

The

ELECTRONIC ENGINEERING MASTER INDEX

*A subject index to the contents of
electronic and allied engineering publi-
cations printed throughout the world
from*

January through December, 1949

NEW YORK

ELECTRONICS RESEARCH PUBLISHING COMPANY, INC.

1950

Other Indispensable Electronic Engineering References

The Electronic Engineering Master Index

1925-1945 Edition.	320 pages.	\$17.50
1935-1945 Edition.	209 pages.	\$10.00
1946 Edition.	202 pages.	\$14.50
1947-1948 Edition.	339 pages.	\$19.50

The Electronic Engineering Patent Index

1946 Edition. 476 pages. \$14.50

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ELECTRONICS RESEARCH PUBLISHING COMPANY, INC.
480 CANAL STREET, N. Y. 13, N. Y.

PRINTED IN THE UNITED STATES OF AMERICA

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PREFACE

The 1949 edition of the *Electronic Engineering Master Index* is the fourth volume in the series covering the electronic and allied engineering literature published throughout the world since 1925. The titles of all articles appearing in foreign-language magazines have been translated into English. Wherever possible the original title of these articles are also given.

Containing more than 12,000 new entries, this volume indexes almost 400 of the major international scientific magazines, journals, and proceedings, resulting in the most comprehensive bibliography of the electronic and allied engineering arts published today.

As in the 1947-1948 volume, this edition lists all U. S. electronic and allied engineering patents granted during the period covered—of which there were 4,000—under the various subject headings. We have included the patent references with the titles of articles and reports in order to afford the user of this volume the utmost correlation between the described and patent phases of the art.

The listings of declassified U. S., British and Canadian documents have been greatly expanded and brought up to date, in order to make available as much as possible of the important war and postwar research in electronics, atomic physics and the allied fields.

In addition, we have expanded our coverage of special reports and documents not appearing in regularly published periodicals by including for the first time a list of British and American reports on German and Japanese research and developments, as well as the titles of many theses on electronic and related subjects submitted at major American universities.

In the Bibliography of Engineering Books, we have listed the books published during 1949 in the United States, as well as many of those published in England, France, Germany, etc. It is hoped that with subsequent editions of the *Electronic Engineering Master Index* we will eventually list the books of all the technical publishers of the world.

The cumulative cross index of subjects at the end of this book serves as a guide to the present compilation as well as to the 1925-1945, the 1935-1945, the 1946, and the 1947-1948 editions. In order to facilitate use of this cumulative index we have given each edition a volume number. The 1925-1945 and 1935-1945 editions are each referred to as volume 1, because the 1935-1945 book is actually the second part of the 1925-1945 book, including the same page numbers. The 1946 edition is referred to as volume 2, the 1947-1948 edition as volume 3, and the 1949 edition as volume 4. The volume number of subsequent editions will continue in consecutive order.

In the cross index there will be a boldface number, which is the volume reference, preceding the page number referred to. Thus, under some specific reference we may find the numbers 2-115, 4-130. This means some material can be found on page 115 of volume 2, the 1946 edition, and also on page 130 of volume 4, the 1949 edition. If the reference is to volume 1 and bears the index number 1-109 or higher, then the information can be found in either

the 1925-1945 edition or the 1935-1945 edition on the same page. If the volume 1 index page number reference is less than 1-109 then it can only be found in the 1925-1945 edition. (This is so because all page numbers below page 109 in this edition fall only within the years 1925-1935.)

We wish to express our appreciation to Evrom Allen Mintz, managing editor of the Electronics Research Publishing Co., Inc., for his contributions to the book. Acknowledgment is also extended to Charles Tepfer, Norman Weinstein, and Arnold J. Unger for their aid in the preparation of this volume.

JOHN F. RIDER

New York City, N. Y.

June, 1950

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Key to Abbreviations

Aug	August	Jan	January
Apr	April	Mar	March
bibliog	bibliography	Nov	November
contd	continued	Oct	October
Dec	December	p	page
diag	diagram	pt	part
ed	edition or editor	Sep	September
Feb	February	sup	supplement
il	illustrations	v	volume

Each magazine article entry is presented as follows:

Title of article
Author or authors
Title of periodical
Volume number
Page number
Month and year

Sample entry:

Circuits for travelling-wave tubes. J. R.
Pierce. IRE Proc 37:510-515 May '49

Government documents and reports are indicated by a code group at the end of the entry. Some code groups used are BDDA (British Declassified Documents); MDDC (Manhattan District Declassified Documents); WDIL (War Department Library). The source of these reports is given in the List of Publications Indexed.

Sample entry:

Video amplifier and scope. E. W. Titterton. MDDC 829

Each patent entry is presented as follows:

Title of patent
Patentee
Patent Number
Number of claims
Date of application
Date granted

Sample entry:

Tone arm and pickup assembly. Clarence F. Jensen, 2,475,785, 6 cl. Appl Mar 18, '47; granted July 12, '49

For additional information on patents, see "Pat Gazette" entry in the List of Publications Indexed.

LIST OF PUBLICATIONS INDEXED

- Akad Sci (USSR) Bul**—Bulletin of the Academy of Sciences, physics series. Cherkasski Per 2, Moscow
- Acoust Soc Am J**—Journal of the Acoustical Society of America. Quarterly. \$8, nonmembers \$10; single copies \$2. American Institute of Physics, 57 E. 55th St., New York
- Acta Phys Aust**—Acta Physica Austriaca. Springer-Verlag, Molknerbastei 5, Vienna
- Acta Phys Polo**—Acta Physica Polonica. Al. Slowackiego 15 m.g. Cracow, Poland
- Acta Polyt**—Acta Polytechnica. Irregular. Royal Swedish Academy of Engineering Sciences, Stockholm, Sweden.
- Advanc Sci**—Advancement of Science. British Association for the Advancement of Science, Burlington House, London W. 1
- AEC, AECID, and AECU**—Documents published by the Atomic Energy Commission, Document Sales Agency, P.O. Box 62, Oak Ridge, Tenn.
- Aero Digest**—Aero Digest. Monthly. \$3; single copies 50¢. Aeronautical Digest Publishing Corp., 515 Madison Ave., New York
- Aero Eng Rev**—Aeronautical Engineering Review. Monthly. \$3; single copies 50¢. Institute of the Aeronautical Sciences, Inc., 2 E. 64th St., New York
- Aero Quart**—The Aeronautical Quarterly. Royal Aeronautical Society, 4 Hamilton Place, W. 1, London
- Aero Sci J**—Journal of the Aeronautical Sciences. Quarterly. \$12; single copies \$1.50. Institute of the Aeronautical Sciences, Inc., 2 E. 64th St., New York 2, N. Y.
- Aerovox Res Worker**—Aerovox Research Worker. Monthly. Aerovox Corporation, New Bedford, Mass.
- AIEE Trans**—Transactions of the American Institute of Electrical Engineers. 33 W. 39th Street, New York
- Akad Nauk Dok**—Bulletin of the Academy of Science, USSR. Wolkhonka 14, Moscow. NOTE: An asterisk after magazine title on any listing indicates English translation of article available at Brookhaven National Laboratory, Upton, N. Y.
- Akad Nauk Izvest OTN**—Bulletin of the Academy of Sciences, technical science series. Wolkhonka 14, Moscow
- Alta Frequenza**—Alta Frequenza. Associazione Elettronica Italiana, Via San Paolo 10, Milan, Italy
- Am Bld**—American Builder and Building Age. Monthly. \$3; single copies 50¢. Simmons-Boardman Pub. Corp., 30 Church St., New York
- Am Cer Soc Bul**—Bulletin of the American Ceramic Society. Monthly. \$6; single copies 50¢. American Ceramic Society, 2525 N. High St., Columbus 2, Ohio
- Am Cer Soc J**—Journal of the American Ceramic Society. Monthly. \$15; single copies \$1.50. American Ceramic Society, 2525 N. High St., Columbus, Ohio
- Am Chem Soc J**—Journal of the American Chemical Society. Monthly. \$12; single copy \$1. American Chemical Society, 60 E. 42nd St., New York
- Am Dyestuff Rep**—American Dyestuff Reporter. Bi-weekly. \$5. Howes Pub. Co., 1 Madison Ave., New York
- Am Gas J**—American Gas Journal. Monthly. \$3; single copies 35¢. American Gas Journal, Inc., 53 Park Place, New York
- Am Helic**—American Helicopter. American Helicopter Society, Bridgeport, Conn.
- Am J Phys**—American Journal of Physics. Monthly, except June, July, Aug. \$6; single copies \$1.50. American Association of Physics Teachers, 57 E. 55th St., New York 22, N. Y.
- Am J Roentgenology & Radium Therapy**—American Journal of Roentgenology & Radium Therapy. American Roentgen Ray Society, Detroit, Michigan
- Am J Sci**—American Journal of Science. Monthly. \$8; single copies 75¢. American Journal of Science, New Haven, Conn.
- Am Mach**—American Machinist. Biweekly. \$5; single copies 50¢. McGraw-Hill Pub. Co., Inc., 330 W. 42nd St., New York 18, N. Y.
- Am Met Soc Bul**—Bulletin of the American Meteorological Society. Monthly. \$3.50; single copies 35¢. American Meteorological Society, 5 Joy St., Boston, Mass.
- Am Mineral**—American Mineralogist. Bimonthly. \$4; single copies \$1. George Banta Pub. Co., Menasha, Wisc.
- Am Photog**—American Photography. Monthly. \$2.50; single copies 25¢. American Photographic Publishing Co., 607 Guardian Bldg., St. Paul 1, Minn.
- Am Rocket Soc J**—Journal of the American Rocket Society. Quarterly. \$4; single copies \$1. Rocket Society, Inc., 29 W. 39th St., New York 18, N. Y.
- Am Soc CE Proc**—Proceedings of the American Society of Civil Engineers. Monthly, except July & Aug. \$8; single copies \$1. American Society of Civil Engineers, 33 W. 39th St., New York
- Am Soc for Metals Trans**—Transactions of the American Society for Metals, 7301 Euclid Ave., Cleveland, Ohio
- Am Water Works Assn J**—Journal of the American Water Works Association. Monthly. \$7; single copies 75¢. American Water Works Association, 500 5th Ave., New York
- Amateur Wireless**—Amateur Wireless Journal of the Wireless Institute of Australia. 191 Queens St., Melbourne, Australia
- Amph Eng N**—Amphenol Engineering News. Monthly. Gratis. American Phenolic Corporation, 1830 S. 54th Ave., Chicago 50, Ill.
- Anais Acad Brasil Cien**—Anais da Academia Brasileira de Ciencias. Academia Brasileira de Ciencias, Rio de Janeiro, Brazil
- Anal Chem**—Analytical Chemistry. Monthly. \$3; single copies 50¢. American Chemical Society, 1155 16th St., N.W., Washington, D. C.
- Ann de Phys**—Annalen der Physik. Irregular. Johann Ambrosius Barth, Salonstrasse 18B, Leipzig, Germany
- Ann Geofis**—Annali di Geofisica. Istituto Nazionale di Geofisica, Citta Universitaria, Rome
- Ann Phys**—Annales de Physique. Bimonthly. Masson et Cie, 120 Boulevard Saint Germain, Paris, 6e
- Ann Radioelec**—Annales de Radioelectricite. Quarterly. 23 rue du Maroc, Paris
- Ann Telecommun**—Annales de Telecommunication. Monthly. Centre National d'etudes des Telecommunications, 24 rue Moret, Paris
- APCO Bul**—The APCO Bulletin Monthly. The Associated Police Communication Officers, Inc., Detroit, Michigan.

- Appl Sci Res—Applied Scientific Research, section A. Irregular. Martinus Nijhoff, The Hague, Holland
- Arch Elek—Archiv fur Elektrotechnik. Irregular. Springer-Verlag, Jegenstrasse 1, Berlin-Charlottenburg, Germany.
- Arch Elek Ubertragung—Archiv der Electrischen Ubertragung. Monthly. Hauptstrasse 61, Friedrichsdorf, Germany
- Arch Forum—Architectural Forum. Monthly. \$5.50; single copies \$1. Time, Inc., 350 5th Ave., New York
- Arch Record—Architectural Record. Monthly. \$4.50; single copies \$1. F. W. Dodge Corp., 119 W. 40th St., New York
- Arch Tech—Archiv fur technisches Messen. Monthly. Leibniz Verlag, Lotzbeckstrasse 2b, Munich, Germany
- Ark Mat Astr Fys—Archiv for Matematik, Astronomi och Fysik. Irregular. Royal Swedish Academy of Sciences, Stockholm, Sweden
- ASME Trans—Transactions of the American Society of Mechanical Engineers. Monthly, except Mar., June, Sept., Dec. \$12; single copies \$1.50. American Society of Mechanical Engineers, 29 W. 39th St., New York
- Assoc Suisse Elect Bul—Bulletin de l'Association Suisse des Electriciens. Seefeldstrasse 301, Zurich 8, Switzerland
- ASTM Bul—American Society for Testing Materials Bulletin, 8 times yearly. \$2.75; single copies 50¢. 20th & Northampton Sts., Easton, Pa.
- Astrophys J—Astrophysical Journal. Bimonthly. \$12; single copies \$3. University of Chicago Press, 5750 Ellis Ave., Chicago, Ill.
- Atti Accad Sci Torino—Transactions of the Academy of Science of Turin, Turin, Italy
- Atti della Accad Naz Lincei—Atti della Accademia Nazionale dei Lincei. Rendiconti, Classe di Scienze Fisiche, Matematiche e Naturali. Monthly Accademia Nazionale dei Lincei, Rome
- Audio Eng—Audio Engineering. Monthly. \$4; single copies 35¢. Radio Magazines, Inc., 342 Madison Ave., New York 17
- Audio Rec—Audio Record. Monthly. Gratis. Audio Devices, Inc., 444 Madison Ave., New York
- Aust J Inst Tech—Australian Journal of Instrument Technology. Bimonthly. 414 Collins St., Melbourne, Australia
- Aust J Sci Res Ser A—Journal of the Commonwealth Scientific & Industrial Research Organization. Quarterly. 314 Albert St., East Melbourne, Australia
- Automotive Ind—Automotive Industries. Semi-monthly. \$2; single copies 25¢. Chilton Co., 100 E. 42nd St., New York
- Aviation W—Aviation Week. Weekly. \$6; single copies 50¢. McGraw-Hill Pub. Co., 330 W. 42nd St., New York
- Avtomatika i Tele—Avtomatika i Telemekhanika. Monthly. Academy of Sciences, Moscow
- AWA Tech Rev—AWA Technical Review. Irregular. 555 Parramatta Road, Ashfield, N.S.W., Australia
- Bak Rev—Bakelite in Review. Quarterly. Bakelite Division, Union Carbide & Carbon Corp., 30 E. 42nd St., New York
- BBC Quart—B.B.C. Quarterly. British Broadcasting Co., Broadcasting House, London, W. C. 1
- BDDA—British declassified documents. H.M. Stationery Office, P.O. Box 569, Cornwall House, London, S.E. 1
- Beama J—Beama Journal. Monthly. British Electrical & Allied Manufacturers' Assn, 36 Kingsway, London, W.C. 2
- Bel Lab Rec—Bell Laboratories Record. Monthly. \$20. Bell Telephone Laboratories, Inc., 463 West St., New York
- Bell System Tech J—Bell System Technical Journal. Quarterly. \$1.50; single copies 50¢. American Telephone and Telegraph Co., 195 Broadway, New York
- Bibliography of Scientific and Industrial Reports—See PB listing
- Biochemical J—Biochemical Journal. The Biochemical Society, Liverpool, England
- Blast Furnace & Steel—Blast Furnace & Steel Plant. Monthly. \$2. Steel Publications, Inc., Box 477, Pittsburgh, Penna.
- Bone Joint Surg J—Journal of Bone and Joint Surgery. American Orthopedic Association, Boston, Mass.
- Brit Govt Pub—H.M. Stationery Office, P.O. Box 569, Cornwall House, London S.E. 1, or British Information Services, 30 Rockefeller Plaza, New York
- Brit Interplanetary Soc J—Journal of the British Interplanetary Society. 157 Friary Road, London S.E. 15
- Brit IRE J—Journal of the British Institution of Radio Engineers. Monthly. 9 Bedford Square, London W.C. 1
- Brit J Radiol—British Institute of Radiology. Monthly. 32 Welbeck St., London W. 1
- Brit Stand Inst—British Standards Institution. British Standards Institution, 24-8 Victoria St., London S.W. 1
- Broadcast Eng J—The Broadcast Engineers' Journal. Monthly. \$2.50; single copy 35¢. National Association of Broadcast Engineers and Technicians, 116-03 91st St., Richmond Hill 18, New York
- Broadcast N—Broadcast News. Bimonthly. \$2; single copies 50¢. Radio Corporation of America, Engineering Products Dept., Camden, New Jersey
- Brown Boveri Rev—Brown Boveri Review. Monthly. Brown, Boveri & Co., Ltd., Baden, Switzerland
- Bus Transportation—Bus Transportation. Monthly. \$5; single copies 50¢. McGraw-Hill Pub. Co., Inc., 330 W. 42nd St., New York
- Business W—Business Week. Weekly. \$6; single copies 25¢. McGraw-Hill Pub. Co., Inc., 330 W. 42nd St., New York
- CAA J—Civil Aeronautics Journal. Monthly. Civil Aeronautics Administration. 75¢. Superintendent of Documents, Washington 25, D.C.
- Cables & Trans—Cables et Transmission. Quarterly. Sotelec, 16 Rue de la Baume, Paris 8e
- Can Phil Soc Proc—Proceedings of the Cambridge Philosophical Society. Quarterly. Cambridge University Press, Bentley House, 200 Euston Road, London, N.W. 1
- Can J Res—Canadian Journal of Research. Monthly. National Research Council of Canada, Ottawa, Canada
- Can Min J—Canadian Mining Journal. Monthly. \$7.50; single copies \$1. National Business Publications, Ltd., Gardenvale, Quebec, Canada
- Cap—Cornell-Dubilier Capacitor. Monthly. Cornell-Dubilier Electric Corp., Hamilton Boulevard, S. Plainfield, N. J.
- Cenco—Cenco News Chats. Quarterly. Central Scientific Co., 1700 Irving Park Road, Chicago, Ill.
- Chalmers Tek Hog—Chalmers Tekniska Hogskolas Handlanger (Transactions of Chalmers University of Technology). Irregular. N. J. Gumperts Bokhandel, Gotenborg, Sweden
- Chem Age—The Chemical Age. Weekly. Benn Brothers, Ltd., Bouverie House, 154 Fleet St., London, E.C. 4
- Chem & Eng N—Chemical & Engineering News. Weekly. \$6; single copies 15¢. American Chemical Society, 60 E. 42nd St., New York
- Chem & Ind—Chemistry and Industry. Weekly. Society of Chemical Industry, 56 Victoria St., London S.W. 1

- Chem Eng—Chemical Engineering Progress. Monthly. \$6; single copies 75¢. American Institute of Chemical Engineers, 120 E. 41st St., New York
 Chem Ind—Chemical Industries. Monthly. \$5; single copies 60¢. Maclean-Hunter Pub. Corp., 522 5th Ave., New York 18
 Chem Soc J—Journal of the Chemical Society. Monthly. The Chemical Society, Burlington House, Piccadilly, London W. 1
 CIT—Theses submitted at California Institute of Technology, Pasadena, California
 Coal Age—Coal Age. Monthly. \$15. McGraw-Hill Pub. Co., Inc., 330 W. 42nd St., New York
 Columbia U' EE Dept—Theses submitted to Department of Electrical Engineering, Columbia University, N. Y.
 Comm N—Communication News. Quarterly. N. V. Philips' Glocilampenfabrieken, Eindhoven, Holland
 Comm Rev—Communication Review. Irregular. Communication Review, 16 Hunter St., Sydney, Australia
 Communications—Communications. Monthly. Bryan Davis Publishing Co., Inc., 52 Vanderbilt Ave., New York 17
 Compt Rend Acad Sci—Comptes Rendus hebdomadaires des Séances de l'Academie des Sciences. Weekly. Gauthier-Villars, 55 Quai des Grand-Augustins, Paris.
 Constr Methods—Construction Methods. Monthly. \$2; single copies 25¢. McGraw-Hill Pub. Co., Inc., 330 W. 42nd St., New York
 Council Sci Ind Res Aust J—Journal of the Council of Scientific and Industrial Research of Australia. Quarterly. Commonwealth Scientific and Industrial Research Organization, 314 Albert St., E. Melbourne, Victoria, Australia
 CQ—CQ. Monthly. \$3; single copies 35¢. Radio Magazines, Inc., 342 Madison Ave., New York
 Dan Acad Tech Sci Trans—Transactions of the Danish Academy of Technical Science. 1 Kommission Hos G.E.C. Gad, Vinumelskaftet 32, Copenhagen K, Denmark
 Distri Elect—Distribution of Electricity. Quarterly. 51-3 Hatton Garden, London E.C. 1
 DuPont Min—DuPont Magazine. Bimonthly. E. I. Du Pont de Nemours & Co., Wilmington, Del.
 Edison Elec Inst Bul—Edison Electric Institute Bulletin. Monthly. \$2. Edison Electric Institute, 420 Lexington Ave., New York
 Elec Comm—Electrical Communication. Quarterly. \$2; single copies 50¢. International Telephone & Telegraph Co., 67 Broad St., New York 4
 Elec Eng—Electrical Engineering. Monthly. \$12; single copies \$1.50. American Institute of Electrical Engineers, 500 5th Ave., New York 18
 Elec Mfg—Electrical Manufacturing. Monthly. Gage Pub. Co., 1250 Ave. of the Americas, New York 20
 Elec Rev—Electrical Review. Weekly. Electrical Review, Dorset House, Stamford St., London S.E. 1
 Elec Times—Electrical Times. Weekly. Sardinia House, Sardinia St., London, W.C. 2
 Elec West—Electrical West. Monthly. \$2; single copies 25¢. McGraw-Hill Pub. Co., 68 Post St., San Francisco 4, Calif.
 Elec World—Electrical World. Weekly. \$6; single copies 35¢. McGraw-Hill Pub. Co., Inc., 330 W. 42nd St., New York
 Electrician—Electrician. Weekly. 30s; single numbers £d. Benn Bros. Ltd., Bouvierie House, 154 Fleet St., London, E.C. 4
 Electricity (USSR)—Electricity (Elektrichestvo). Monthly. Cherkoski Per. 2, Moscow. NOTE: An asterisk after magazine title on any listing indicates English translation of article available at Brookhaven National Laboratory, Upton, N. Y.
 Electrochem Assoc Jpn J—Journal of the Electrochemical Association of Japan, Tokyo
 Electrochem Soc J—Journal of the Electrochemical Society. Monthly. \$10; single copies \$1. American Electrochemical Society, 235 W. 102nd St., New York 25, N. Y.
 Electrochem Soc Trans—Transactions of the Electrochemical Society. Semiannually. Single copies \$2 to members, \$7 to nonmembers. Electrochemical Society, 235 W. 102nd St., New York
 Electro-ind Bul—Bulletin of the Electro-Industry of Weak Currents. 10 issues annually. Pybny. Per 2. Moscow. NOTE: An asterisk after magazine title on any listing indicates English translation available at Brookhaven National Laboratory, Upton, N. Y.
 Electronic Eng—Electronic Engineering. Monthly. 28 Essex St., Strand, W.C. 2, London
 Electronics—Electronics. Monthly. \$6.00; single copies 75¢. McGraw-Hill Publishing Co., Inc., 330 W. 42nd St., New York 18
 Electronique—Electronique. Monthly. 21 Rue des Jeuneurs, Paris 2e
 Elektron—Electron. Monthly. 4, Anastasius-Grunstrasse, Linz, Austria
 Elektron Wiss und Tech—Das Elektron in Wissenschaft und Technik. Monthly. Hans Reich Verlag, Maxstadstr. 1, Garmisch-Partenkirche, Bavaria, Germany
 Elektrotech und Maschinenbau—Elektrotechnik und Maschinenbau. Springer-Verlag, Molkerbastei 5, Vienna I, Austria
 Elektrotech Zeit—Elektrotechnische Zeitschrift. Weekly. Verband Deutscher Elektrotechniker, Wegenerstr. 13/15, Wuppertal-Barmen, Germany
 Elektrotechnik—Elektrotechnik. Verlag Technik G.M.B.H., Dorotheenstrasse 41, Berlin, N.W. 7
 Elektrotechnika—Eletrotechnika. V. Honved-u. 22, Budapest, Hungary
 Elettronica—Elettronica i Televisione. 16 Via Garibaldi, Turin, Italy
 Elettrotecnica—Elettrotecnica. Semimonthly. Milan, Italy
 Endeavour—Endeavour. Imperial Chemical Industries. Quarterly. Nobel House, Buckingham Gate, London S.W. 1
 Eng & Min J—Engineering & Mining Journal. Monthly. \$3; single copies 50¢. McGraw-Hill Pub. Co., Inc., 330 W. 42nd St., New York
 Eng Digest—The Engineer's Digest. Monthly. Engineers Digest, Ltd., 120 Wigmore St., London W. 1
 Eng N—Engineering News-Record. Weekly. \$6; single copy 35¢. McGraw-Hill Pub. Co., Inc., 330 W. 42nd St., New York 18
 Engineer—Engineer. Weekly. 28 Essex St., Strand, London W.C. 2
 Engineering—Engineering. Weekly. 36 Bedford St., Strand, London W.C. 2
 Ericsson Rev—Ericsson Review. Irregular. Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden
 Ericsson Tech—Ericsson Technics. Irregular. Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden
 ETZ—See Electrotech Zeit. Monthly. Wuppertal, Germany
 Factory Management—Factory Management and Maintenance. Monthly. \$3; single numbers 35¢. McGraw-Hill Publishing Co., Inc., 330 W. 42nd St., New York 18
 Far Soc Dis—Discussions of the Faraday Society. Irregular. Aberdeen University Press, Ltd., 6 Upper Kirkgate, Aberdeen, Scotland
 Far Soc Trans—Transactions of the Faraday Society. Aberdeen University Press, Ltd., 6 Upper Kirkgate, Aberdeen, Scotland
 Fernmeldetechn Zeit—Fernmeldetechnische Zeitschrift. Monthly. Friedr. Vieweg & Sohn, Brunswick, Germany

- Fidelco Tec Bol—Boletin Tecnico de Fidelco, S.A. Monthly. Fidelco, S.A., Apartado 2619, Havana, Cuba
- FM-TV—FM-TV. Monthly. \$3; single copies 25¢. 264 Main St., Gt. Barrington, Mass.
- Food Ind—Food Industries. Monthly. \$3; single copies 35¢. McGraw-Hill Pub. Co., Inc., 330 W. 42nd St., New York
- Franc Elec Soc Bul—Bulletin de la Societe Francaise des Electriciens. Monthly. 8-14 Avenue Pierre Larousse, Malakoff (Seine), France
- Franklin Inst J—Journal of the Franklin Institute. Monthly. \$8; single numbers \$1. The Franklin Institute of the State of Pennsylvania, Benjamin Franklin Parkway at 20th St., Phila. 3, Pa.
- Frequenz—Frequenz. Monthly. Fachverlag Schiele & Schon, Leuschnerdamm 13, Berlin, S.O. 36, Germany
- Frontier—Frontier. Quarterly. Armour Research Foundation of Illinois Institute of Technology, Technology Center, Chicago 16, Ill.
- Funk und Ton—Funk und Ton. Verlag fur Radio-Foto-Kinotechnik G.m.b.H., Eichborndamm 141/167, Berlin-Borsigwalde, Germany
- Gas Age—Gas Age. Biweekly. \$4; single copies 25¢. Moore Pub. Co., Inc., 9 E. 38th St., New York.
- GEC Jour—G.E.C. Journal. Quarterly. The General Electric Co., Ltd., Magnet House, Kingsway, London, England
- GE Ham N—General Electric Ham News. Bimonthly. Gratis. General Electric, Tube Div., Electronics Dept., Schenectady, New York
- Gen Elec Rev—General Electric Review. Monthly. \$4; single numbers 40¢. General Electric Co., Schenectady 5, New York
- Gen Rad Exp—General Radio Experimenter. Monthly. General Radio Co., 275 Massachusetts Ave., Cambridge, Mass.
- Genie Civil—Le Genie Civil. Weekly. Genie Civil, 5 Rue Jules Lefebre, Paris 9e
- Glass Ind—Glass Industry. Monthly. \$3.50; single copies 35¢. Ogden Pub. Co., 55 W. 42nd St., New York
- Guide to Russian Sci Lit—Guide to Russian Scientific Periodical Literature. Monthly. Brookhaven National Laboratory, Upton, New York
- Ham Tips—Ham Tips (RCA). Irregular. Radio Corporation of America, Tube Dept., Harrison, N. J.
- Heat & Ven—Heating and Ventilating. Monthly. \$3; single copies 30¢. Industrial Press, 148 Lafayette St., New York
- Heating-Piping—Heating, Piping and Air Conditioning. Monthly. \$3; single issues 35¢. Keeney Pub. Co., 6 North Michigan Ave., Chicago, Ill.
- Helv Phys Acta—Helvetica Physica Acta. Irregular. Journal of the Societe Suisse de Physique. Editions Berkausser S.A., Basel, Switzerland
- HF—HF. Quarterly. 7 Rue de la Science, Brussels, Belgium
- HP Jour—Hewlett-Packard Journal. Monthly. Hewlett Packard Co., 395 Page Mill Road, Palo Alto, Calif.
- IEEE Proc—Proceedings of the Institution of Electrical Engineers. Monthly. Savoy Place, London W.C. 2
- Illum Eng—Illuminating Engineering. Monthly. \$10; single copies \$1.50. Illuminating Engineering Society, 51 Madison Ave., New York
- Ind & Eng Chem—Industrial and Engineering Chemistry. Monthly. \$4; single copies 75¢. American Chemical Society, 1155 16th St., N.W., Washington, D.C.
- Ind Plast Mod—Industrie des Plastiques Modernes. Les Publications Techniques Associes, 40 Rue du Calisec, Paris 8e
- Ind Radiography—Industrial Radiography. American Industrial and X-Ray Society, Chicago, Ill
- Indian J Phys—Indian Journal of Physics. Monthly. Indian Association for the Cultivation of Science, 210 Bowbazar St., Calcutta, India
- Inst Pet J—Journal of the Institute of Petroleum. Monthly. Institute of Petroleum, 26 Portland Place, London W. 1
- Instrumentation—Instrumentation. Quarterly. Minneapolis-Honeywell Regulator Co., Brown Instruments Div., Wayne & Windrim Avenues, Phila., Pa.
- Instruments—Instruments. Monthly. \$3. Instruments Pub. Co., 921 Ridge Ave., Pitts., Pa.
- Intl Proj—International Projectionist. Monthly. \$2.50; single copies 30¢. International Projectionist Pub. Co., Inc., 19 W. 44th St., New York 18
- Iodine Abstracts—Iodine Abstracts and Reviews. Chilean Iodine Educational Bureau, Inc., 120 Broadway, New York 5, N. Y.
- IRE Proc—Proceedings of the Institute of Radio Engineers. Monthly. \$18; single numbers \$2.25. Institute of Radio Engineers, Inc., 1 E. 79th St., New York
- IRE Proc (Australia)—Proceedings of the Institution of Radio Engineers Australia. Monthly. Science House, Essex and Gloucester Sts., Sydney, New South Wales, Australia
- Iron Age—Iron Age. Weekly. \$8; single numbers 35¢. Chilton Co., Inc., 100 E. 42nd St., New York 17
- Iron & Steel Eng—Iron and Steel Engineer. Monthly. \$7.50; single issues \$1.50. Association of Iron & Steel Engineers, 1010 Empire Bldg., Pitts., Pa.
- Iron & Steel Inst J—Journal of the Iron and Steel Institute. Monthly. Iron and Steel Institute, 4, Grosvenor Gardens, London, S.W. 1
- Isotopes Div Circ—Isotopes Division circulars. Atomic Energy Commission, Oak Ridge, Tennessee
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- Jour Ap Phys—Journal of Applied Physics. Monthly. \$7; single copies 70¢. American Institute of Physics, 57 E. 55th St., New York 22
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- Rubber Age—Rubber Age. Monthly. \$3; single copies 35¢. Palmerton Pub. Co., Inc., 250 W. 57th St., New York
- Ry Age—Railway Age. Weekly. \$6; single copies 50¢. Simmons-Boardman Publishing Corp., 30 Church St., New York 7
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Industrial Heating

Photoelectric Tubes, Devices

Remote Control

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Crystals

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Rectifiers

Regulation

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Communications

Frequency Modulation, Reception & Receivers

Loudspeakers & Baffles

Manufacturing Techniques

Microwaves, Receivers & Transmitters

Servicing, AM Receivers

Servicing, Analysis of Receivers

Television, Receivers & Reception

Transceivers

Tuning Aids, Receivers

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Tuning Aids, Receivers

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Frequency Modulation, Detectors

Microwaves, Detection

Pulse Circuits, Detectors

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Printed Circuits & Miniaturization

Vacuum Tubes, Miniature

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RECEPTION and RECEIVERS (AM), Servicing

See servicing

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Superheterodyne**

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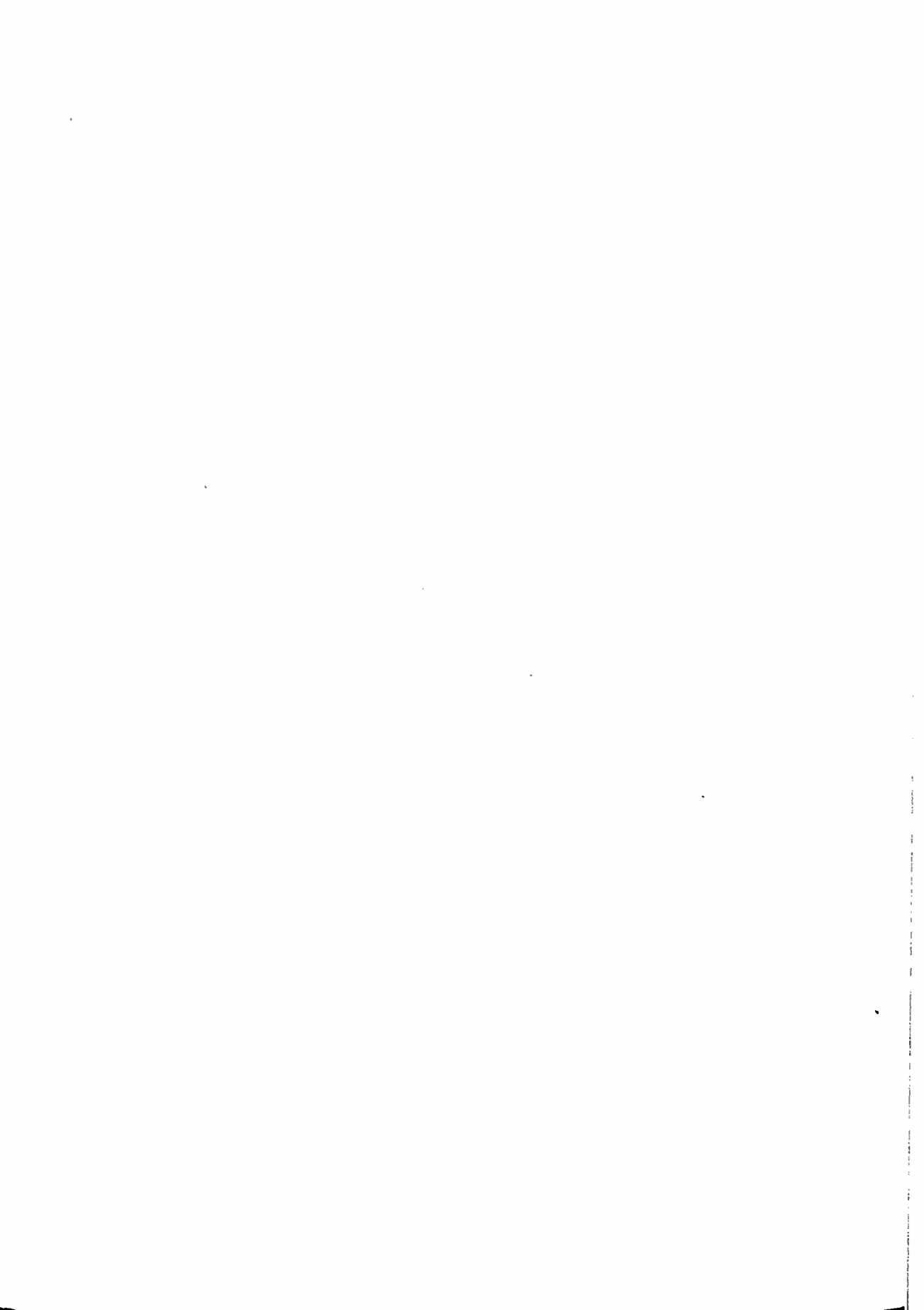
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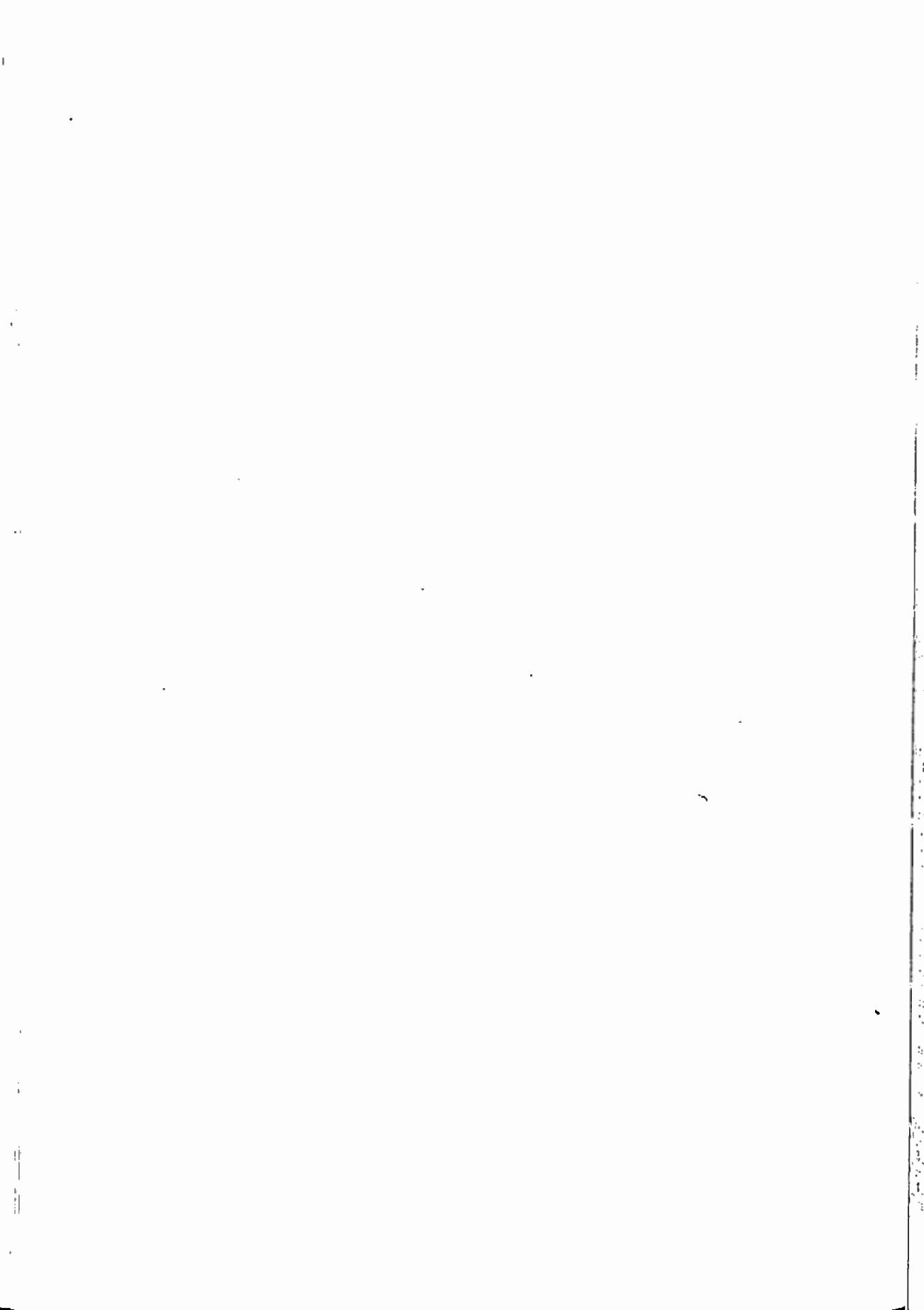
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THE ELECTRONIC ENGINEERING MASTER INDEX FOR 1947-1948

The Journal of the Franklin Institute:

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New York, Electronics Research Publishing Co., 1950. Price, \$19.50.

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Material for the *Index* is drawn from approximately 250 major international scientific magazines and journals published between January 1947 and January 1949. The listing of declassified U. S., British, and Canadian wartime documents and the listing of electronic patents extends the field covered by the index. To complete the indexing of technical material engineering books published in the U. S. during 1947 and 1948 as well as some foreign books are classified under the proper subject heading and listed in a separate bibliography.

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E. A. MECHLER

The Proceedings of the IRE:

This book is a comprehensive compilation of the literature in the field of electronics and related subjects. Covering the period 1947-1948, it contains 18,000 published paper titles and 5,500 electronic and allied subject patents. These references have been collected from 230 major scientific magazines from all over the world, as well as documents from government and university laboratories which have been declassified.

The reference and patents are arranged in terms of subject under headings such as Acoustics, Broadcasting, Instrumentation, to find

quickly the references in a given field. . . . A cumulative cross index of subjects is provided in this volume which covers not only the 1947-1948 edition, but also the 1925-1945 and 1946 editions. The list of patents is especially useful since this type of material is not normally available as classified in this book.

The Electronic Engineering Master Index is an invaluable reference book for anyone engaged in the research and development field, and is highly recommended by this reviewer.

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