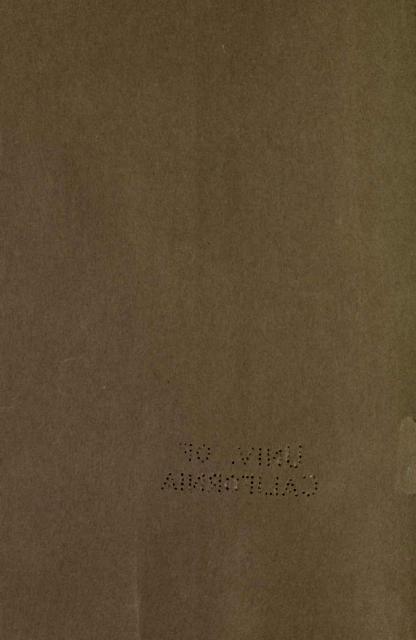


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Books on Industrial Arts



BOOKS ON INDUSTRIAL ARTS

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PREFACE.

The books listed hereafter constitute a selected part of the material obtainable in the library. Certain comprehensive works of reference and sets like the International Correspondence School and the various handbooks such as issued by F. J. Drake & Co. have not been included as they are permanently accessible on the open shelves set aside for such purpose.

The selection has been made on the strength of our own experience as to the usefulness of the books listed and the character of the local patronage. Similar lists issued by other libraries have also been consulted and occasionally the judgment of individual experts has been solicited.

The list covers the range of industrial and applied arts; books on fine arts having been left for future treatment.

The expressed purpose of the Charles Skelton Fund, entrusted to the care of the Library Trustees, directs the building up and maintenance of a library that should consist "of works, treatises on the arts and sciences, especially on Mechanics, Engineering, &c., the reading of which will inculcate virtues of honest industry and frugality."

It is hoped that the publication of this list will in a measure realize this expectation, that the attention of all those interested in the various local industries may be called to the resources of the library and that its usefulness will be enhanced. The lists are distributed free of charge.

Key to rating marks:

- A Indicates an elementary work.
- B Indicates a popular, non-technical work.
- **C** Indicates more advanced books treating of details of practical application.
- **D** Indicates books for specialists and professional experts.

CYCLOPEDIAS AND DICTIONARIES.

Dixon, D. B. Mechanical arts simplified. **603 D64.5

Goodchild, G. F. and Tweney, C. F. eds. Technological and scientific dictionary. 1906. *603 G615

Hawkins, Nehemiah. Hawkins' electrical dictionary. 1909. *537.03 H31.4

Hawkins' mechanical dictionary. 1909. 620.3 H31.4

Henley's encyclopaedia of practical engineering. 1906-8. v. 1-4. *620.3 H78.4

Tolhausen, Alexandre, and Tolhausen, Louis. Dictionnaire technologique. 3 v. *603 T57

AERIAL NAVIGATION.

B, C. Aero club of America. Navigating the air; a scientific statement of the progress of aeronautical science up to the present time. 1907. 533.6 Ae8.6

B, C. Alexander, J. H. Model balloons and flying machines, with a short account of the progress of aviation. 1910. 533.6 Al 2.5

- B, C. Berget, Alphonso. Conquests of the air, aeronautics, aviation, history, theory, practice. 1909. 533.6 B45.3
- C. Brewer, R. W. A. Art of aviation; a handbook upon aeroplanes and their engines, with notes upon propellers. 1910. 533.6 B75.1
- C. Chatley, Herbert. Principles and designs of aeroplanes. 1911. 533.6 C39.58
- D. Problem of flight; a text-book of aerial navigation. 1907. 533.6 C39.6
- B. Hildebrandt, Alfred. Airships past and present, together with chapters on the use of balloons in connection with meteorology, photography and the carrier pigeon; tr. by W. H. Story. 1908. 533.6 H54.1
- A, C. Jackman, W. J., and Russell, T. H. Flying machines, construction and operation; a practical book which shows, in illustrations, working plans and text how to build and navigate the modern airship. 1910. 533.6 Jl21.3
- **C, D. Lanchester, F. W.** Aerial flight. 1908, 1910. 2 v. 533.7 L22.1

Contents: v. 1. Aerodynamics. v. 2. Aerodonetics.

- B, C. Maxim, Sir H. S. Artificial and natural flight. 1908. 533.6 M45.1
- D. Neilson, R. M. Aeroplane patents. 1910. 533.6 N31.1
- C. Petit, Robert. How to build an aeroplane; tr. from the French by T. D. Hubbard and J. H. Ledeboer. 1910. 533.6 P14.4
- B. Turner, C. C. Aerial navigation of to-day; a popular account of the evolution of aeronautics. 1909. 533.6 T85.1
- D. Walker, Frederick. Aerial navigation; a practical handbook on the construction of dirigible balloons, aerostats, aeroplanes and airships. 1910. 533.6 W15.1

BUILDING AND CARPENTRY.

C, D. Arthur, William. New building estimator; a practical guide to estimating the cost of labor and material in building construction from excavation to finish. 1909.

D. Bamford, W. B. Agreements for building contracts. 1910. 692.9 B22.1 Reprinted from transactions of American society of civil engineers, vol. 67.

- Bergh, L. de C. Safe building construction; a treatise giving in simplest forms possible practical and theoretical rules and formulæ used in construction of buildings and general instruction. 1908.
- C. Davison, T. R. Arts connected with building, lectures on craftsmanship and design. 1909. 690 D29.1
- D. Diamant, Sidney. Curves for calculating beams, channels and reactions; a manual for engineers, architects, designers, draughtsmen, builders and contractors. 1908. . 625.1 D54.3
- C, D. Ellis, George. Modern practical joinery; a treatise on the practice of joiners' work by hand and machine for the use of workmen, architects, builders and machinists; with chapters on stairbuilding and hand-railing, foreman's work, fixing, &c. 1908.
- C. Hodgson, F. T. Light and heavy timber framing made easy, balloon framing, mixed framing, &c. 1909. 694.2 H66.5
- C. Jacoby, H. S. Structural details; or, Elements of design in heavy framing. 1909. 690 J15.8
- **Ketchum, M. S.** Design of steel mill buildings and calculation of stresses in framed structures. 1903.
 690 K49.3

D. Kidder, F. E. Building construction and superintendence. 1904, 1909. 3 v. 690 K53 Contents:

v. 1. Masons' work. 1909.

v. 2. Carpenters' work. 1904.

v. 3. Trussed roofs and roof trusses. 1904.

C. Munby, A. E. Introduction to the chemistry and physics of building materials. 1909. (Westminster series.) 691 M92.4

C. Richey, H. G. Building foreman's pocket book and ready reference. 1909. 690 R39.08

C. Building mechanics' ready reference, carpenters and wood-workers' edition. 1906. 690 R39.1

HAND-RAILING AND STAIR-BUILDING.

- C. Hodgson, F. T. Common-sense stair-building and hand-railing. 1907. 694.8 H66.2
- C. Mayer, David. Stair-building made easy. 1908. 694.8 M45.8

CONCRETE AND CEMENT.

- D. Desch, C. H. Chemistry and testing of cement. 1911. 666.9 D45.2
- D. Eckel, E. C. Cements, limes and plasters; their materials, manufacture, and properties. 1905. 666.9 Ec5.2
- C. Gilbreth, F. B. Concrete system. 1908. 693.5 G37.3
- C. Gillette, H. P., and Hill, C. S. Concrete construction, methods and cost. 1908. 666.9 G415.2
- C, D. Marsh, C. F., and Dunn, William. Manual of reinforced concrete and concrete block construction. 1908. 691.3 M35.5
- D. Mörsch, Emil. Concrete-steel construction (Der eisenbetonbau); tr. from German ed. . .by
 E. P. Goodrich. 1909. L691.3 M83.2
- Richey, H. G. The building mechanics' ready reference; cement workers' and plasterers' edition. 1908.
 691.5 R39.1
- D. Spaulding, F. P. Hydraulic cement, its properties, testing and use. 1906. 666.9 Sp1.1

- C, D. Taylor, F. W., and Thompson, S. E. Treatise on concrete, plain and reinforced; materials, construction and design of concrete and reinforced concrete. 1909. 691.3 T215
- C, D. Turneaure, F. E., and Maurer, E. R. Principles of reinforced concrete construction. 1909. 691.3 T85.1
- C. Waterbury, L. A. Cement laboratory manual; a manual of instructions for the use of students in cement laboratory practice. 1908. 666.9 W29.2

MASONRY.

- D. Baker, I. O. Treatise on masonry construction. 1909. 693 B17
- **D.** Bankhart, G. P. Art of the plasterer; an account of the decorative development of the eraft, chiefly in England from the 16th to the 18th century, with chapters on the stucco of the classic period of the Italian renaissance, also on sgraffito, pargetting, Scottish, Irish and modern plaster work. 1909.
- C. Gilbreth, F. B. Bricklaying system. 1909.. 691.4 G37.1

D.

Kidder, F. E. Mason's work. (in his Building construction and superintendence. 1909. pt. 1.) 690 K53 C. Richey, H. G. Building mechanics' ready reference, stone and brick mason's ed. 1907. 693 R39.1

STONE AND STONE-CUTTING.

- Dobson, Edward. Rudiments of masonry and stonecutting, exhibiting the principles of masonic projection. 1903.
- C, D. Merrill, G. P. Stones for building and decoration. 1903. 553.5 M55.8
- C, D. Seibert, J. S., and Biggin, F. C. Modern stone-cutting and masonry, with special reference to the making of working drawings. 1900.

693.12 Si1

GRAINING AND MARBLING.

- C. Hasluck, P. N., ed. Practical graining and marbling. 1907. 698.1 H27.6
- C. Maire, F. Graining and marbling; a series of practical treatises on material, tools and appliances used, general operations. . . and marbling in all shades. [c. 1910.]
- C, D. Petrie, J. Practical arts of graining and marbling. n. d. **698.1 P44.6

Renwick, W. G. Marble and marble working; a handbook for architects, sculptors, marble quarry owners and workers and all engaged in the building and decorative industries. 1909. 691 R29.5

C.

C. Soxhlet, D. H. Art of dyeing and staining marble, artificial stone, bones, horn, ivory and wood; a practical handbook. . .tr. from the German by Arthur Morris, and Herbert Robson. 1902. 698 So9

HOUSE PAINTING, PAPERHANGING AND HARD-WOOD FINISHING.

- C. Hodgson, F. T. Hardwood finisher. 1902. 698.1 H66
- C. Up-to-date hardwood finisher. 1904. 698.1 H66.1
- C. Sabin, A. H. House painting, glazing, paperhanging and whitewashing; a book for the householder. 1908. 698.1 Sal.4
- C. Whigelt, George. Architectural hardwood finishing; a practical treatise on modern methods of finishing the woodwork of new buildings. 1906. 698.1 W63.1

HEATING AND VENTILATION.

- C, D. Baldwin, W. J. S. Baldwin on heating. 1908. 697 B19
- **C**, **D**. Hot water heating and fitting; modern hot water apparatus, the methods of their construction and the principles involved. 1908. 697 B19.4
- C, D. Carpenter, R. C. Heating and ventilating buildings; a manual for heating engineers and architects. 1910.
 697 C22.4
- King, A. G. Practical steam and hot water heating and ventilation; a modern practical work on steam and hot water heating and ventilation, with descriptions and data of all materials and appliances used in construction of such apparatus, rules, &c. 1908. 697 K58.6
- D. Shaw, W. W. Air currents and the laws of ventilation, lectures on the physics of the ventilation of buildings. 1907. 697 Sh2.1

PLUMBING.

C.

Lawler, J. J. Modern plumbing, steam and hot water heating; a new practical work for the plumber, the heating engineer, the architect and the builder. 1904. 696 L42.5 C. Richey, H. G. Building mechanics' ready reference, plumbers', steamfitters' and tinners' ed. 1908. 696 R39.1

CHEMICAL TECHNOLOGY.

- Allen, A. H. Commercial organic analysis; a treatise on the properties, proximate analytical examination and modes of assaying the various organic chemicals and products employed in the arts, manufactures, medicine. 1892-1901. 4 v. in 9. 543 Al 5
- C, D. Lunge, George. Technical chemists' handbook, tables and methods of analysis for manufacturers of inorganic chemical products. 1908. 660 L97.78
- C, D. Technical methods of chemical analysis; tr. from the latest German ed. and adapted to English conditions of manufacture by C. A. Keane. 1908.
 v. 1, pts. 1-2. 660 L97.8
- C. Meade, R. K. Design and equipment of small chemical laboratories. 1908. L542.1 M46.3
- C, D. Phillips, H. J. Engineering chemistry; a practical treatise for the use of analytical chemists, engineers, ironmasters, ironfounders, and students. 1902. 543 P54

- C. Rogers, Allen. Laboratory guide of industrial chemistry. 1908. 660 R63.5
- C, D. Stillman, T. B. Engineering chemistry; a manual of quantitative chemical analysis for the use of students, chemists and engineers. 1910.

545 St5.3

C, D. Thorp, F. H. Outlines of industrial chemistry. 1901. 660.2 T39

COLOR, PAINT AND VARNISH.

- C, D. Hall, C. B. Chemistry of paints and paint vehicles. 1906. 667.6 H14.2
- **C**, **D**. **Holley**, **C**. **D**. Lead and zinc pigments. 1909. 667.6 H718.5
- C, D. Holley, C. D., and Ladd, E. F. Analysis of mixed paints, color pigments and varnishes. 1909. 667.6 H72.1
- C. Lowe, Houston. Paints for steel structures. 1909. 667.6 L95.6
- C, D. McIntosh, J. G. Manufacture of varnishes and kindred industries, based on and including the Drying oils and varnishes of Livache, 2d greatly enl. English ed. v. 1-2. 1904-8. *667.7 L74 To be complete in three volumes.

- C. Maire, Frederick. Modern pigments and their vehicles; their properties and uses considered mainly from the practical side and how to make tints from them. 1908. 667.6 M28.5
- C, D. Zerr, George, and Rubencamp, R. Treatise on colour manufacture; a guide to the preparation, examination and application of all pigment colours in practical use; tr. by Charles Mayer. 1908. 667.6 Z5.8

OILS AND FATS.

- D. Allen, A. H. Acid derivatives of phenols, cromatic acids, essential oils, terpenes, camphors, &c. 1901. (In his Commercial organic analysis, v. 2, pt. 3.) 543 Al 5
- C. Andes, L. E. Drying oils, boiled oil and solid and liquid driers; a practical work for manufacturers of oils, varnishes. 1901. 665 An2
- C, D. Archbutt, L., and Deeley, M. Lubrication and lubricants, theory and practice of lubrication. 1900. 665 Ar22
- C. Askinson, G. W. Perfumes and their preparation. 1900. 668.5 As4

- C. Carpenter, W. L. Treatise on the manufacture of soap and candles, lubricants and glycerin. 1895. 668.1 C22.8
- C. Dieterichs, E. E. F. Treatise on friction, lubrication oils and fats; the manufacture of lubricating oils, paint oils, and of grease and the testing of oils. 1906. 665 D57.6
- C, D. Ennis, W. D. Linseed oil and other seed oils. 1910. 665.3 En6.5
- C. Gadd, W. L. Soap manufacture for workmen and students. 1899. 668.1 G11
- C. Gill, A. H. Handbook of oil analysis. 1909. 665 G41.4
- C. Idris, T. H. W. Notes on essential oils. 1898. 668.5 Id5.6
- C. Lamborn, L. L. Modern soaps, candles and glycerin; a practical manual of modern methods of utilization of fats and oils in the manufacture of soap and candles, and of the recovery of glycerin. 1906. 668.1 L17.5
- C, D. Lewkowitsch, Julius. Chemical technology and analysis of oils, fats and waxes. 1909. 3 v. 665 L58.2

- D. Parry, E. J. Chemistry of essential oils and artificial perfumes. 1909. 668.5 P25.2
- C. Rideal, Samuel. Glue and glue testing. 1900. 668.3 R43
- D. Wright, C. R. A. Animal and vegetable fixed oils. 1903. 665.2 W93.1

FUEL.

- C. Allen, Horace. Modern power gas producer, practice and applications; a practical treatise dealing with the gasification of various classes of fuels by the pressure and suction systems of producer. 1908. 662.6 Al 5.5
- C, D. Booth, William, and Kershaw, J. B. C. Smoke prevention and fuel economy (based on the German work of E. Schmatolla). 1905. 662.6 B64.8
- C. Gissing, F. T. Commercial peat, its uses and possibilities. 1910. - 662.6 G44.2
- C, D. Jüptner von Jonstorff, Hanns, freiherr. Heat energy and fuels, pyrometry, combustion, analysis of fuels and manufacture of charcoal, coke and fuel gases; tr. by Oskar Nagel. 1909. 662.6 J97.4

B, C. Lewes, V. B. Liquid and gaseous fuels and the part they play in modern power production. 1907. (Westminster series.) 662.6 L58.5

B. Neuberger, Henry, and Noalhat, Henri. Technology of petroleum oil fields of the world, their 'history, geography and geology. . .tr. from the French by J. G. McIntosh. 1901. L665.5 N39

C. Thompson, A. B. Petroleum mining and oil field development. 1901. 665.5 T37.6

CELLULOID.

C. Böckmann, Frank. Celluloid, its raw material, manufacture, properties and uses. . .tr. by Charles Salter. 1907. 679 B63.2

LEATHER.

- **C**, **D**. **Bennett, H. G**. Manufacture of leather. 1909. 675 B43.5
- C. Standage, H. C. Leather workers' manual. . .a compendium of practical recipes and working formulæ for curriers, bootmakers, &c. 1900. 675 St2.5

C, D. Trotman, S. R. Leather trades chemistry; a practical manual on the analysis of materials and finished products. 1908. 675 T75.5

PAPER.

C. Sindall, R. W. Manufacture of paper. 1908. (Westminster series.) 676 Si6.5

B. Spicer, A. D. Paper trade; a descriptive and historical survey of the paper trade from the commencement of the 19th century. [c. 1907.] 676 Sp4.6

RUBBER.

- B, C. Beadle, Clayton, and Stevens, H. P. Rubber production and utilization of the raw product. 1910. (Pitman's common commodities of commerce.)
- C. Clouth, Franz. Rubber, gutta-percha and balata. 1903. L678 C61
- C. Heil, Adolf, and Esch, W. Manufacture of rubber goods; a practical handbook for the use of manufacturers, chemists and others. 1909. 678 H36.6

- C, D. Johnson, W. H. Cultivation and preparation of Para rubber. 1909.
 678 J63
- C. Pearson, H. C. Crude rubber and compounding ingredients; a textbook of rubber manufacture. 1910. 678 P31
- B. Rubber country of the Amazon. 1911. 678 P31.68
- C. Rubber tires and all about them; pneumatic, solid, cushion, combination for automobiles, omnibuses, cycles and vehicles of every description. 1906. 678 P31.7
- C. Seeligmann, T., and others. India rubber and gutta percha; a. . .practical treatise on india rubber and gutta percha in their historical, botanical, arboricultural, mechanical, chemical and electrical aspects. . .tr. from the French. . . by J. G. McIntosh. 1910. L678 Se3
- B, C. Terry, H. L. India rubber and its manufacture, with chapters on gutta percha and balata. 1907. 678 T27.4
- C. Weber, C. O. Chemistry of india rubber, including the outlines of a theory on vulcanization. 1902. 678 W38

- C. Wright, Herbert. Rubber cultivation in the British empire; a lecture delivered before the Society of Arts. 1907. 678 W93.7
- C. Wyllie, J. A., and Ferreira, O. G. Notes on rubber cultivation, with special reference to Portuguese India. 1907. 678 W972.6

TEXTILES AND DYEING.

- C. Barker, A. F. Textiles. 1910. 677 B24.8
- C, D. Bowman, F. H. Structure of wool fibre and its relation to the uses of wool for technical purposes. 1908. 677 B68.8
- C. Bradbury, Fred. Carpet manufacture. 1904. 677 B 72
- C. Brannt, W. T., ed. Practical dry cleaner, scourer and garment dyer. 1909. 667.1 B73.6
- Carter, H. R. Spinning and twisting of long vegetable fibres, flax, hemp, jute, tow and ramie; a practical manual of the most modern methods as applied to the hackling, carding, preparing, spinning and twisting of the long vegetable fibres of commerce. 1904. 677 C24
 - Farrell, F. J. Dyeing and cleaning; a practical handbook. 1908. 667.2 F24.2

C.

- C. Fraps, G. S. Principles of dyeing. 1903. 667.2 F84.6
- C. Hannan, W. I. Textile fibres of commerce; a handbook on the occurrence, distribution, preparation, and uses of the animal, vegetable and mineral fibres used in cotton, woolen, paper, silk, brush and hat manufactures. 1902. 677 H19
- C. Hooper, L. Hand-loom weaving; plain and ornamental. 1910. 677 H76.4
- C. Matthews, J. M. Laboratory manual of dyeing and textile chemistry. 1909. 667.2 M43.5
- C. Nesbit, Harry. Grammar of textile design. 1906. 677 N63.3
- C. Owen, F. A. Dyeing and cleaning of textile fabrics; a handbook for the amateur and the professional. 1909. 667.2 Ow2.3
- C. Taylor, J. T. Cotton weaving and designing. 1910. 677 T21.2

CIVIL ENGINEERING.

C. Fieberger, G. J. Civil engineering; a textbook for a short course. 1905. 620 F45

- D. Gillette, H. P. Handbook of cost data for contractors and engineers; a reference book giving methods of construction and actual costs of materials and labor on numerous engineering works. 1910. 620 G41.41
- D. Gillette, H. P., and Dana, R. T. Cost keeping and management engineering; a treatise for engineers, contractors and superintendents engaged in the management of engineering construction. 1909. 620 G412
- C. Humphreys, A. C. Lecture notes on some of the business features of engineering practice. 1905. 620.4 H88.5
- C. Supplement. 1905.

620.4 H88.51

C, D. Trautwine, J. C. Civil engineers' pocketbook, rev. by J. G. Trautwine, jr., and J. C. Trautwine, 3d. 1909. 620.8 T69

ARCHES.

D. Balet, J. W. Analysis of elastic arches, threehinged, two-hinged and hingeless of steel, masonry and reinforced concrete. 1908.

624.6 B19.1

C, D. Reuterdahl, Arvid. Theory and design of reinforced concrete arches. 1909. 624.6 R31.8

BRIDGES.

D. Burr, W. H., and Falk, M. S. Design and construction of metallic bridges. 1908. 624 B945.2 "This book is based upon the ninth edition of The stresses in bridge and roof trusses, arched ribs and suspension bridges by one of the authors of this volume." Preface.

Davies, M. W. Theory and practice of bridge construction in timber, iron and steel. 1908.
 624 D28.8

- D. Grimm, C. R. Secondary stresses in bridge trusses. 1908. 624 G76.8
- Ketchum, M. S. Design of highway bridges and the calculation of stresses in bridge trusses. 1908. 624 K49.2
- D. Merriman, Mansfield, and Jacoby, H. S. Textbook on roofs and bridges. 1907. 4 v. 624 M55 Contents:
 - v. 1. Stresses in simple trusses.
 - v. 2. Graphic statics.
 - v. 3. Bridge design.

C.

- v. 4. Higher structures.
- **Thomson, W. C.** Design of typical steel railway bridges; an elementary course for engineering students and draughtsmen. 1908. 624 T38.3

STRENGTH OF MATERIALS.

- D. Burr, W. H. Elasticity and resistance of the materials of engineering. 1908. 620.1 B94.3
- D. Johnson, J. B. Materials of construction; a treatise for engineers on the strength of engineering materials. 1906. 620.1 J63
- D. Johnson, J. B., Bryan, C. W., and Turneaure, F. E. Theory and practice of modern framed structures. 1910. v. 1. 620.1 J631
- Ketchum, M. S. Design of steel mill buildings and the calculation of stresses in framed structures. 1906. 690 K49.3
- D. Merriman, Mansfield. Textbook on the mechanics of materials and of beams, columns and shafts.
 1905. 620.1 M55
- D. Popplewell, W. C. Strength of material; a manual for students of engineering. 1907. -620.1 P81.8
- Smith, H. E. Strength of material; an elementary study prepared for the use of midshipmen at the U. S. Naval Academy. 1909. 620.1 Sm5.8

C, **D**. **Thurston, R. H.** Materials of engineering. 1903-7. 3 v. 620.1 T42

Contents :

v. 1. Non-metallic materials of engineering and metallurgy. v. 2. Iron and steel.

v. 3. Treatise on brasses, bronzes and other alloys and their constituents.

C, D. Unwin, W. C. Testing of materials of construction. 1910. 620.1 Un9.8

EARTHWORK AND RETAINING WALLS.

- D. Crockett, C. W. Methods of earthwork computations. 1908. 526.9 C87.5
- **Ketchum, M. S.** Design of walls, bins and grain elevators. 1907. 621.87 K49.3
- D. Patton, W. M. Practical treatise on foundations, explaining fully the principles involved. 1906. 721.1 P27.6
- D. Prelini, C. Graphical determination of earth slopes, retaining walls and dams. 1908. 627.8 P91.4

ELECTRIC ENGINEERING.

- A, C. Electrical catechism. 533 plain answers to 533 practical questions about electrical apparatus. 1908. 537 El 2 Compiled from Power.
- C, D. Foster, H. A. Electrical engineers' pocketbook; a handbook of useful data for electricians and electrical engineers. 1908. 537.08 F81
- Franklin, W. S. Elements of electrical engineering; a textbook for technical schools and colleges. 1906. 2 v. 537.8 F85.3 Contents:
 v. 1. Direct current machines.
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