

Books Received.

TECHNOLOGIE DER HOLZVERKOHUNG, UNTER BESONDERER BERÜCKSICHTIGUNG DER HERSTELLUNG VON SAENTLICHEN HALB- UND GANZFABRIKATEN AUS DEN ERSTLINGS-DESTILLATEN. Von M. Klar. Second enlarged and revised edition. Verlag von J. Springer, Berlin. 1910. Price M. 10. Bound M. 11.

Svo volume containing 403 pages of subject-matter, with 49 illustrations, a list of German, Austrian, English, United States, and French patents on the subject, and an alphabetical index. The text is classified as follows:—I. Historical. II. Raw materials for wood distillation. III. Chemical changes of wood during destructive distillation. IV. Products of the destructive distillation of wood. V. The condensable gases, their composition, properties, and utilisation. VI. Pyroligneous acid and its composition. VII. The tar and its constituents. VIII. Wood charcoal and its composition. IX. Preparation of the wood before distillation. X. Distillation apparatus. XI. Apparatus for wood in the form of billets, faggots, branches, etc. XII. Apparatus for wood waste, sawdust, and other finely-divided materials containing cellulose. XIII. Plant for cooling the distillation products. XIV. Treatment of the uncondensable gases and transport of the same. XV. Working up the crude pyroligneous acid into crude wood spirit and calcium acetate. XVI. Working up the calcium acetate into acetic acid and acetone. XVII. Working up the tar or tar-oils from non-resinous and resinous wood respectively. XVIII. Formaldehyde. XIX. Further working up of the wood charcoal into briquettes. XX. Analytical part.

THE TRANSPORTATION OF GASES, LIQUIDS AND SOLIDS BY MEANS OF STEAM, COMPRESSED AIR AND PRESSURE WATER. A complete description of the theory, construction, operation, and application of jet machines, montejus, spray nozzles, etc. By O. NAGEL; Ph.D. Vacher & Sons, Great Smith Street, London, S.W.; or from the Author, New York, P.O. Box 385, 1909. Price 2 dols. (8s. 6d.) net.

Svo volume containing 194 pages of subject matter, with 193 illustrations, and an alphabetical index. The matter is divided as follows:—I. Transportation of gases. II. Transportation of liquids. III. Transportation of solids. IV. Atomising liquids. V. Condensers. VI. Theory. Appendix: Remarks on the nature of machines. Tables.

PRODUCER GAS FIRED FURNACES. Detailed descriptions and illustrations of practical producer gas-fired furnaces of the chemical, metal, metallurgical, iron, steel, lime, cement, glass, brick, and ceramic industries. By O. NAGEL. Vacher & Sons, Great Smith Street, London, S.W.; or from the Author. New York P.O. Box 385. 1909. Price 2 dols. (8s. 8d.) net.

Svo volume containing 184 pages of subject matter, with 237 illustrations, and an alphabetical index. The text is arranged under the following headings:—I. The generation of producer gas. II. The construction of gas producers. III. The combustion of producer gas. IV. Producer gas-fired furnaces in the chemical industries: V. in the metal industries; VI. in the iron and steel industries; VII. in the lime and cement industries; VIII. in the glass industry; IX. in the brick and ceramic industries. X. The selection of refractories for gas-fired furnaces. Appendix: Purification of gases; gas power; tables.

TRAITE COMPLET D'ANALYSE CHIMIQUE APPLIQUEE AUX ESSAIS INDUSTRIELS. Par J. Post et B. Neumann, avec la collaboration de nombreux chimistes et spécialistes. Deuxième Edition française entièrement refondue. Traduite d'après la troisième édition allemande et

augmentée de nombreuses additions, par M. Pellet et G. Chenu. Tome Second. Deuxième Fascicule. Librairie Scientifique A. Hermann et Fils, Rue de la Bonne, Paris, 1910. Price 8 frs.

Svo volume containing 300 pages of subject matter, with 120 illustrations, and a detailed table of contents. The present volume deals with the analysis of the following substances:—Beetroot sugar, cane sugar, starch, dextrin, glucose. In an appendix are given the French official methods for the examination of sugar products, etc.

YEAR-BOOK OF PHARMACY. Comprising abstracts of papers relating to Pharmacy, Materia Medica, and Chemistry contributed to British and Foreign Journals from July 1, 1908, to June 30, 1909, with the Transactions of the British Pharmaceutical Conference at the Forty-Sixth Annual Meeting held in Newcastle, July, 1909. By J. O. BRAITHWAITE (Editor of the, Year-Book) and E. S. PECK, M.A., and H. FINNEMORE, B.Sc., F.I.C. (Editor of the Transactions). J. and A. Churchill, 7, Great Marlborough Street, London. 1909. Price 10s.

TONDINDUSTRIE-KALENDER, 1910. Erster Teil, Zweiter Teil, Dritter Teil. Verlag der Tondindustrie-Zeitung, Ges.m.b.H., Berlin. Price M. 1.50. Single parts, M. 1. each.

PART I. is bound in linen, contains a calendar with blank pages, and a table of the formulæ and molecular weights of substances used in the ceramic industry. Part II. contains 225 pages and an alphabetical index, and gives data and constants useful in the ceramic industry. Part III. is a guide to books relating to the ceramic industry, and contains also lists of the names of firms where materials, etc., can be purchased.

STATISTICAL ABSTRACT FOR THE SEVERAL BRITISH COLONIES, POSSESSIONS AND PROTECTORATES IN EACH YEAR FROM 1894 TO 1908. Forty-sixth number. [Cd. 4931]. Wyman & Sons, Fetter Lane, London, E.C. Price 2s.

This publication contains in a succinct form the principal official data regarding the trade, shipping, agriculture, production, revenue, expenditure, &c., &c., of the various British Colonies, Possessions and Protectorates, as well as an abstract of the rates of import duty levied in the various Colonies on the principal articles of trade.

Patent List.

Where a Complete Specification accompanies an Application, an asterisk is affixed. The dates given are (i) in the case of Applications for Patents, the dates of Application, and (ii) in the case of Complete Specifications Accepted, those of the Official Journals in which acceptances of the Complete Specifications are advertised. Complete Specifications thus advertised as accepted are open to inspection at the Patent Office immediately, and to opposition within two months of the said dates.

1.—GENERAL PLANT: MACHINERY.

APPLICATIONS.

- 216. Pearce. Collection of fume, flue dust, and other matter suspended in gas. Jan. 4.
- 306. Younten's Onyx Process, Ltd., and Younton. Machines for separating materials. Jan. 6.
- 433. Wilson. Apparatus for filtering liquids.* Jan. 7.
- 479. Davis. Column stills for distilling and treating thick, gritty liquids. Jan. 7.
- 581. Chambers, and H. B. Watson, Ltd. Vacuum plant for continuous discharge of solids from liquid. Jan. 10.

744. Shaw. Apparatus for evaporating liquids. Jan. 11.
 826. Benninghoff and Klönne. Gas-fired retort or chamber furnaces.* Jan. 12.
 1033. Averine. Filtering apparatus.* Jan. 14.

COMPLETE SPECIFICATIONS ACCEPTED.

- 20,765 (1908). Shaw. Apparatus for evaporating or concentrating liquids. Jan. 12.
 26,301 (1908). Perks. Continuous distillation of liquids. Jan. 12.
 317. (1909). Moore and Pearce. Separation of dust from gases. Jan. 12.
 13,558 (1909). Gayley. Drying air. Jan. 19.
 21,906 (1909). Turus. Apparatus for storing and compressing air, gases, and liquids under pressure. Jan. 19.

II.—FUEL; GAS; MINERAL OILS AND WAXES
DESTRUCTIVE DISTILLATION; HEATING;
LIGHTING.

APPLICATIONS.

124. Marks (Internat. Marine Signalling Co.). Preserving calcium carbide.* Jan. 3.
 207. Seaton-Snowdon and Young. Solidifying petroleum spirit and raising the flash point of the product. Jan. 4.
 316. Tully. Retort furnaces for the destructive distillation of coal and other substances. Jan. 5.
 342. Merrick. Gas purifiers.* Jan. 6.
 343. Reichel. Regenerators for coke ovens.* Jan. 6.
 442. Sauvageot. *See under III.*
 826. Benninghoff and Klönne. *See under I.*
 859. Roesch (Burchard). Treatment of oil and petrol for heating, lighting, &c. Jan. 12.
 1045. Schuster. Removing heavy hydrocarbons from the hot gases from coke ovens, gas retorts, producers, &c. Jan. 15.

COMPLETE SPECIFICATIONS ACCEPTED.

- 26,199 (1908) and 11,675 (1909). Farnham. Gas producers. Jan. 12.
 8150 and 8151 (1909). Senftner. Electrodes for arc lamps. Jan. 12.
 21,554 (1909). Woodall and Duckham. Settings of vertical retorts for carbonising coal, &c. Jan. 19.

III.—TAR AND TAR PRODUCTS.

APPLICATIONS.

442. Sauvageot. Obtaining mineral grease and retort carbon from coal tar residues. [Fr. Appl., Jan. 20, 1909.]* Jan. 7.
 531. Newton (Bayer und Co.). Manufacture of formyl derivatives of natural alcohol bases. Jan. 8.
 544. Ullmann. Manufacture of chlorinated anthraquinonesulphonic acids. [Ger. Appl., May 10, 1909.]* Jan. 8.

IV.—COLOURING MATTERS AND DYES.

APPLICATIONS.

133. Soc. pour l'Industrie Chim. a Bâle. Manufacture of vat dyestuffs of the anthracene series. [Fr. Appl., Jan. 4, 1909.]* Jan. 3.
 368. Newton (Bayer und Co.). Manufacture of dyestuffs of the triphenylmethane series. Jan. 6.
 369 and 370. Newton (Bayer und Co.). Manufacture of azo dyestuffs. Jan. 6.
 532. Newton (Bayer und Co.). Manufacture of *o*-oxyazo dyestuffs. Jan. 8.
 932. Newton (Bayer und Co.). *See under XIII.*
 933. Newton (Bayer und Co.). Manufacture of azo dyestuffs. Jan. 13.

COMPLETE SPECIFICATIONS ACCEPTED.

- 2702 (1909). Newton (Bayer und Co.). Manufacture of anthracene derivatives. Jan. 19.
 4768 (1909). Newton (Bayer und Co.). Manufacture of azo dyestuffs. Jan. 19.
 5998 (1909). Newton (Bayer und Co.). Manufacture of derivatives of the anthracene series. Jan. 12.
 8144 (1909). Newton (Bayer und Co.). Manufacture of trisazo dyestuffs. Jan. 12.
 16,996 (1909). Meister, Lucius, und Brüning. Manufacture of vat dyestuffs. Jan. 19.

V.—FIBRES; TEXTILES; CELLULOSE; PAPER.

APPLICATIONS.

132. Arledter. Electrically sizing, filling, and colouring paper. Jan. 3.
 476. Mijnsen. Preparation of non-brittle sheets from acetylcellulose. [Ger. Appl., Jan. 9, 1909.]* Jan. 7.
 867 Shimizu. Heating cotton yarns and the products obtained thereby. [Japanese Appl., Feb. 20, 1909.]* Jan. 12.
 870. Peters. Production of waterproof linen. Jan. 12.
 951. Weeber. Production of adherent layers of varnish and cellulose on an underlay of fabric, paper, &c. [Austrian Appl., Jan. 16, 1909.]* Jan. 13.

COMPLETE SPECIFICATION ACCEPTED.

- 3200 (1909). Dassonville. Apparatus for electrolytically cleaning and bleaching animal or vegetable fibres and fabrics, tissues, &c. Jan. 12.

VI.—BLEACHING; DYEING; PRINTING;
FINISHING.

APPLICATIONS.

900. Dean. Apparatus for treating cloth or yarn with liquors or vapours in bleaching, dyeing, &c. Jan. 13.

COMPLETE SPECIFICATIONS ACCEPTED.

- 625 (1909). Garscadden and Ingram. Automatic skein and hank dyeing machine. Jan. 19.
 3055 (1909). Newton (Bayer und Co.). Process of dyeing and printing. Jan. 19.

VII.—ACIDS; ALKALIS; SALTS; NON-METALLIC
ELEMENTS.

APPLICATIONS.

86. Freeth and Cockledge. Manufacture of ammonium chloride from ammonium sulphate and common salt. Jan. 1.
 228. Boulton (Ashcroft). Manufacture of cyanides, cyanamides, amides, and other like derivatives of metals. Jan. 1.
 262. Blake and Smart. Kilns for decarbonising and revivifying animal charcoal.* Jan. 5.
 408. Luckow. Electrolytic manufacture of salts of heavy metals. Jan. 7.
 475. Chem. Werke vorm. Dr. H. Byk. Treating borates containing active oxygen. [Ger. Appl., March 1, 1909.]* Jan. 7.
 779. Gathy. Treatment of dolomite. [Belg. Appl., Jan. 12, 1909.]* Jan. 11.
 899. Ely and Rollason. Treatment of waste chemical liquors containing sulphur compounds and cyanides. Jan. 13.

COMPLETE SPECIFICATIONS ACCEPTED.

- 3395 (1909). Bartelt. Production of chlorine. Jan. 12.
 5618 (1909). Gill. Manufacture of ferric oxide. Jan. 19.
 9918 (1909). Walker. *See under X.*
 18,203 (1909). Bender. Production of oxides of nitrogen. Jan. 19.
 22,037 (1909). Pauling. Production of nitrous gases. Jan. 12.

VIII.—GLASS; CERAMICS.

APPLICATIONS.

280. Libeski and Offord. *See under* XIII.

IX.—BUILDING MATERIALS.

APPLICATIONS.

47. Coventry (Doherty). Burning cement.* Jan. 1.
55. Lynde. Consolidating concrete compo, plaster, &c. Jan. 1.
528. McCormack and McCormack. Fire-brick. Jan. 8.
930. Sabbioni. Marble cement for imparting an insoluble weather-resisting coating to walls. &c. [Ital. Appl., Feb. 13, 1909.]* Jan. 13.

COMPLETE SPECIFICATION ACCEPTED.

12,114 (1909). Bohm. Apparatus for cleaning and separating clay. Jan. 12.

X.—METALS; METALLURGY, INCLUDING ELECTRO-METALLURGY.

APPLICATIONS.

232. Parsons and Silberrad. Alloys. Jan. 4.
287. Soc. Electro-Métallurgique Franç. Manufacture of pure nickel. [Addition to No. 14,946 of 1909. Fr. Appl., Jan. 6, 1909.]* Jan. 5.
313. Rodman. Materials for case-hardening or cementation purposes.* Jan. 5.
452. Howard and Hadley. Treating the fumes from zinc retorts. [Addition to No. 4563 of 1909.]* Jan. 7.
461. Hardingham (Troeller). Treatment of ores and metallurgical products.* Jan. 7.
484. Rodman. Compound for case-hardening purposes.* Jan. 7.
672. Mulacek and Hatlanek. Electric induction smelting furnaces. [Ger. Appl., March 2, 1909.]* Jan. 10.
676. Bourcoud. Manufacture of iron. Jan. 10.
684. Goldberg. Phosphorous metal composed of manganese and antimony.* Jan. 10.
707. Martin and Down. Zinc-distilling furnace. Jan. 11.
727. Cowper-Coles. Electrodeposition of metals. Jan. 11.
728. Cowper-Coles. Rendering iron surfaces non-corrosive. Jan. 11.
845. Lacroix. Electrolysis of metallic solutions. Jan. 12.
994. Reynolds. Manufacture of steel. Jan. 14.
1102. Cowper-Coles. Extraction of iron from its ores. Jan. 15.
1124. Stewart. Smelting tin ores. Jan. 15.

COMPLETE SPECIFICATIONS ACCEPTED.

14,434 (1908). Williams. Treatment of copper ores. Jan. 12.
20,838 (1908). Gibbs. Producing metallic articles and combined metallic and non-metallic articles by electrodeposition. Jan. 12.
21,164 (1908). Carriek and Pattison. Wet treatment of mattes. Jan. 19.
1677 (1909). Goodland, Ferro, and Thornton. Apparatus for recovering the metallic contents of ores, &c. Jan. 19.
9918 (1909). Walker. Reverberatory furnaces for producing blister copper and sulphuric acid. Jan. 19.
12,019 (1909). Stoker. Soldering aluminium and its alloys. Jan. 19.
16,931. (1909). Mills (Van Winkle). Electroplating baths. Jan. 12.

XI.—ELECTRO-CHEMISTRY.

APPLICATIONS.

132. Arledter. *See under* V.
383. Marino. Manufacture of electrodes for batteries and electrolytic apparatus. Jan. 6.

408. Luckow. *See under* VII.
673 and 674. Mulacek and Hatlanek. Electric induction furnaces. [Ger. Appl., March 2, 1909.]* Jan. 10.
845. Lacroix. *See under* X.
1021. Ingle. *See under* XIII.
1110. Némécek and Hofmann. Insulating covering or composition.* Jan. 15.

COMPLETE SPECIFICATIONS ACCEPTED.

3200 (1909). Dassonville. *See under* V.
6872 (1909). British Thomson-Houston Co. (General Electric Co.). Electrolytic cells. Jan. 10.
14,288 (1909). Schott and Gen. Electrolytic apparatus with a liquid anode. Jan. 12.
16,931 (1909). Mills (Van Winkle). *See under* X.

XII.—FATS; OILS; WAXES.

APPLICATIONS.

632. Crossfield and Sons, Ltd., and Markel. Conversion of unsaturated fatty acids or their glycerides into saturated compounds. [Addition to No. 1515 of 1903.] Jan. 10.
636. Lilienfeld. Manufacture of substitutes for oils, caoutchouc, or resins. Jan. 10.

COMPLETE SPECIFICATION ACCEPTED.

23,111 (1909). Weyner. Cosmetic soap and its manufacture. Jan. 19.

XIII.—PAINTS; PIGMENTS; VARNISHES; RESINS.

APPLICATIONS.

289. Libeski and Offord. Compositions for pigments and for the production of ceramics and glass. Jan. 5.
636. Lilienfeld. *See under* XII.
932. Newton (Bayer and Co.). Manufacture of colouring matter lakes. Jan. 13.
1021. Ingle. Preparations for making floor coverings, insulating materials, &c. Jan. 14.

XIV.—INDIA-RUBBER; GUTTA-PERCHA.

APPLICATIONS.

341. Cockerill. Drying and otherwise treating india-rubber. Jan. 6.
537. Weller. Rubber substitute. Jan. 8.
636. Lilienfeld. *See under* XII.
659. Perkin, Matthews, and Strange. Synthetic manufacture of caoutchouc or its homologues. Jan. 10.
718, 719, and 720. Banchieri. Devulcanising india-rubber and treating reclaimed or regenerated india-rubber.* Jan. 11.
833. Hyatt. Manufacture of rubber and rubber articles. Jan. 12.

COMPLETE SPECIFICATIONS ACCEPTED.

9284 (1909). Markus. Utilisation of waste rubber. Jan. 12.
24,438 (1908). British Murac Synd., and Dessau. Removing foreign matter from india-rubber, gutta-percha, &c. Jan. 19.
7433 (1909). Smith. Manufacture of india-rubber. Jan. 19.
16,540 (1909). Poizot. Manufacture of spongy rubber. Jan. 19.

XV.—LEATHER; BONE; HORN; GLUE.

APPLICATIONS.

225. Reidel. Leather substitute. [Ger. Appl., Jan. 8, 1909.]* Jan. 4.
513. Horsfield. Treatment of leather in the prepared or partly tanned state. Jan. 8.

COMPLETE SPECIFICATION ACCEPTED.

21,202 (1909). Eberle. Process of bating hides. Jan. 19.

XVIII.—FERMENTATION INDUSTRIES.

394. Epstein. Treatments or utilisation of ferments or cultivations or the like. Jan. 6.
 771. Kuhn. Manufacture of temperance beer. Jan. 11.
 772. Kuhn. Manufacture of beer. Jan. 11.

COMPLETE SPECIFICATION ACCEPTED.

- 15,331 (1909). Smart. Carbonating beer, cider, and other beverages. Jan. 19.

XIX.—FOODS. WATER PURIFICATION;
SANITATION.

APPLICATIONS.

6. Baldwin and Lester. Processes of sterilising. [U.S. Appl., Feb. 16, 1909.]* Jan. 1.
 481. Neumann. Manufacture of cocoa powder. [Ger. Appl., Jan. 12, 1909.]* Jan. 7.
 579. Chambers and Watson. Treatment of trade effluent. Jan. 10.
 754. Neumann. Manufacture of cocoa powder. [Ger. Appl., March 15, 1909.]* Jan. 11.
 825. Loring. Treatment of flour. Jan. 12.
 834. Henri and others. Sterilising liquid foods and other liquids. [Ger. Appl., March 2, 1909.]* Jan. 12.
 850. Schmidt. Water purifying apparatus. [Ger. Appl., Jan. 13, 1909.]* Jan. 12.
 899. Ely and Rollason. See under VII.

COMPLETE SPECIFICATION ACCEPTED.

- 412 (1909). Goldsmith. Process of making casein and like compounds. Jan. 19.

XX.—ORGANIC PRODUCTS; MEDICINAL SUBSTANCES; ESSENTIAL OILS.

APPLICATIONS.

418. Weiss. Cod-liver oil and preparations thereof containing a high percentage of natural phosphorus compounds. Jan. 7.
 815. Gelhaar and Carlson. Production of compounds of guanidine.* Jan. 12.

816. Gelhaar. Production of salts of urea. Jan. 12.
 1088. Kaufmann. Process of making arylstibine iodides Jan. 15.

COMPLETE SPECIFICATIONS ACCEPTED.

- 13,828 (1909). Wellcome and Pyman. Manufacture of therapeutic compounds. Jan. 12.
 14,663 (1909). Wellcome and Pyman. Manufacture of therapeutic compounds. Jan. 19.
 17,171 (1909). Wellcome and Barger. Preparation of a physiologically active base. Jan. 19.

XXI.—PHOTOGRAPHIC MATERIALS
AND PROCESSES.

COMPLETE SPECIFICATION ACCEPTED.

- 7800 (1909). Hans. Producing chromate glue pictures on metal, porcelain, glass, &c. Jan. 12.

XXII.—EXPLOSIVES; MATCHES.

APPLICATIONS.

460. Hale. Manufacture or treatment of explosives. Jan. 7.
 555. Van Pittius. Explosives. Jan. 8.

COMPLETE SPECIFICATION ACCEPTED.

- 25,553 (1909). Gray. Explosive compound. Jan. 19.

XXIII.—ANALYTICAL PROCESSES.

APPLICATION.

462. Arndt. Testing air or other gases for particular kinds of gases. [Ger. Appl., Jan. 7, 1909.]* Jan. 7.

COMPLETE SPECIFICATIONS ACCEPTED.

- 9368 (1909). Barron (Moir). Colour screens for detecting potassium. Jan. 12.
 9518 (1909). Brenot. Apparatus for analysing gaseous mixtures and recording the result. Jan. 12.