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*Catalogue*  
OF  
*Special Technical Works*  
FOR  
**MANUFACTURERS, STUDENTS, AND TECHNICAL  
SCHOOLS**

**BY EXPERT WRITERS**

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## Paints, Colours and Printing Inks.

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**THE CHEMISTRY OF PIGMENTS.** By ERNEST J. PARRY, B.Sc. (Lond.), F.I.C., F.C.S., and J. H. Coste, F.I.C., F.C.S. Demy 8vo. Five Illustrations. 285 pp. 1902. Price 10s. 6d.; India and Colonies, 11s.; Other Countries, 12s.; strictly net.

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**THE MANUFACTURE OF PAINT.** A Practical Handbook for Paint Manufacturers, Merchants and Painters. By J. CRUICKSHANK SMITH, B.Sc. Demy 8vo. 1901. 200 pp. Sixty Illustrations and One Large Diagram. Price 7s. 6d.; India and Colonies, 8s.; Other Countries, 8s. 6d.; strictly net.

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**THE MANUFACTURE OF MINERAL AND LAKE PIGMENTS.** Containing Directions for the Manufacture of all Artificial, Artists and Painters' Colours, Enamel, Soot and Metallic Pigments. A Text-book for Manufacturers, Merchants, Artists and Painters. By Dr. JOSEF BERSCH. Translated by A. C. WRIGHT, M.A. (Oxon.), B.Sc. (Lond.). Forty-three Illustrations. 476 pp., demy 8vo. 1901. Price 12s. 6d.; India and Colonies 13s. 6d.; Other Countries, 15s.; strictly net.

#### Contents.

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**THE MANUFACTURE OF LAKE PIGMENTS FROM ARTIFICIAL COLOURS.** By FRANCIS H. JENNISON, F.I.C., F.C.S. **Sixteen Coloured Plates, showing Specimens of Eighty-nine Colours, specially prepared from the Recipes given in the Book.** 136 pp. Demy 8vo. 1900.

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#### RECIPES FOR THE COLOUR, PAINT, VARNISH, OIL, SOAP AND DRY-SALTERY TRADES.

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(See also *Writing Inks*, p. 11.)

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**THE OIL MERCHANTS' MANUAL AND OIL TRADE READY RECKONER.** Compiled by FRANK F. SHERIFF. Second Edition Revised and Enlarged. Demy 8vo. 214 pp. 1904.

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*(For "Textile Soaps" see p. 32.)*

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## Glue, Bone Products and Manures.

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## Chemicals, Waste Products and Agricultural Chemistry.

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## Brewing and Botanical.

**HOPS IN THEIR BOTANICAL, AGRICULTURAL AND TECHNICAL ASPECT, AND AS AN ARTICLE OF COMMERCE.** By EMMANUEL GROSS, Professor at the Higher Agricultural College, Tetschen-Liebwerd. Translated from the German. Seventy-eight Illustrations. 1900. 340 pp. Demy 8vo. Price 12s. 6d.; India and Colonies, 13s. 6d.; Other Countries, 15s.; strictly net.

#### Contents.

HISTORY OF THE HOP—THE HOP PLANT—Introductory—The Roots—The Stem—and Leaves—Inflorescence and Flower: Inflorescence and Flower of the Male Hop; Inflorescence and Flower of the Female Hop—The Fruit and its Glandular Structure: The Fruit and Seed—Propagation and Selection of the Hop—Varieties of the Hop: (a) Red Hops; (b) Green Hops; (c) Pale Green Hops—Classification according to the Period of Ripening: Early August Hops; Medium Early Hops; Late Hops—Injuries to Growth—Leaves Turning Yellow, Summer or Sunbrand, Cones Dropping Off, Honey Dew, Damage from Wind, Hail and Rain; Vegetable Enemies of the Hop: Animal Enemies of the Hop—Beneficial Insects on Hops—CULTIVATION—The Requirements of the Hop in Respect of Climate, Soil and Situation: Climate; Soil; Situation—Selection of Variety and Cuttings—Planting a Hop Garden: Drainage; Preparing the Ground; Marking-out for Planting; Planting; Cultivation and Cropping of the Hop Garden in the First Year—Work to be Performed Annually in the Hop Garden: Working the Ground; Cutting; The Non-cutting System; The Proper Performance of the Operation of Cutting; Method of Cutting; Close Cutting, Ordinary Cutting, The Long Cut, The Topping Cut; Proper Season for Cutting: Autumn Cutting, Spring Cutting; Manuring; Training the Hop Plant: Poled Gardens, Frame Training; Principal Types of Frames; Pruning, Cropping, Topping, and Leaf Stripping the Hop Plant; Picking, Drying and Bagging—Principal and Subsidiary Utilisation of Hops and Hop Gardens—Life of a Hop Garden; Subsequent Cropping—Cost of Production, Yield and Selling Prices.

**Preservation and Storage**—Physical and Chemical Structure of the Hop Cone—Judging the Value of Hops.

**Statistics of Production—The Hop Trade**—Index.

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## Timber and Wood Waste.

**TIMBER:** A Comprehensive Study of Wood in all its Aspects (Commercial and Botanical), showing the Different Applications and Uses of Timber in Various Trades, etc. Translated from the French of PAUL CHARPENTIER. Royal 8vo. 437 pp. 178 Illustrations. 1902. Price 12s. 6d.; India and Colonies, 13s. 6d.; Other Countries, 15s.; net.

#### Contents.

**Physical and Chemical Properties of Timber**—Composition of the Vegetable Bodies—Chief Elements—M. Fremy's Researches—Elementary Organs of Plants and especially of Forests—Different Parts of Wood Anatomically and Chemically Considered—General Properties of Wood—**Description of the Different Kinds of Wood**—Principal

Essences with Caducous Leaves—Coniferous Resinous Trees—**Division of the Useful Varieties of Timber in the Different Countries of the Globe**—European Timber—African Timber—Asiatic Timber—American Timber—Timber of Oceania—**Forests**—General Notes as to Forests; their Influence—Opinions as to Sylviculture—Improvement of Forests—Unwooding and Rewooding—Preservation of Forests—Exploitation of Forests—Damage caused to Forests—Different Alterations—**The Preservation of Timber**—Generalities—Causes and Progress of Deterioration—History of Different Proposed Processes—Dessication—Superficial Carbonisation of Timber—Processes by Immersion—Generalities as to Antiseptics Employed—Injection Processes in Closed Vessels—The Boucherie System, Based upon the Displacement of the Sap—Processes for Making Timber Uninflammable—**Applications of Timber**—Generalities—Working Timber—Paving—Timber for Mines—Railway Traverses—Accessory Products—Gums—Works of M. Fremy—Resins—Barks—Tan—Application of Cork—The Application of Wood to Art and Dyeing—Different Applications of Wood—Hard Wood—Distillation of Wood—Pyroligneous Acid—Oil of Wood—Distillation of Resins—Index.

**THE UTILISATION OF WOOD WASTE.** Translated from the German of ERNST HUBBARD. Crown 8vo. 192 pp. 1902. Fifty Illustrations. Price 5s.; India and Colonies, 5s. 6d.; Other Countries, 6s.; net.

#### Contents.

General Remarks on the Utilisation of Sawdust—Employment of Sawdust as Fuel, with and without Simultaneous Recovery of Charcoal and the Products of Distillation—Manufacture of Oxalic Acid from Sawdust—Process with Soda Lye; Thorn's Process; Bohlig's Process—Manufacture of Spirit (Ethyl Alcohol) from Wood Waste—Patent Dyes (Organic Sulphides, Sulphur Dyes, or Mercapto Dyes)—Artificial Wood and Plastic Compositions from Sawdust—Production of Artificial Wood Compositions for Moulded Decorations—Employment of Sawdust for Blasting Powders and Gunpowders—Employment of Sawdust for Briquettes—Employment of Sawdust in the Ceramic Industry and as an Addition to Mortar—Manufacture of Paper Pulp from Wood—Casks—Various Applications of Sawdust and Wood Refuse—Calcium Carbide—Manure—Wood Mosaic Plaques—Bottle Stoppers—Parquetry—Fire-lighters—Carborundum—The Production of Wood Wool—Bark—Index.

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## Building and Architecture.

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**THE PREVENTION OF DAMPNESS IN BUILDINGS;** with Remarks on the Causes, Nature and Effects of Saline, Efflorescences and Dry-rot, for Architects, Builders, Overseers, Plasterers, Painters and House Owners. By ADOLF WILHELM KEIM. Translated from the German of the second revised Edition by M. J. SALTER, F.I.C., F.C.S. Eight Coloured Plates and Thirteen Illustrations. Crown 8vo. 115 pp. 1902. Price 5s.; India and Colonies, 5s. 6d.; Other Countries, 6s.; net.

#### Contents.

The Various Causes of Dampness and Decay of the Masonry of Buildings, and the Structural and Hygienic Evils of the Same—Precautionary Measures during Building against Dampness and Efflorescence—Methods of Remedying Dampness and Efflorescences in the Walls of Old Buildings—The Artificial Drying of New Houses, as well as Old Damp Dwellings, and the Theory of the Hardening of Mortar—New, Certain and Permanently Efficient Methods for Drying Old Damp Walls and Dwellings—The Cause and Origin of Dry-rot: its Injurious Effect on Health, its Destructive Action on Buildings, and its Successful Repression—Methods of Preventing Dry-rot to be Adopted During Construction—Old Methods of Preventing Dry-rot—Recent and More Efficient Remedies for Dry-rot—Index.

**HANDBOOK OF TECHNICAL TERMS USED IN ARCHITECTURE AND BUILDING, AND THEIR ALLIED TRADES AND SUBJECTS.** By AUGUSTINE C. PASSMORE. Demy 8vo. 380 pp. 1904. Price 7s. 6d.; India and Colonies, 8s.; Other Countries, 8s. 6d.; strictly net, post free.

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## Foods and Sweetmeats.

**THE MANUFACTURE OF PRESERVED FOODS AND SWEETMEATS.** By A. HAUSNER. With Twenty-eight Illustrations. Translated from the German of the third enlarged Edition. Crown 8vo. 225 pp. 1902. Price 7s. 6d.; India and Colonies, 8s.; Other Countries, 8s. 6d.; net.

#### Contents.

**The Manufacture of Conserves**—Introduction—The Causes of the Putrefaction of Food—The Chemical Composition of Foods—The Products of Decomposition—The Causes of Fermentation and Putrefaction—Preservative Bodies—The Various Methods

of Preserving Food—The Preservation of Animal Food—Preserving Meat by Means of Ice—The Preservation of Meat by Charcoal—Preservation of Meat by Drying—The Preservation of Meat by the Exclusion of Air—The Appert Method—Preserving Flesh by Smoking—Quick Smoking—Preserving Meat with Salt—Quick Salting by Air Pressure—Quick Salting by Liquid Pressure—Gamagee's Method of Preserving Meat—The Preservation of Eggs—Preservation of White and Yolk of Egg—Milk Preservation—Condensed Milk—The Preservation of Fat—Manufacture of Soup Tablets—Meat Biscuits—Extract of Beef—The Preservation of Vegetable Foods in General—Compressing Vegetables—Preservation of Vegetables by Appert's Method—The Preservation of Fruit—Preservation of Fruit by Storage—The Preservation of Fruit by Drying—Drying Fruit by Artificial Heat—Roasting Fruit—The Preservation of Fruit with Sugar—Boiled Preserved Fruit—The Preservation of Fruit in Spirit, Acetic Acid or Glycerine—Preservation of Fruit without Boiling—Jam Manufacture—The Manufacture of Fruit Jellies—The Making of Gelatine Jellies—The Manufacture of "Sulzen"—The Preservation of Fermented Beverages—**The Manufacture of Candies**—Introduction—The Manufacture of Candied Fruit—The Manufacture of Boiled Sugar and Caramel—The Candying of Fruit—Caramelised Fruit—The Manufacture of Sugar Sticks, or Barley Sugar—Bonbon Making—Fruit Drops—The Manufacture of Dragées—The Machinery and Appliances used in Candy Manufacture—Dyeing Candies and Bonbons—Essential Oils used in Candy Making—Fruit Essences—The Manufacture of Filled Bonbons, Liqueur Bonbons and Stamped Lozenges—Recipes for Jams and Jellies—Recipes for Bonbon Making—Dragées—Appendix—Index.

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## Dyeing Fancy Goods.

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**THE ART OF DYEING AND STAINING MARBLE, ARTIFICIAL STONE, BONE, HORN, IVORY AND WOOD, AND OF IMITATING ALL SORTS OF WOOD.** A Practical Handbook for the Use of Joiners, Turners, Manufacturers of Fancy Goods, Stick and Umbrella Makers, Comb Makers, etc. Translated from the German of D. H. SOXHLET, Technical Chemist. Crown 8vo. 168 pp. 1902. Price 5s.; India and Colonies, 5s. 6d.; Other Countries, 6s.; net.

### Contents.

Mordants and Stains—Natural Dyes—Artificial Pigments—Coal Tar Dyes—Staining Marble and Artificial Stone—Dyeing, Bleaching and Imitation of Bone, Horn and Ivory—Imitation of Tortoiseshell for Combs: Yellows, Dyeing Nuts—Ivory—Wood Dyeing—Imitation of Mahogany: Dark Walnut, Oak, Birch-Bark, Elder-Marquetry, Walnut, Walnut-Marquetry, Mahogany, Spanish Mahogany, Palisander and Rose Wood, Tortoiseshell, Oak, Ebony, Pear Tree—Black Dyeing Processes with Penetrating Colours—Varnishes and Polishes: English Furniture Polish, Vienna Furniture Polish, Amber Varnish, Copal Varnish, Composition for Preserving Furniture—Index.

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## Lithography, Printing and Engraving.

**PRACTICAL LITHOGRAPHY.** By ALFRED SEYMOUR. Demy 8vo. With Frontispiece and 33 Illus. 120 pp. 1903. Price 5s.; Colonies, 5s. 6d.; Other Countries, 6s.; net.

### Contents.

Stones—Transfer Inks—Transfer Papers—Transfer Printing—Litho Press—Press Work—Machine Printing—Colour Printing—Substitutes for Lithographic Stones—Tin Plate Printing and Decoration—Photo-Lithography.

**PRINTERS' AND STATIONERS' READY RECKONER AND COMPENDIUM.** Compiled by VICTOR GRAHAM. Crown 8vo. 1904.

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### Contents.

Price of Paper per Sheet, Quire, Ream and Lb.—Cost of 100 to 1000 Sheets at various Sizes and Prices per Ream—Cost of Cards—Quantity Table—Sizes and Weights of Paper, Cards, etc.—Notes on Account Books—Discount Tables—Sizes of spaces—Leads to a lb.—Dictionary—Measure for Bookwork—Correcting Proofs, etc.

**ENGRAVING FOR ILLUSTRATION. HISTORICAL AND PRACTICAL NOTES.** By J. KIRKBRIDE. 72 pp. Two Plates and 6 Illustrations. Crown 8vo. 1903. Price 2s. 6d.; Abroad, 3s.; strictly net.

### Contents.

Its Inception—Wood Engraving—Metal Engraving—Engraving in England—Etching—Mezzotint—Photo-Process Engraving—The Engraver's Task—Appreciative Criticism—Index.

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## Bookbinding.

**PRACTICAL BOOKBINDING.** By PAUL ADAM. Translated from the German. Crown 8vo. 180 pp. 127 Illustrations. 1903. Price 5s.; Colonies, 5s. 6d.; Other Countries, 6s.; net.

### Contents.

Materials for Sewing and Pasting—Materials for Covering the Book—Materials for Decorating and Finishing—Tools—General Preparatory Work—Sewing—Forwarding, Cutting, Rounding and Backing—Forwarding, Decoration of Edges and Headbanding—Boarding—Preparing the Cover—Work with the Blocking Press—Treatment of Sewn Books, Fastening in Covers, and Finishing Off—Hand-tooling and Other Decoration—Account Books—School Books, Mounting Maps, Drawings, etc.—Index.

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## Sugar Refining.

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**THE TECHNOLOGY OF SUGAR:** Practical Treatise on the Modern Methods of Manufacture of Sugar from the Sugar Cane and Sugar Beet. By JOHN GEDDES MCINTOSH. Demy 8vo. 83 Illustrations. 420 pp. Seventy-six Tables. 1903. Price 10s. 6d.; Colonies, 11s.; Other Countries, 12s.; net.

(See "Evaporating, Condensing, etc., Apparatus," p. 26.)

### Contents.

Chemistry of Sucrose, Lactose, Maltose, Glucose, Invert Sugar, etc.—Purchase and Analysis of Beets—Treatment of Beets—Diffusion—Filtration—Concentration—Evaporation—**Sugar Cane:** Cultivation—Milling—Diffusion—Sugar Refining—Analysis of Raw Sugars—Chemistry of Molasses, etc.

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## Bibliography.

**CLASSIFIED GUIDE TO TECHNICAL AND COMMERCIAL BOOKS.** Compiled by EDGAR GREENWOOD. Demy 8vo. 1904. Being a Subject-list of the Principal British and American Books in print; giving Title, Author, Size, Date, Publisher and Price.

[In the press.]

### Contents.

Agriculture—Architecture—Art—Book Production—Building—Chemicals—Commercial—Electricity—Engineering—Farming—Gardening—Glass—Hygiene—Legal (not pure Law)—Metallurgy—Mining—Military—Music—Naval—Oils—Paints—Photography—Physical Training—Plumbing—Pottery—Printing—Public Health—Railways—Roads—Soaps—Surveying—Teaching—Textile—Veterinary—Water—Index, etc., etc.

**TEXTILE SOAPS AND OILS.** Handbook on the Preparation, Properties and Analysis of the Soaps and Oils used in Textile Manufacturing, Dyeing and Printing. By GEORGE H. HURST, F.C.S. Crown 8vo. 200 pp. Nine Illustrations. 1904. Price 5s.; India and Colonies, 5s. 6d.; Other Countries, 6s.; net.

### Contents.

**Methods of Making Soaps**—Hard Soap—Soft Soap. **Special Textile Soaps**—Wool Soaps—Calico Printers' Soaps—Dyers' Soaps. **Relation of Soap to Water for Industrial Purposes**—Treating Waste Soap Liquors—Boiled Off Liquor—Calico Printers and Dyers' Soap Liquors—**Soap Analysis**—**Fat in Soap.**

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On p.26, the title of the first chapter of Evaporating, Condensing and Cooling Apparatus has been corrected by reference to the original book.

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