formulæ are novel to a degree. Through careful selection the information contained is the very latest obtainable, and on this account is adapted to present day requirements. The subjects have been arranged in alphabetical order, and numerous cross headings are given throughout, making it possible to find the desired data without loss of time.

As explained by the editor, the information has been selected from works and periodicals specially devoted to each subject, so that the book is practically one of expert advice on nearly every subject. The recipes, of course, have not all been tested, since this procedure would mean the expenditure of a sum of money altogether out of the question, and no doubt some will not be found as satisfactory as could be desired, but on the whole the work may be taken as a safe guide.

It is impossible here to list all the subjects on which the book contains information, but in order that a fair idea may be given a few of them are enumerated as follows:

Bleaching, Candles, Corn-Cures, Etching and Engraving, Glass Making, Ceramics, Paper, Ointments, Microscopy, Mirror-Making, Paints, Rubber, Explosives, Gilding, Galvanizing, Bronzing, Tinning, Silvering Acid Proofing, Adhesives, Plating, Enameling, Varnishes, Polishes, Cleaning Process, Soaps, Leather and its Preparation, Insecticides, Amalgams, Alloys, Solders, Photographic Formulæ, Shoe Dressings, Stove Blacking, Rust Preventives, Lubricants, Oils, Dyes, Colors, and Pigments, Dryers, Inks, Artificial Gems, Jewelers' Recipes, Watchmakers' Recipes, Household Formulae, Waterproofing, Fireproofing, Cements, Glues, Mucilages, etc., Fireworks, Stain and Spot Eradicators, Vinegars, Alcohol and its Uses, Essences and Extracts, Dentifrices, Cosmetics, Perfumes, Tanning, Metallurgical Formulæ, Casting, Hair Restorers, Depilatories, Condiments.

* * * * The Commercial Organization of Engineering Factories.—

By Henry Spencer. London: E. & F. N. Spon, Limited, 57 Haymarket. 534 x 834, pp. 220. (105. 6d. net.)

Organization, or system, as it is commonly called to-day, plays no unimportant part in the operation of the modern industrial plant, whether it be large or small. The day has long since passed when the plodder, who carried the particulars of his business in his head, can be successful. Keen competition makes it necessary for any business, no matter what its magnitude may be, to be run as systematically as possible, if it is to win in the race for supremacy, or even if it is to have standing at all.

The work in hand is devoted exclusively to organization in engineering establishments, and large ones at that, but it is possible to extract from it principles applicable to enterprizes of much smaller dimensions. It may be considered a handbook to commercial engineering, and is an exposition of modern practice, with forms and precedents for the use of directors, secretaries, managers, accountants, cashiers, and all students of industrial economy.

Many principles which will help in a large measure tomake a business successful are given. The application of these principles is set forth by an enunciation of the procedure that experience has proved to bring the desired results.

The call of late years for rapid production has led to specializing, and plants are designed that will give a maximum output at a minimum cost. With this maximum production a means of prompt distribution is called for, and to meet this demand the production engineer has arisen. It is the duty of the production engineer to see that orders received are promptly sent through their proper channels to be filled; that they are executed with the least possible delay, and that the finished product is shipped to the purchaser immediately upon completion. The manner of arriving at these results, which should receive the most careful attention at the hands of every management, is dealt with in the pages of this book.

In order to give the reader some idea of the comprehensiveness of what the work contains, the subjects of the various chapters may be enumerated as follows: Correspondence department, including filing, telephone calls, etc.; contracting department; receiving department; store-room; estimating department; advertising department; orders received; drawing office; costs department; plant, buildings, etc.; forwarding department; accountants' department; cashiers' department; selling agents and travellers; secretary's department. Ninety-five forms are given, which will be found either applicable to large or small establishments. These and the explanations regarding the use of same are most valuable.

Crucibles : Their Care and Use. By Jno. A. Walker, Jersey City, N.J., Joseph Dixon Crucible Co.; 6x9, pp. 39.

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This is the title of a comprehensive book on the subject of graphite crucibles, which are also known as plumbago or blacklead crucibles. It should be in the hands of everyone interested in the melting of the various metals. The author is Mr. John A. Walker, Vice-President, Treasurer, and General Manager of the Joseph Dixon Crucible Company, Jersey City, N.J.

Mr. Walker is thoroughly fitted by his long years of experience in crucible making to be an authority on the subject, as he certainly is.

The purpose of the book is to instruct users of crucibles as to their proper use, and the dangers of abuse of crucibles. It tells what graphite is, and why crucibles are made of it. It tells why crucibles must be made of flake graphite. It tells why some crucibles are dark and others light, and the importance of that fact.

It states that most crucibles are perfect when they reach the user, and that much of the trouble that comes is due to the fault of the user. It gives rules for annealing crucibles, and tells why all of them should be carefully followed. It gives the use of tongs for handling crucibles and their misuse by careless melters. The proper shape of tongs and how they should be handled is also set forth, and how the metal should be placed in the crucibles, and how the crucibles should be placed in the fire. The various fuels used in melting metals are fully described, and their effect on the crucibles given. It speaks of the importance of perfect combustion.

The book also carries much allied information, it gives the proportions of metal in commonly-used alloys. It tells, the freezing, fusing and boiling points of various substances.