

Gooch, F. A., and Browning, P. E.: Outlines of qualitative chemical analysis. 2nd ed., rev. New York, John Wiley & Sons, 1909. 6+145 p. 8°, cl. \$1.25 net.

Hacnig, A.: Der Schmirgel u. seine Industrie. Eine techn. Studie über moderne Schleifmittel u. die Entwickl. der Schleifmaschinenindustrie. VII., 112 S. m. 45 Abbildgn. 8°. Wien, A. Hartleben. 1910. M. 3, cloth M. 3.80.

Hale, W. J.: The calculations of general chemistry; with definitions, explanations, and problems. New York, D. Van Nostrand Co., 1909. c. 7-9+174 p. 12°, cl., \$1.

König, Prof. J.: Chemie der menschlichen Nahrungs- u. Genussmittel. III. Bd. Untersuchung v. Nahrungs- u. Genussmitteln u. Gebrauchsgegenständen. 4., vollständig umgearb. Aufl. In Gemeinschaft m. Dr. A. Bömer, Prof. Fr. Goppelsroeder, Dr. J. Hasenbäumer u. a. bearb. J. Th. Allgemeine Untersuchungsverfahren. (XIV, 772 S. m. 405 Abbildgn.) gr. 8°. Berlin, J. Springer. 1910. Half mor., M. 26.

Lampa, A.: Ueber Absorption u. Brechung des Lichtes in kolloidalen Metallösungen, speziell in kolloidalen Goldlösungen. [Aus: "Sitzungsber. d. k. Akad. d. Wiss." (17 S.) gr. 8°. Wien, A. Hölder. 1909. 55 Pf.

Leavens, G. D.: A discussion of methods for determining the availability of phosphoric acid in Thomas phosphate powder (basic slag phosphate); with a complete transcript of Wagner's method. [New York, Coc-Mortimer Co., 24 Stone Street.] [1909.] 1908.39 p. il. tabs., O. pap. (Add. publishers for price.)

Lockemann, Dr. G.: Die Beziehungen der Chemie zur Biologie u. Medizin. (30 S.) gr. 8°. Heidelberg, C. Winter, Verl. 1909. 80 Pf.

Mindes, J.: Die Selbstbereitung pharmazeutischer Spezialitäten. 2., verm. Aufl. (IV. 52 S.) kl. 8°. Wien, F. Deuticke. 1909. M. 1.50.

Moser, Dr. L. Die Bestimmungsmethoden des Wismuts u. seine Trennung v. den anderen Elementen. (126 S.) Sammlung v. Einzeldarstellgn. auf dem Gebiete der chem., technisch-chem. u. physikalisch-chem. Analyse. X. Bd. Hrsg. v. Dr. B. M. Margosches. Lex. 8°. 1909. Stuttgart, F. Enke. M. 4, cloth M. 4.60.

Nahrungsmittelbuch, Deutsches. Hrsg. vom Bunde deutscher Nahrungsmittel-Fabrikanten u. -Händler E. V. 2. vielfach geänd. u. verm. Aufl. (VII., 408 S.) gr. 8°. Heidelberg, C. Winter, Verl. 1909. M. 10.40, cloth 11.50.

Passon, M.: Handwörterbuch der Agrikulturchemie. 2 Bde. Leipzig, W. Engelmann. 1909. About M. 24.

Perkin, W. H., and Lean, B.: An Introduction to Chemistry and Physics. 12mo., pp. 236. London, Macmillan. 1909. 3s. 6d.

Prag, E.: A course in dyeing for garment dyers. Philadelphia, Modern Dyer and Cleaner Publishing Co. [1909.] 4+90 p. il. 8°, \$5.

Richards, R. H.: Text book of ore dressing. New York, McGraw-Hill Book Co. 1909. 700 p. il. 8°, cl., \$5 net.

Schmatolla, E.: Die Brennöfen f. Tonwaren, Kalk, Magnesit, Zement u. dergl. m. besond. Berücksicht. der Gas-Brennöfen. 2., verm. u. umgearb. Aufl. (VI., 151 S. m. 160 Abbildgn.) 8°. Hannover, Dr. M. Jänecke. 1909. M. 5, cloth M. 5.80.

Tanagl, Prof. F.: Arbeiten aus dem Gebiete der chemischen Physiologie. [Aus: "Archiv f. d. ges. Physiol." 5. Heft. (III., 192 S.) gr. 8°. Bonn, M. Hager. 1909. M. 9.

Troeger, J., and Bauer, E.: Jahresbericht üb. die Fortschritte der Chemie u. verwandter Teile anderer Wissenschaften. Begründet v. J. Liebig u. H. Kopp. Für 1905-1908. 1. Heft. (S. 1-240.) gr. 8°. Braunschweig, F. Vieweg & Sohn. 1909. M. 12.

Weber, F.: Untersuchungen üb. die Wandlungen des Stärke- u. Fettgehaltes der Pflanzen, insbesondere der Bäume. Ausgeführt im pflanzenphysiolog. Institut der

k. k. Wiener Universität. [Aus: "Sitzungsber. d. k. Akad. d. Wiss." (65 S.) gr. 8°. Wien, A. Hölder. 1909. M. 1.75.

Zerr, G., u. Rübenkamp, Dr. R.: Handbuch der Farbenfabrikation. Lehrbuch der Fabrikation, Untersuchung u. Verwendg. aller in der Praxis vorkomm. Körperfarben. Mit zahlreichen Abbildgn. u. Tabellen. 2. neubearb. u. verm. Aufl. (XVI., 878 S.) gr. 8°. Berlin, Union, Zweigniederlassg. M. 28, cloth M. 30.

Zipser, Prof. J.: Die textilen Rohmaterialien u. ihre Verarbeitung zu Gespinnsten. (Die Materiallehre u. die Technologie der Spinnerei.) Ein Lehr- u. Lernbuch f. textile, gewerbl. u. höhere techn. Schulen sowie zum Selbstunterrichte. Auf Grund des Normallehrplanes u. der Instruktion f. den technolog. Unterricht an k. k. Webschulen. I. Th.: Die textilen Rohmaterialien. Mit 40 Orig.-Zeichnng. im Texte. 4. Aufl. (IX., 101 S.) gr. 8°. Wien, F. Deuticke. 1909. M. 1.50.

* Compiled by H. Grevel and Co., 33, King Street, Covent Garden, London W.C., from whom all the works in foregoing list can be obtained.

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.

- 29,755. Caldecott. *See under X.*
 29,764. Wilton. Furnaces. Dec. 20.
 29,780. Krüger. Production of crystals.* Dec. 20.
 29,879. Collard. Recovery of by-products contained in the state of gas or vapour in the atmosphere of works.* Dec. 21.
 30,069 and 30,070. Haddan (Aktiebolaget Separator). Centrifugal separators with filtering apparatus.* Dec. 23.
 30,080. Tiemann. Purification of solutions. [Addition to No. 25,644 of 1908.]* Dec. 23.
 30,247. Hartley. Vacuum filters. Dec. 28.
 30,363. Rusdell. Apparatus for transmitting heat between fluids. Dec. 29.
 30,540. Brownlow. Separating liquids from solids by centrifugal force. Dec. 31.

COMPLETE SPECIFICATIONS ACCEPTED.

- 27,939 (1908). Jones. Centrifugal machines for separating liquids from solids. Dec. 30.
 8493 (1909). Wedge. Furnaces having superposed working chambers. Dec. 31.
 13,034 (1909). Schmidt. Liquefying and separating mixtures of gas. Dec. 30.
 16,108 (1909). Kyll. Rectifying columns. Dec. 30.
 18,742 (1909). Makin. *See under XVIII.*

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

APPLICATIONS.

- 29,752. Evans. Purification of coal gas and like gases. Dec. 20.
 29,930. Fabry. Removing tar from coke-oven gas, retort gas, &c.* Dec. 22.
 30,148. Von Unruh. Manufacture of incandescing bodies for use in gas lighting.* Dec. 24.
 30,198. Johnson (Maschinen u. Armaturenfabr. vorm. H. Breuer und Co.). Controlling the flow of gases, especially from coal-distilling retorts.* Dec. 24.
 30,229. Boulton (Groeling). Utilisation of natural gases or petroleum distillation gases.* Dec. 24.
 30,396. Parker. Destructive distillation of coal. Dec. 29.

COMPLETE SPECIFICATIONS ACCEPTED.

23,043 (1908). Wilton. Purification of gas obtained by distillation of carbonaceous materials and recovery of by-products. Dec. 31.

28,435 (1908). Laigle. Incandescent gas filaments. Dec. 31.

71 (1909). Robin. Incandescent gas mantles. Dec. 31.

282 (1909). Coolidge. Manufacture of refractory electric conductors. Dec. 31.

1629 (1909). Lowes. Incandescent gas mantles. Dec. 31.

6411 (1909). Jones. Purifying and revivifying spent or waste lime. Dec. 30.

11,442 (1909). Gewerkschaft der Steinkohlenzeche Mont Cenis. *See under VII.*

12,467 (1909). Haddan (Bruno - Patente - Verwertungsges.). Manufacture of incandescence bodies. Dec. 30.

16,464 (1909). Köhn. Firing furnaces with tar and other heavy hydrocarbon liquids. Dec. 31.

IV.—COLOURING MATTERS AND DYES.

APPLICATIONS.

29,794. Johnson (Badische Anilin und Soda Fabrik). Manufacture of halogenated indigo colouring matters and derivatives thereof. Dec. 30.

30,197. Johnson (Badische Anilin und Soda Fabrik). Manufacture of stable indigo-white preparations. Dec. 24.

30,207. Newton (Bayer und Co.). Manufacture of azo dyestuffs. [Addition to No. 1397 of 1909.] Dec. 28.

30,480. Ullmann. Manufacture of anthraquinone derivatives. [Ger. Appl. March 15, 1909.]* Dec. 30.

30,504. Johnson (Badische Anilin und Soda Fabrik). Manufacture of compounds of the anthracene series. Dec. 30.

COMPLETE SPECIFICATIONS ACCEPTED.

1600 (1909). Newton (Bayer und Co.). Manufacture of dyestuffs of the galloxyaniline series. Dec. 30.

6727 (1909). Bloxam (Act.-Ges. f. Anilinfabr.). Manufacture of a monoozo dyestuff for chrome-mordanted wool. Dec. 31.

6992 (1909). Johnson (Badische Anilin und Soda Fabrik). Manufacture of halogenated indigo colouring matters. Dec. 30.

7820 (1909). Newton (Bayer und Co.). Manufacture of acid wool dyestuffs. Dec. 30.

9908 (1909). Newton (Bayer und Co.). Manufacture of a new dyestuff. Dec. 30.

V.—FIBRES; TEXTILES; CELLULOSE; PAPER.

APPLICATIONS.

29,991. Schwalbe. Refining all kinds of celluloses or ligneous fibres.* Dec. 22.

30,337. Müller. Rendering cardboard or pasteboard impervious to light liquids and grease. Dec. 28.

30,510. Gebauer. Manufacture of artificial silk and fabrics thereof.* Dec. 30.

COMPLETE SPECIFICATIONS ACCEPTED.

27,676 (1908). Pfiel and Siebert. Process for obtaining textile fibres. Dec. 30.

28,163 (1908). Malcolmson (De Lamarte). Treatment of megasse and other vegetable fibre. Dec. 30.

12,976 (1909). Reeser. Manufacture of sheets or objects from acetylcellulose. Dec. 31.

15,107 (1909). Hentschel. Drying paper webs coated on both sides. Dec. 31.

15,190 (1909). Brandenberger. Manufacture of cellulose films. Dec. 30.

VI.—BLEACHING; DYEING; PRINTING; FINISHING.

APPLICATIONS.

29,723. Warburton. Appliances for bleaching or dyeing yarn in the cop, cheese, or other dense form. Dec. 20.

29,925. Denman. Colour printing on fabrics and the like. Dec. 22.

30,243. Warburton and Cass. Dyeing machines for cops, cheeses, and similar dense bodies of yarn. Dec. 28.

30,273. Brickhill and Barnes. Cotton fabrics dyed with aniline black. Dec. 28.

30,505. Johnson (Badische Anilin und Soda Fabrik). Discharging dyed material and pastes therefor. Dec. 30.

COMPLETE SPECIFICATIONS ACCEPTED.

6034 and 13,483 (1909). Robertson. Calico printing machines. Dec. 30.

22,986 (1909). Platt, and Times Coloured Spinning Co. Apparatus for dyeing and similarly treating textile material on bobbins, &c. Dec. 30.

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

APPLICATIONS.

29,795. Johnson (Chem. Fabr. Griesheim-Elektion). Manufacture of alkali metals. Dec. 20.

29,962. Falk. *See under XIII.*

30,151. Blake and Smart. Kilns for revivifying animal charcoal, &c.* Dec. 24.

30,196. Raschen, Imison, and United Alkali, Co. Purification of arsenical sulphuric acid and obtaining arsenic therefrom. Dec. 24.

30,323. Rollin, and Hedworth Barium Co. Manufacture of barium oxide. Dec. 28.

30,324. Peniakoff. Manufacture of alkali aluminates.* Dec. 28.

30,339. Soc. Anon. pour l'Utilisation de l'Air et ses Dérivés. Purification of barium carbonate. [Fr. Appl. Jan. 21, 1909.]* Dec. 28.

30,359. Burns. Manufacture of sulphuric acid and plasters or cements from anhydrites. Dec. 29.

30,379. Johnson (Badische Anilin und Soda Fabrik). Manufacture of stable anhydrous hydrosulphites. Dec. 29.

30,380. Johnson (Badische Anilin und Soda Fabrik). Manufacture of ammonia. [Comprised in No. 15,641 of 1909.] Dec. 29.

30,386. Herve. Manufacture of soda crystals.* Dec. 29.

30,502. Johnson (Badische Anilin und Soda Fabrik). Manufacture of nitrate. Dec. 30.

30,503. Johnson (Badische Anilin und Soda Fabrik). Removal of nitrous acid from solutions. Dec. 30.

COMPLETE SPECIFICATIONS ACCEPTED.

25,208 (1908). Greenwood. Electrolytic decomposition of alkaline salts. Dec. 30.

27,587 (1908). Rollin, and Hedworth Barium Co. Manufacture of anhydrous barium hydrate. Dec. 30.

27,592 (1908). Hazari-Flamand. Dividing air into its elements by fractional distillation. Dec. 30.

27,774 (1908). Riiber. Production of phosphate precipitates. Dec. 30.

28,674 (1908). Dowrance and Williams. Manufacture of alkaline cyanides. Dec. 30.

5799 (1909). Comp. Gén. d'Electro-Chimie de Bozel. Manufacture of metallic silicides. Dec. 30.

6411 (1909). Jones. *See under II.*

11,275 (1909). Johnson (Badische Anilin und Soda Fabrik). Manufacture of calcium nitrite. Dec. 31.

11,442 (1909). Gewerkschaft der Steinkohlenzeche Mont Cenis. Manufacture of ammonium sulphate from distillation gases. Dec. 30.

23,645 (1909). Moyer, and Soc. Chim. des Usines du Rhône. Manufacture of zinc sulphide. Dec. 31.

VIII.—GLASS; CERAMICS.

APPLICATIONS.

30,220. Thompson. Manufacture of glass from cheap material. Dec. 24.

30,233. Helliwell and Helliwell. Manufacture of abrading or polishing powders. Dec. 24.

COMPLETE SPECIFICATION ACCEPTED.

5722 (1909). West and Lewis. Potters' kilns or ovens. Dec. 31.

IX.—BUILDING MATERIALS.

APPLICATIONS.

29,753. Poths. Rotary kilns for burning cement. [Addition to No. 13,440 of 1908.]* Dec. 20.

- 29,090. Elliott. Drying or seasoning timber. Dec. 22.
 30,259. Stephenson and Duerden. Kilns for burning bricks and tiles. Dec. 28.
 30,330. Matcham and Gale. Lithographic stone. Dec. 28.
 30,359. Burns. *See under VII.*

X.—METALS; METALLURGY INCLUDING ELECTRO-METALLURGY.

APPLICATIONS.

- 29,755. Caldecott. Separating liquid from crushed ore products or other granular material.* Dec. 20.
 29,779. Von Schlippenbach. Apparatus for continuous oxidation, reduction, or other treatment of ores, &c. [Ger. Appl., Jan. 23, 1909.]* Dec. 20.
 29,916. Portheim. Alloying lead and aluminium. Dec. 22.
 30,182. Sulman and Picard. Recovery of oxidised mineral substances. Dec. 24.
 30,341. Johnson. Extraction of gold and other metals from their ores. Dec. 28.
 30,377. Cito. Smelting silver-nickel-cobalt and arsenic ore.* Dec. 29.
 30,425. Marks (Colorado Iron Works Co.). Treatment of ores.* Dec. 29.

COMPLETE SPECIFICATIONS ACCEPTED.

- 28,508 (1908). Stewart. Treatment of alloys of tin and copper to separate the metals. Dec. 31.
 28,509 (1908). Stewart. Treatment of tin alloys containing silver to separate the metals. Dec. 31.
 28,551 (1908). Jensen (Spitz). Separating tin or other metals from waste metal, old metal ware, alloys, &c. Dec. 31.
 6138 (1909). Steinweg. Soldering aluminium and metals rich in aluminium. Dec. 30.
 13,553 (1909). Gayley. Drying air particularly for use in metallurgy. Dec. 31.

XI.—ELECTRO-CHEMISTRY.

APPLICATIONS.

- 29,706. Luckow. Method of regenerating storage batteries.* Dec. 20.
 30,463. Schulte. Apparatus for electrolytically removing the grease from objects to be galvanised.* Dec. 30.
 30,603. Wassmer. Thermally treating substances of inferior conductivity. Dec. 31.

COMPLETE SPECIFICATIONS ACCEPTED.

- 25,208 (1908). Greenwood. *See under VII.*
 2128 (1909). British Thomson-Houston Co. (General Electric Co.). Electric insulating material. Dec. 31.

XII.—FATS; OILS; WAXES.

COMPLETE SPECIFICATION ACCEPTED.

- 17,271 (1909). Filbert. Cottonseed oil and food compounds of which cottonseed oil is an ingredient. Dec. 30.

XIII.—PAINTS; PIGMENTS; VARNISHES; RESINS.

- 29,886. Marks (Southern Manufacturing Co.). Extraction of turpentine, oils, and other products from wood.* Dec. 21.

- 29,962. Falk. Manufacture of white lead.* Dec. 22.

XIV.—INDIA-RUBBER; GUTTA-PERCHA.

APPLICATIONS.

- 29,864. Dreyfus, Friedl, Bentley, and Clayton Aniline Co. Recovery of rubber from old or waste vulcanised rubber. Dec. 21.
 30,447. Cockerill. Production of india-rubber. Dec. 30.

XV.—LEATHER; BONE; HORN; GLUE.

APPLICATION.

- 30,272. Winterbottom and Barnes. Manufacture of imitation leather. Dec. 28.

COMPLETE SPECIFICATION ACCEPTED.

- 12,211 (1909). Prutz. Leather and process of manufacturing same. Dec. 31.

XVI.—SOILS; FERTILISERS.†

COMPLETE SPECIFICATION ACCEPTED.

- 26,807 (1909). Mines de Manganèse de Las Cabosses. Stimulant manure having a base of oxide of manganese. Dec. 30.

XVII.—SUGARS; STARCHES; GUMS.

APPLICATION.

- 30,300. Holste. Bleaching-starch.* Dec. 20.

COMPLETE SPECIFICATION ACCEPTED.

- 17,637 (1909). Steel. Manufacture of invert sugar and glucose in transportable form. Dec. 30.

XVIII.—FERMENTATION INDUSTRIES.

APPLICATIONS.

- 29,757. Black and Levin. *See under XIX.*
 30,181. Boulton (Wahl). Manufacture of fermented hopped beverages.* Dec. 24.
 30,223. Buxton. Using hops in brewing beer. Dec. 24.
 30,224. Buxton. Conditioning beer for bottling. Dec. 24.
 30,476. Whitaker. Brewing process. Dec. 30.
 30,594. Sefton-Jones (Elmassian). Quick malting process. Dec. 31.

COMPLETE SPECIFICATIONS ACCEPTED.

- 18,742 (1909). Makin. Apparatus for drying brewers' refuse, hops, grains, &c. Dec. 30.
 19,257 (1909). Kluge. Production of a denaturing agent for spirits. Dec. 30.

XIX.—FOODS. WATER PURIFICATION; SANITATION.

APPLICATIONS.

- 29,737. Normandy. Apparatus for water distilling and filtering. Dec. 30.
 29,757. Black and Levin. Manufacture of vinegar. Dec. 20.
 30,303. Gobbi. Apparatus for purifying water or other liquids. [Fr. Appl., April 19, 1909.]* Dec. 28.
 30,397. Henri, Helbronner, and von Recklinghausen. Sterilisation of liquids. Dec. 29.
 30,512. Nogier. Sterilising liquids. [Fr. Appl., Feb. 17, 1909.]* Dec. 30.

COMPLETE SPECIFICATIONS ACCEPTED.

- 28,507 (1908). Bloxam (Thomas). Bleaching or conditioning flour. Dec. 31.
 17,271 (1909). Filbert. *See under XII.*

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

APPLICATIONS.

- 29,751. Newton (Bayer and Co.). Manufacture of pharmaceutical compounds. [Addition to No. 27,030 of 1909.] Dec. 20.
 29,787. Busch, and Wulfig und Co. Preparation of salts of guaiacol-sulpho acid.* Dec. 20.
 30,592. Newton (Bayer and Co.). Manufacture of pharmaceutical compounds. [Addition to No. 28,166 of 1909.] Dec. 31.

COMPLETE SPECIFICATIONS ACCEPTED.

- 4564 (1909). Zimmermann (Chem. Fabr. auf Action, vorm. E. Schering). Manufacture of albumose-silver compounds. Dec. 30.
 11,108 (1909). Wellcome and Pyman. Manufacture of therapeutic compounds. Dec. 31.

XXI.—PHOTOGRAPHIC MATERIALS AND PROCESSES.

COMPLETE SPECIFICATIONS ACCEPTED.

- 27,687 (1908). Soc. Anon. Le Photographie des Couleurs, Sury, and Bastyns. Printing on paper of photographs in colour. Dec. 30.
 50 (1909). Duncan. Preparation of plates and films for producing coloured pictures by photography. Dec. 31.

XXII.—EXPLOSIVES; MATCHES.

APPLICATION.

- 29,882. Claesson. Manufacture of smokeless gunpowder.* Dec. 21.

COMPLETE SPECIFICATION ACCEPTED.

- 28,544 (1908). Anderson. Explosives. Dec. 31.

XXIII.—ANALYTICAL PROCESSES.

APPLICATION.

- 30,478. Foster. Pyrometers. [U.S. Appl., Feb. 10, 1909.]* Dec. 30.