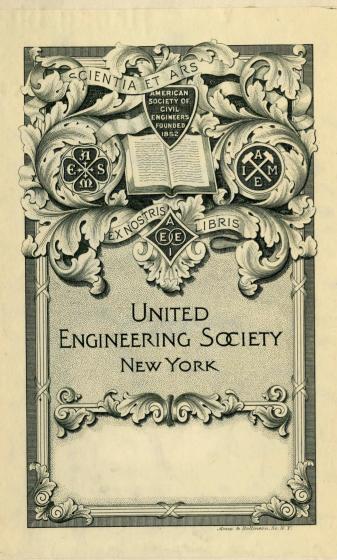
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ABBREVIATIONS.

add. additional, additions, Adv. Sci. Ser. Advanced Science Series. Anon. Anonymous.
Balt. Baltimore.
bds. boards (bound in board covers.) Bevan's B. M. I. Bevan's British Manufacturing Industries. Bost. Boston. Bull. Pub. Bulletin Publications. Camb. Math. Ser. Cambridge Mathematical Series. Camb. Sch. and Coll. T.B. Cambridge School and College Text Books. Cass. Tech. Man. Cassel's Technical Manuals. Chic. Chicago. clo. cloth (binding). color. colored. Collins' Sci. Text Books. Collins' Science Text Books. Comp. compiler. compiled. cont. contained. corr. corrected. Cr. } Crown. ctws. 100 weight (Pounds.) Diag. diagrams. diag. deg. degree. Dec. December. ea. each. Ed.) edition, edited, ed. } editor. Elem. Ser. Elementary Series. enl. enlarged. Fahr. Fahrenheit. flex. flexible. Fold. folded, folding. o. o. p. out of print.

F.cap. 8vo. Foolscap octavo. Franklin Sq. Lib. Square Library. Ga. Georgia. geneal. genealogy. half mor. half morocco (binding.)
half rus. half russian (binding.) Hist. Ser. Historical Series. Ill. Illinois. Illus. Illustrated. Imp. 8vo. Imperial octavo. Improv. Improved. in. inches. incl. including. Inst. Institute. Internat. Educ. Ser. International Educational Series. Internat. Sci. Ser. International Science Series Introd. Introduction. jr. junior. L. Ele. Sc. Man. or L. Elem. Sci. Man. Longman's Elementary Manuals. La. } large. lbs. Pounds (weight.) Lib. Library. lithog. lithographed. Lond. London. long. longitude.
Manch. Manchester.
Mass. Massachusetts.
Med. 8vo. Medium Octavo. mor. morocco.

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Penna. Pennsylvania. Pap. paper (in paper pap. binding. Phila. Philadelphia. Pl. } plates.
Pl. 8vo. Post Octavo. portr. } portraits. pp. pages. red. reduced. rev. revised. Roy. Royal. School Bull. Pub. School Bulletin Publications. Sci. Ser. Science Series. Scient. Manuals. Scientific Manuals. ser. Ser. Series. shp. sheep (binding.) Sm.) small. sm. Spec. Ser. Specialist's Series. Sq. Square. Stand. Standard. Subs. I subscription. subs. (sold by subscription.) suppl. supplement. Textb. of Sci., Textbooks of S. Textbooks of Science. thous. thousand. trans. translated. U. S. United States. V. N. S. S. Van Nostrand's Science Series vol. volume. vols. volumes. W. pl. with plates.
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INTRODUCTION.

I have examined the proof sheets of Part IIa of H. E. Hafer-korn's "Handy Lists of Technical Literature" and consider it a very complete and useful bibliography of the subjects covered, as far as concerns permanent publications in the English language. For Engineers, Electricians and Inventors who find it necessary to familiarize themselves with the state of Electrical Science and its applications to the purposes of practical life, the work should prove very valuable, as it covers all that is of any practical value in the Electrical field up to the present year. Such a work as this has become almost a necessity, as the growth of technical literature has been so rapid within the past few years that without such reference lists it is well nigh impossible for any one to learn where to look for information concerning it.

A. J. SHAW, Supt. & Mgr.,

THE SHAW ELECTRIC CRANE CO.

Milwaukee, Wis., Nov. 24. 1890.

PREFACE.

Originally it was intended to publish Part IIa before Part III, or include its subjects in that part. Considering that **Electricity** and the professions based thereon play such an important part in the industries of the present day, I have decided to embody **Electricity** and relative subjects in a separate volume.

The cross-references in this part are not given to any great extent, as in this instance they would prove annoying rather, than practical.

All new books published before October 30th, 1890, that could be traced, and a number of old and rare books are also enumerated, which, it is hoped, will be of great use in making out a list on any subject desired.

Subscribers and users of the "HANDY LISTS" will greatly oblige me by calling my attention to mistakes and omissions that can be proved and by giving information regarding titles of new books treating on the subject of Electricity, etc.

Books treating on Electricity used in the practice of Medicine are omitted.

THE COMPILER.

JOJICE.

Subscribers will please notice corrected title of No. 131, which should read as follows:

131 Electricity in daily life: a popular account of the science and application of electricity to everyday uses. Illus. N. Y. 1890. 8vo. \$3.50. Sc—So. Contents: Electricity in service of man—Electric motor—Electric railway—Lighting—Telegraph—Cable-laying—Electricity in warfare—Electricity in the household—Electricity applied to the human body, (Collected from Scribner's Magazine.)

Omitted Title for Part III:

Johnson, Geo. H. Drainage tables, giving the necessary diameters of pipes and culverts for the discharge of given quantities under given heads, etc., for the use of railway and city engineers. N. Y. 1888. 12mo., pap. 25c. Ec.

Explanation of Entries.

The main entry of each work will be found under the author's name, containing full title, year of issue, publisher's or agent's name, editions and price. The publisher or distributing agent of each book is indicated by a system of abbreviations, at the end of the entry, which are explained in the accompanying Key, containing a list of all publishers and agents represented in this part. For the convenience of booksellers, and especially in order to facilitate procuring books in a hurry, the method of distinguishing the publisher of each work, heretofore employed in the key, has in this part been extended to the abbreviations in the main entry, so that the heavy letters indicate the publisher or sole agent, while those in ordinary light-faced type designate the jobber, to whom the bookseller may apply for copies in case the publisher should be out of the work.

The various editions of a book with their prices, have been specified, including American reprints of English works, the first price mentioned being that of

the original publication.

If a second value is added, in a different monetary standard, it indicates the price at which the book is sold by the jobber or agent stated in connection with each entry.

The exact year of publication has been added in all cases where it could be ascertained, and enclosed in brackets whenever it does not appear on the titlepage. When two or more editions have been issued at the same price, the dates of all, but the last have been enclosed in parantheses.

The subject headings are entered in the same alphabetical series as the authors, but are distinguished by being printed in *italics*. The numbers following refer to the numbers prefixed to each entry of a distinct book, and indicate that the subject is treated in the books mentioned.

When a "see" or "see also" precedes a number, it signifies that the subject is incidentally treated in the work referred to; but when placed before a name, the "see also" indicates other related subjects, which must also be looked up, in order to obtain the whole literature on any given subject.

Directions for using the "Handy Lists."

If looking for a book by a certain known author, turn to his name in the alphabet. The abbreviation at the end of the book entry refers to the *key*, as explained above.

If in search for books or treatises on a certain subject, turn to this subject, printed in *italics*, as stated above. In case there are more than one work referred to, take a slip of paper and copy all the numbers and cross-references, and, with this for a guide, look up first all the numbers copied, then the numbers under each one of the related subjects referred to.

PART IIa.

Electricity and Magnetism, Telegraph, Gas, etc.

N. B. — If a dagger † appears before the title it denotes that the DATE of publication could not be traced, but that the book is inserted in "Whitaker's Reference Catalogue," 1889.

If the YEAR appears in brackets [] it designates that the book was copyrighted in that year, but the year does not appear on the title-page

The year ofter First or a Former edition is given in parenthesis ().

In cases, where an English book is handled by an American importer, and vice versa, the size

mentioned in the importer's catalogue appears in parenthesis ().

A 1 Telegraph code 78.

A B C code 77.

A B C of electricity 321, 322.

- 1 Abernethy, J. P. The modern service of commercial and railway telegraphy, in theory and practice. Embracing much valuable and desirable information regarding the railway station service and express service. 6th rev. and enl. ed. Illus. Cleveland, O. (1886) 1887, 12mo, \$2.00.

 An excellent work for self-instruction, as well as for class use; covering, practically, both commercial and railway telegraphy.
- 2 Accum, F. Description of the process of manufacturing coal gas. With elevation, sections, and plans of the apparatus employed at the gas works in London (1820). W. 7 col. fold. pl. Lond. 1820. 8vo, bds, \$3.00.

A Century of electricity 323, 324.

Absolute measurements in electricity 178, 179, see 274, 275; see also Electrical Measurement.

Absolute measurements in magnetism 178, 179.

Abstracts of specifications deposited at the Patent Office with reference to electric lighting, see 109.

Accumulators 406, see 71, 75, 388.

Accumulators of the Plante type, see 388.

Action of galvanic battery, see 45.

3 Adams, Geo. An essay on electricity, explaining the principles of that useful science, etc. W. plates. Lond. 1792, 8vo, old sheep, scarce \$4.00.

Age of electricity 47

4 †Ager, G. Alphabetical telegram code of nearly 50,000 sentences. The code words in sequence to the 150,000 code words in the duplex standard code. In accordance with the telegraph convention rules. Lond. (n. d.) £1 11s 6d.

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14 †Ager, G. Corn, seed, and general merchant's telegram code. Lond. (n.d.)
£1 11s 6d.

N. B.—May be used separately, being complete in itself; or may be used as a supplement to the telegram code (third edition), as no single word is contained in both books.

15 Alglave, Em., and Boulard, J. The electric light; its history, production and application. Trans. from the French by T. O'Conor Sloane. Ed. with notes and additions, by C. M. Lungren. Illus. N. Y. 1884. 8vo, \$5.00

Ac—E—J—Mv—So—V.

15a Allsop, F. C. Electric bell construction. Treatise on the construction of electric bells, indicators, and similar apparatus. Illus. drawn to scale. Lond. 1890. Cr. 8vo. 3s 6d.

16 Allsop, F. C. Practical electric-bell fitting: a treatise on the fitting-up and maintenance of electric bell, and all the necessary apparatus. Illus. Lond. 1890. P. 8vo, 3s. 6d., \$1.25. Bi—Cu—J—Mv—So—V—Ww. Alphabets for printing and single-needle instruments, see 75; see also Tele-

graph—Telegraphy.

Alternate current dynamos, see 23.

Alternate current machinery 265, see 410, 470.

Alternate current transformer 143.

Alternating currents 52, see 458.

Alternating current system, see 237.

17 American Bell Telephone Co., et al., vs. the Peoples' Tel. Co., et al. U. S. Circuit Court, So. Dist. of N. Y. Argument of E. N. Dickerson for complaintants. Bost. 1884. 8vo. bds. (Printed for private use.)

**Mu. American telegraphic cipher 132.*

**Ammeter*, see 23, 61, 237, 458.*

**Ampere's hypothesis, see 145.*

**Amperemeter*, see 145.*

18 Anderson R. Lightning conductors; their history, nature, and mode of application. 3d rev., re-arranged, and enlarged ed. Illus. Lond. 1885. 8vo. 16s., \$5.00. Co—J—My—So—V.

19 Angell, J. Elements of magnetism and electricity, with practical instructions for the performance of experiments, and the construction of cheap apparatus. Enl. ed. (Collin's elem. Sci. T. B.) Lond. 1877. F.cap 8vo. (12 mo.) 1s. 6d., 60c. Cw—J—So.

20 Angell, J. Elements of magnetism and electricity, with practical instructions for the performance of experiments. Illus. N. Y. 1876. 16mo. 75c.

Anglo American cotton telegraph code 327, 328.

21 Anglo American (The) telegraph code; to cheapen telegraphy, and to furnish a complete cipher, adapted to use in general correspondence, including business, social and other subjects of correspondence. N.Y. 1886. Svo. \$2.50.

22 Anthony, W. A., and Brackett, C. F. Elementary textbook of physics.

Part II: electricity and magnetism, and acoustics and optics. Illus. N.Y.

(n. d.) 12mo. \$1.50.

My—Wu.

Antogeneous formation, see 388.

Apparatus used in electric lighting, see 92; see also Electric light.

Appendix telegraph code 329.

Applications of accumulators, see 388; see also Accumulators.

Applications of electricity 244, 245.

Applications of electricity to elevated and underground railways, see 537.

Application of electricity to railway working 276; see also Electric Railway.

Arc lamps 307, see 23, 33, 109, 130, 216, 219, 234, 458; see also Electric Light.

Arc system, see 237.

Armature, see 23, 225, 237, 470.

Artificial lighting in relation to health 88.

23 Atkinson, P. The elements of electric lighting. Including electric generation, measurement, storage and distribution. 3d ed. Illus. N. Y. 1889. 12mo, \$1.50.

Contents: Electricity a mode of molecular motion; alternate current dynamos; direct current dynamos; electric terms and units; electric measurement; the arc lamp; the incandescent lamp; the storage battery; electric distribution, etc.

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Atlantic Telegraph, history of, 141.

Audiometer, see 237.

25 †Aveling, E. Magnetism and electricity. Illus. Lond. (n. d.) Cr. 8vo, 6s. Cd.

26 Aveling, E. Mechanics and experimental science. Keys to heat and light, and magnetism and electricity. Lond. 1889. Cr. 8vo, (12mo), 5s, \$2.00.

27 Avery, E. M. Modern electricity and magnetism. Theoretically and practically considered. Illus. N.Y. 1885. 12mo. 75c. Sg—So—V.

28 Ayrton, W. E. Electric railways. Abstracts of a lecture delivered at the Royal Institution. W. fold. pl. Lond. 1882. 8vo. pap. 6d., 20c. Ec—So.

29 Ayrton, W. E. On the economical use of gas engines for production of electricity. Lond. 1882. 8vo. pap. 1s., 40c.

30 Ayrton, W. E. Practical electricity; a laboratory and lecture course for first year students of electrical engineering, based on the practical definitions of the electrical units. 3d ed. Illus. Lond. 1888. Cr. 8vo. (12mo.) 7s. 6d., \$2.50 Bi—Cb—J—Mv—So—V—Ww.

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32 Badt, F. B. Bellhanger's handbook. Illus. Chic. 1889, 16mo, \$1.00.

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34 Badt, F. B. Incandescent wiring hand-book. Illus. and tables. Chic. 1889, 16mo. \$1.00. Bi—Cu—E—Ed-J—Mv—Ww.

Badt, F. B., and Carhart, H. S. Derivation of practical electrical units. Being a reprint of articles published in the Western Electrician. Illus. and portr. Chic. 1890. 16mo, 56 pp. 75c. Ed—So—V.

Baile, J. Wonders of electricity. Ed. with addit. by J. W. Armstrong. Illus. N. Y. 1872. 12mo, \$1.00.

Baker, W. G. Magnetism and electricity. (Elem. Textbooks) Lond. 1886. 12mo. 1s. Bf.

38 Ballantyne, R. M. Battery and boiler, or, the laying of the submarine electric cables. New ed. Illus. Lond. 1882. P. 8vo. (12mo.) 5s., \$2.00.

39 Baltimore (The) and Ohio Telegraph Co. Addenda. Laws of the U.S. and Canada relating to telegraphs. N. Y. 1884. 8vo, pap.

NOTE.—Free to those, who had bought the original work; not separately sold.

40 Banister, H. Gas manipulation. With a description of the various instruments and apparatus employed in the analysis of coal and coal gas. Rev. and enl. by W. T. Sugg. Lond. 1867. 8vo, \$6.00.

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- 41 Barlow, P. Magnetic attractions and the laws of terrestrial and electromagnetism. Lond, 1823, 8vo bds., scarce, \$4.
- 42 Barnard, C. First steps in electricity; designed for the entertainment and instruction of young people at home and in school. Illus. N. Y. 1888.

43 †Barrett, W. F. Edison and some of his inventions. Illus. (Manch. Sci. Ser.) Manch. (n. d.) Cr. 8vo, pap. 1d.

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 Hg. Batteries, see 61, 75, 216, 237, 458; see also Electric Batteries. Batteries, management of, see 45. Battery transformer system, see 219.
- 45 Beechey, Fred. S. Electro-telegraphy: a book for beginners. 2d ed. Illus. Lond. (1876) 1881. Cr. 8vo. (12mo) 1s., 40c; pap. 6d., 20c. Co—J—So—V. Contents:—What is electricity? Sources of electricity. On the action of the galvanic battery. Single and double fluid cells. Management of batteries. Appliances to make up a land telesflete of electric current through a conducting coil, and round a bar of soft iron. Office of signalling. Measurement of currents. Reasons for using lightning protectors.
- 46 Bell, Alex. G. The Telephone. A lecture on researches in electric telephony. Lond. 1878. 8vo. pap. 60c. Bell hanger's hand book 32. Co. Bellhanging, see Electric Bells. Bell telephone, see 237; see also Telephone.

Benjamin, Park. The age of electricity. From amber-soul to telephone. Illus. N. Y. 1886. 12mo. (cr. 8vo.) \$2.00; 7s. 6d. Bi—Cb—J—Sc—So—V.

48 Berly's, J. A. British, American and continental electrical directory and adviser. The electrician's vade mecum. Lond. 1882. Roy. 8vo. (8vo.)

49 Berly, J. A. Universal electrical directory and business adviser, with British, French, Belgian, Russian, Canadian, German and U. S. sections. 3d enl. ed. Lond. 1883. 8vo. 7s. 6d., \$3.00.

Bernstein carbons, see 23. Bibliography of electricity 192a, 319, 396. Bibliography of magnetism 192a, 319. Birmingham wire gauge 518.

- Black, J. Gas fittings: a practical handbook, treating of every description of gas laying and fitting. Illus. (Weale's Ser.) Lond. 1890. 12mo, 2s 6d, Blake's transmitter, see 237.
- 51 Blakesley, Th. H. Electricity at the Board of Trade. Lond. 1883. 8vo.
- 52 Blakesley, Th. H. Papers on alternating currents of electricity, for the use of students and engineers. 2d enl. ed. Illus. (Spec. Ser.) Lond. (1885.) 1889. P. 8vo. (12mo.) 4s. 6d., \$1.50.
- 53 Bleunard, A. Babylon electrified; the history of an expedition undertaken to restore ancient Babylon by the power of electricity, and how it resulted. Trans. from the French by F. L. White. Illus. by Montador. W. map. Phila. 1889. 8vo. \$2.50, 12s.
- 54 Bloomer, J. G. Commercial cryptograph: A telegraphic code and double index, holocryptic cipher. N. Y. 1883. 8vo. \$5.00. Ac-V.
- 55 Boggett, Wm. A key to the mysteries of water, electricity, and heat.
- 56 Bond, R. Handbook of telegraph; a guide to candidates for employment in the telegraph service. 4th rev. and enl. ed. To which is appended questions on magnetism, electricity and practical telegraphy for the use of students by W. McGregor. (Weale's Ser.) Lond. 1873. 12mo, 3s.,
- 57 Bookbuyer's and Bookseller's accurate and economical telegraphic code.

- 58 Bottone, S. R. The dynamo. How made and how used. A book for amateurs. 6th ed. with additional matter and illus. Lond. (1884, '88,) Bi--J-Mv-Sn-So-V. 1890. P. 8vo. (12mo.) 2s. 6d., \$1.00.
- 59 Bottone, S. R. Electric bells and all about them. A practical book for practical men. Illus. Lond. 1889. P. 8vo. (12mo.) 3s., \$1.20.
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62 Bowditch, W. R. The analysis, technical valuation, purification, and use of coal gas. Illus. Lond. 1867. 8vo. \$4.50.

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