

JAN

FEB 47-94

MAR 95-142

APR 143-212

MAY 213-256

JUN 257-300 28 Essex Street, Strand, London, W. C. 2

JUL 301-346

AUG 347-388

SEP 389-434

OCT 435-476

NOV 477-544 January to December 1952

DEC 545-588

Electronic Engineering

GENERAL INDEX

VOLUME XXIV

Page

A

| | |
|---|-----|
| Acceleration, Chart for Determining, by A. E. Maine .. | 377 |
| Acoustic Measurements, Equipment for, by D. E. L. Shorter, B.Sc., A.M.I.E.E., and W. Wharton, A.M.I.E.E.— | |
| Part 5—A Portable 7½ Watt Loudspeaker Amplifier | 7 |
| Activities and Equipment of an Industrial Electronics Laboratory, The, by G. H. Hickling, B.Sc., A.M.I.E.E.— | |
| Part 1 | 2 |
| Part 2 | 70 |
| Part 3 | 120 |
| Part 4 | 148 |
| Part 5 | 236 |
| Acton, J. P., The Single Pulse Dekatron | 48 |
| Add-on Counter, An | 376 |
| Adhesive Tape Resistors, by M. Lorant | 129 |
| Aerial Combining Unit at Daventry, The | 263 |
| Aircraft Vibration Research, by D. M. Corke | 518 |
| A.G.C. Amplifier with Constant Output, An, by A. B. Shone, B.Eng., A.M.I.E.E. | 374 |
| Allen, N. T., Ph.D., and K. S. W. Champion, Ph.D., A.Inst.P., A Timing Circuit for Controlling Related High Energy Pulses | 423 |
| Aluminium, The Anodic Oxidation of, by G. C. Thompson | 281 |
| American Electrocardiograph Design, Some Features of, by E. E. Suckling, M.Sc., A.M.I.E.E. | 243 |
| Amplification, Distributed, by A. Cormack, B.Sc. | 144 |
| Amplifier, A Design for a Constant Volume, by G. J. Pope | 464 |
| Amplifier, A Feedback-Pair Video, by V. H. Attree, B.Sc. | 504 |
| Amplifier, A Stable, High Quality Power, by E. J. Miller, B.Sc.(Eng.) | 366 |
| Amplifier with Constant Output, An A.G.C., by A. B. Shone, B.Eng., A.M.I.E.E. | 374 |
| Amplifier with a Useful Modification, The Differential, by B. F. Davies | 404 |
| Analysis and Automatic Recognition of Speech Sounds, The, by Caldwell P. Smith | 368 |
| Andrew, A. M., B.Sc., An Exponential Stimulator | 334 |
| Anodic Oxidation of Aluminium, The, by G. C. Thompson | 281 |
| Apparatus for Determining the Velocity of an Ultrasonic Pulse in Engineering Materials, An, by E. N. Gatfield | 390 |
| Applications of Electronics in the Textile Industry, The, by A. A. Atkins, B.Sc.(Eng.), A.M.I.E.E., A.M.I.Mech.E. | 530 |
| Armitage, M. D., B.Sc., A.Inst.P., Improved Stabilization from a Voltage-Regulator Tube | 568 |

Page

| | |
|--|-----|
| Atkins, A. A., B.Sc.(Eng.), A.M.I.E.E., A.M.I.Mech.E., The Applications of Electronics in the Textile Industry | 530 |
| Atkins, V. L., Recent Developments in Dielectric Heating | 200 |
| Atomic Exports | 449 |
| Atomic Heating System, An | 21 |
| Attenuator, A New Magnetic, by M. Lorant | 506 |
| Attree, V. H., B.Sc.— | |
| A Feedback-Pair Video Amplifier | 504 |
| A Simple Capacitance-Meter | 284 |
| Audio-Frequency Response in Two Reactance Elements, The Prediction of, by N. H. Crowhurst, A.M.I.E.E. | |
| Part 2—Circuits with Two Reactance Elements | 33 |
| Part 3—Circuits with Two Reactance Elements | 82 |
| Part 4—Step Circuits | 337 |
| Audio Frequency Spectrum Analysis, by S. V. Soanes, M.A., Ph.D.— | |
| Part 1 | 268 |
| Part 2 | 312 |
| Authority Aids Exports, Local | 492 |
| Automatic Circuit Checker, An, by V. J. Cox | 258 |
| Automatic Product Handling and Qualitative Control, by J. A. Sargrove, M.I.E.E., M.Brit.I.R.E. | 193 |
| Automatic Recognition of Speech Sounds, The Analysis and, by Caldwell P. Smith | 368 |
| Automatically Indicating the Termination of a Television Programme | 441 |
| Automobile Engineering Research, Electronics in, by J. R. Bristow, B.Sc., Ph.D., F.Inst.P., A.M.I.Mech.E. | 189 |

B

| | |
|--|-----|
| Bache, H., B.Eng., and F. A. Benson, M.Eng., A.M.I.E.E., M.I.R.E.— | |
| Mean-Noise Characteristics of Glow-Discharge Voltage-Regulator Tubes | 328 |
| Peak-Noise Characteristics of Glow-Discharge Voltage-Regulator Tubes | 278 |
| Balancing Aerial Coupling Circuits | 319 |
| Barnstaple Transmitting Station | 161 |
| Batching, Counting and Sorting, by G. C. Shore | 205 |
| Baxter, I. G., B.Sc., A.R.C.S., An Electrical Flowmeter for Recording Blood Flow | 162 |
| Bayliss, A. J., B.Sc., A Ten-Channel Pulse Code Telemetering System | 485 |
| Bayliss, J. W., B.Sc., A.M.I.E.E., An Electronic Bridge-Balance | 577 |
| BBC High Power Transmitter, Remote Control | 229 |

| | Page |
|--|---|
| BBC New Automatic Unattended Transmitter Technique, by F. A. Peachey, M.I.E.E., R. Toombs, B.Sc., A.M.I.E.E., and C. Gunn-Russell, M.A.— | |
| Part 1 | 446 |
| Part 2 | 490 |
| BBC New Premises for the | 489 |
| Beacons for Lighthouses and Light Vessels, Radio | 283 |
| Beauchamp, K. G., A.M.Brit.I.R.E., Linear Scanning with Wide-Angled Cathode-Ray Tubes | 176 |
| Benson, F. A., M.Eng., A.M.I.E.E., M.I.R.E.— | |
| Design of Series-Parallel Valve Voltage Stabilizers, The | 118 |
| Mean-Noise Characteristics of Glow-Discharge Voltage-Regulator Tubes, with H. Bache, B.Eng. | 328 |
| Peak-Noise Characteristics of Glow-Discharge Voltage-Regulator Tubes, with H. Bache, B.Eng. | 278 |
| Study of the Characteristics of Glow-Discharge Voltage-Regulator Tubes, A— | |
| Part 1 | 396 |
| Part 2 | 456 |
| Beta-Particle and Gamma-Ray Thickness Gauges, by M. G. Hammett, M.I.E.E., A.M.I.Mech.E., and H. W. Finch | 536 |
| Biological Experiments, A Heart-Rate Recorder for, by W. E. Boyd, M.A., M.D., M.Brit.I.R.E., and W. R. Eadie | 102 |
| Bombay Radio Exhibition | 25 |
| Booth, A. D., D.Sc., Ph.D., F.Inst.P., The Physical Realization of an Electronic Digital Computer | 442 |
| BOOK REVIEWS— | 42, 90, 138, 182, 252, 296, 340, 382, 432, 472, 510 |
| A.C./D.C. Test Meters | 140 |
| Advanced Practical Physics for Students | 252 |
| Advanced Theory of Waveguides | 432 |
| Amplifiers: The Why and How of Good Amplification | 585 |
| Antennas: Theory and Practice | 296 |
| Application of the Electronic Valve in Radio Receivers and Amplifiers—Volume II | 433 |
| Audio Handbook No. 2—Feedback | 183 |
| Autobiography of Robert A. Millikan | 584 |
| Automatic Feedback Control | 474 |
| Automatic and Manual Control | 90 |
| Basic Electron Tubes | 182 |
| Cathode-Ray Oscillographs | 433 |
| Colour Cinematography | 510 |
| Die Magnetische Schallaufzeichnung in Theorie und Praxis (Magnetic Sound Recording in Theory and Practice) | 510 |
| Dimensional Analysis | 90 |
| Echo Sounding at Sea (British Practice) | 432 |
| Electrical Communications Experiments | 586 |
| Electrical Engineering—Theory and Practice | 434 |
| Electrical Engineer's Reference Book | 254 |
| Electrical Instruments and Measurements | 585 |
| Electric Fuses | 138 |
| Electricity Meters and Instrument Transformers | 42 |
| Electronics | 297 |
| Electrons and Holes in Semiconductors | 434 |
| Elektromaschinen, Band II (Electrical Machines, Volume II) | 433 |
| Elementary Mathematics | 140 |
| Facts from Figures | 140 |
| F.B.I. Register of British Manufacturers 1951/52 | 140 |
| Foundations of Wireless | 384 |
| Fundamentals of Technical Electricity | 138 |
| Further Laboratory and Workshop Notes | 510 |
| General Network Analysis | 342 |
| Harwell—The First Five Years | 91 |
| Industrial High Vacuum | 510 |
| Industrial Magnetic Testing | 384 |
| Introduction to Electronic Circuits | 43 |
| Introductory Nuclear Physics | 297 |
| Laboratory Instruments—Their Design and Application | 340 |
| Magnetron, The | 340 |
| Materials Technology for Electron Tubes | 138 |
| Measurement of Radio Isotopes, The | 253 |
| Microphones | 434 |
| Oscilloscope Book, The | 43 |
| Oxide-Coated Cathode, The | 382 |
| Power System Analysis | 585 |
| Practical Electrician's Pocket Book, The | 139 |
| Principles of Alternating Currents | 432 |
| Principles of Radio | 383 |
| Printed Circuit Techniques: An Adhesive Tape-Resistor System | 383 |
| Prism and Lens Making | 383 |
| Proceedings of a Conference on Centimetric Aerials for Marine Navigational Radar | 254 |
| Quarterly Journal of Mechanics and Applied Mathematics | 92 |
| Radar and Electronic Navigation | 253 |
| Radio and Television Receiver Troubleshooting and Repair | 472 |
| Radio Amateur's Handbook, The | 433 |
| Radio Installations: Their Design and Maintenance | 90 |
| Radio Interference Suppression | 585 |
| Radioisotopes—Industrial Applications | 341 |
| Reports on Progress in Physics, Vol. XIV, 1951 | 42 |
| Reports on Progress in Physics, Vol. XV | 472 |
| Scientific Research in British Universities 1951-52 | 586 |
| Semiconducting Materials | 90 |
| Servomechanisms (Selected Government Research Reports, Vol. V) | 382 |
| Sound Insulation and Room Acoustics | 252 |
| Sound Recording and Reproduction | 511 |
| Structural Adhesives | 382 |
| Technological Applications of Statistics | 474 |
| Television and F.M. Antenna Guide | 139 |
| Television and Other Receiving Antennas | 91 |

| | Page |
|--|------|
| Television Master Antenna Systems | 183 |
| Television Principles and Practice | 473 |
| Television Receiver Practice | 434 |
| Theoretische Elektrotechnik III. Grundzuge der Theorie Elektrischer Maschinen. (Theoretical Electrical Engineering III. Fundamentals of the Theory of Electrical Machines) | 584 |
| Theory and Design of Valve Oscillators | 340 |
| Thermionic Valve Circuits | 472 |
| Vacuum Physics | 182 |
| Vade Mecum 1952 | 434 |
| Wireless and Electrical Trader Yearbook, 1952 | 384 |
| Wireless Fundamentals | 511 |
| Boyd, W. E., M.A., M.Brit.I.R.E., and W. R. Eadie | |
| Heart-Rate Recorder for Biological Experiments, A | 102 |
| " Bread-board " Construction, Improved | 425 |
| Bridgewater, T. H., M.I.E.E.— | |
| Paris-London Television | 410 |
| Recent Developments in Television Outside Broadcasting | 158 |
| Brierley, R. W., An Electronic Coin Sorting Machine | 22 |
| Briggs, P. H., B.Sc., An Industrial Servo Mechanism | 58 |
| Brimley, K. J., B.Sc., and J. McAuslan, B.Sc., A Dekatron Timer | 406 |
| Bristow, J. R., B.Sc., Ph.D., F.Inst.P., A.M.I.Mech.E., Electronics in Automobile Engineering Research | 189 |
| British Standards, Recent | 346 |
| Brockelsby, C. F., A.R.C.S., B.Sc., A.M.I.E.E., The Wien Bridge and Some Applications | 450 |
| Brown, D. E.— | |
| Emission Stabilizer with D.C. Heater Supply | 171 |
| Very High Impedance Valve Voltmeter, A, with K. Kandiah | 320 |

C

| | |
|---|-----|
| Calibration Bars for Single Sweep Time-Bases, by M. Gregson | 239 |
| Calibrator, A Self-Interpolating Crystal, by D. Cooke | 23 |
| Canadian Television | 449 |
| Capacitance-Meter, A Simple, by V. H. Attree, B.Sc. | 284 |
| Capacitor Grader, Robot | 77 |
| Cathode-Ray Tubes, Linear Scanning with Wide-Angled, by K. G. Beauchamp, A.M.Brit.I.R.E. | 176 |
| Catton, W. T., M.Sc., An Electronic Time-Base and Stimulator Unit | 380 |
| Champion, K. S. W., Ph.D., A.Inst.P., and N. L. Allen, Ph.D., A Timing Circuit for Controlling Related High Energy Pulses | 423 |
| Changing the Phase of a Low Frequency Sinusoid, by P. Huggins, A.M.Brit.I.R.E. | 462 |
| Chang Sing, Lt.-Col., B.Sc., and Capt. Chu Yao-I, B.Sc., Some New Multivibrators | 270 |
| Characteristics of Glow-Discharge Voltage-Regulator Tubes, A Study of the, by F. A. Benson, M.Eng., Ph.D., A.M.I.E.E., M.I.R.E.— | |
| Part 1 | 396 |
| Part 2 | 456 |
| Chart for Determining Acceleration, by A. E. Maine | 377 |
| Checker, An Automatic Circuit, by V. J. Cox | 258 |
| Chemical Analysis, A Precision Polarograph for, by H. D. Dell, Ph.D., and C. H. R. Gentry, B.Sc., A.R.I.C. | 152 |
| Chippendale, R. A., B.Sc., and J. A. Jenkins, M.Eng., A.Inst.P., Some New Image Converter Tubes | 302 |
| Chord Organ, The, A New Domestic Musical Instrument, by Alan Douglas | 562 |
| Chu Yao-I, Capt., B.Sc., and Lt.-Col. Chang Sing, B.Sc., Some New Multivibrators | 270 |
| Circuits, Some Recently Developed Cold Cathode Glow Discharge Tubes and Associated, by G. H. Hough, Ph.D., and D. S. Ridler— | |
| Part 1 | 230 |
| Part 2 | 230 |
| Clavioline, The, by G. H. Hillier | 154 |
| Coils, The Required Figure of Merit of Frame Deflector, by E. T. Emms, B.Sc., A.R.C.S. | 238 |
| Coin Sorting Machine, An Electronic, by R. W. Brierley | 22 |
| Cold Cathode Glow Discharge Tubes and Associated Circuits, Some Recently Developed, by G. H. Hough, Ph.D., and D. S. Ridler— | |
| Part 1 | 152 |
| Part 2 | 230 |
| Part 3 | 272 |
| Cold-Cathode Triode, A Variable Voltage Stabilizer Employing a, by F. S. Goulding, B.Sc. | 493 |
| Combined Timer and Cycle Counter, A, by P. Huggins, A.M.Brit.I.R.E. | 578 |
| Combining Circuits, Transmitter, by A. R. A. Rendall, Ph.D., B.Sc., M.I.E.E., and G. A. Hunt, B.Sc. | 550 |

| | Page |
|--|------|
| COMMENTARIES— | |
| BBC Charter | 213 |
| BBC Annual Report | 477 |
| British Contribution to Television Conference | 143 |
| Copyright Law | 545 |
| "Engineer," The | 1 |
| Franco-British Television | 347 |
| Marconi Jubilee | 143 |
| National Research Trust Committee | 389 |
| Nineteenth National Radio Show | 435 |
| Nineteenth National Radio Show | 213 |
| Physical Society's Exhibition | 213 |
| R.E.C.M.F. Exhibition | 301 |
| Report of the Advisory Council on Scientific Policy | 257 |
| Report of the Broadcasting Commission | 95 |
| Royal Commission on Awards to Inventors | 389 |
| Society of British Aircraft Constructors' Exhibition | 435 |
| Society of British Aircraft Constructors' Exhibition | 47 |
| Technical Education | 1 |
| Television | 389 |
| Training of Engineers | 321 |
| Commerce, Television in | 27 |
| Comparator, An Optical Projection, by W. A. Gold, B.Sc. | 220 |
| Comparator, A Simple Valve, by B. C. Foster | 426 |
| Complex Quantities, The Resolution of, by N. H. Crowhurst, A.M.I.E.E. | 28 |
| Computers, On the Background of Pulse-Coded, by T. J. Ray, M.A., B.Sc., A.M.I.E.E.— | 66 |
| Part 1 | 28 |
| Part 2 | 66 |
| Computer, The Physical Realization of an Electronic Digital, by A. D. Booth, D.Sc., Ph.D., F.Inst.P. | 442 |
| Control of B.B.C. High-Power Transmitter, Remote | 229 |
| Control Tower, A New | 503 |
| Cooke, D., Self-Interpolating Crystal Calibrator, A | 23 |
| Copper, Temperature/Resistance Chart for Electrical, by A. E. Maine | 111 |
| Corbyn, D. B., B.Sc., A.M.I.E.E., Special Rectifier Circuits | 418 |
| Corke, D. M., Aircraft Vibration Research | 518 |
| Cormack, A., B.Sc., Distributed Amplification | 144 |
| Counter, A Direct Reading Mains Frequency Cycle, by P. Huggins, A.M.Brit.I.R.E. | 276 |
| Counter, An Add-on | 376 |
| Counter Tubes, Geiger, A Production Range, by N. B. Balaam, B.Sc., A.M.I.E.E. | 558 |
| Counting-rate Meters, by G. D. Smith | 14 |
| Counting and Sizing of Particles | 544 |
| Coupling Circuits, Balancing Aerial | 319 |
| Cox, V. J., Automatic Circuit Checker, An | 258 |
| Crompton, E. W., A V.H.F. Multi-band Panoramic Receiver | 478 |
| Crowhurst, N. H., A.M.I.E.E., The Prediction of Audio-Frequency Response— | 33 |
| No. 2: Part 2 | 82 |
| " : Part 3 | 241 |
| No. 3 | 337 |
| No. 4 | 426 |
| The Resolution of Complex Quantities | 23 |
| Crystal Calibrator, A Self-Interpolating, by D. Cooke | 165 |
| Crystal Clutch, A High Speed, by M. Lorant | 76 |
| Crystal Constants, Piezo Electric, by W. R. Hinton, A.M.I.E.E. | 10 |
| Crystal Electrodes by Vacuum Coating, The Deposition of V.F., by L. Holland | 10 |
| D | |
| Daventry, The Aerial Mixing Circuit at | 263 |
| Davies, B. F., The Differential Amplifier with a Useful Modification | 404 |
| D.C. Heater Supply, Emission Stabilizer with, by D. E. Brown | 171 |
| Deards, Sidney R., Matrix Theory Applied to Thermionic Valve Circuits | 264 |
| Deflector Coils, The Required Figure of Merit of Frame, by E. T. Emms, B.Sc., A.R.C.S. | 238 |
| Dekatron, The Single Pulse, by J. R. Acton | 48 |
| Dekatron C.R.O., Time Marker, A, by J. H. L. McAuslan, B.Sc. | 567 |
| Dekatron Timer, A, by J. McAuslan, B.Sc., and K. J. Brimley, B.Sc. | 408 |
| Deighton, M. O., B.Sc., N. F. Moody, A.M.I.E.E., and G. J. R. Macluskus, B.Sc., Millimicrosecond Pulse Techniques— | 214 |
| Part 1.—An Introduction to Techniques and the Development of Basic Circuits | 287 |
| Part 2.—A High Speed Oscillograph | 19 |
| Dell, H. A., Ph.D., Precision Polarograph for Chemical Analysis, A | 192 |
| Dental Reflectometer, Precision | 192 |

| | Page |
|---|---|
| Deposition of H.F. Crystal Electrodes by Vacuum Coating, The, by L. Holland | 10 |
| Design for a Constant Volume Amplifier, A, by G. J. Pope | 464 |
| Design of Series-Parallel Valve Voltage Stabilizers, The, by F. A. Benson, M.Eng., A.M.I.E.E., M.I.R.E. | 118 |
| Design of Television Frame Output Stages, The Theory and, by Edward T. Emms, B.Sc., A.R.C.S. | 96 |
| Design of Wire Wound Resistors, The, by K. L. Selig, A.M.I.E.E. | 372 |
| Determining the Velocity of an Ultrasonic Pulse in Engineering Materials, An Apparatus for, by E. N. Gatfield | 390 |
| Dialled Despatches | 212 |
| Diaphragm Type Micromanometer, An, by Michael Lorant | 80 |
| Dielectric Heating, Recent Developments in, by V. L. Atkins | 200 |
| Differential Amplifier with a Useful Modification, by B. F. Davies | 404 |
| Diode Valve Voltmeter Errors, by G. D. Morgan, Ph.D. | 575 |
| Direction Finding, Radio | 6 |
| Direct Reading Mains Frequency Cycle Counter, A, by P. Huggins, A.M.Brit.I.R.E. | 276 |
| Discrimination, Pulse Brightening, by A. L. Whitwell, A.M.Brit.I.R.E. | 362 |
| Distributed Amplification, by A. Cormack, B.Sc. | 144 |
| Dot-Interlaced Television, by G. G. Gouriet, A.M.I.E.E. | 166 |
| Douglas, Alan, The Chord Organ, A New Domestic Musical Instrument | 562 |
| Dummer, G. W. A., M.B.E., M.I.E.E., The Engineering of Radar Equipments | 348 |
| E | |
| Eadie, W. R., and W. E. Boyd, Heart-Rate Recorder for Biological Experiments, A | 102 |
| Eadon-Clarke, C. E., Assoc.I.E.E., High Frequency Heating Practice | 210 |
| Electrical Flowmeter for Recording Blood Flow, An, by I. G. Baxter, B.Sc., A.R.C.S. | 162 |
| Electrocardiograph Design, Some Features of American, by E. E. Suckling, M.Sc., A.M.I.E.E. | 243 |
| "Electrodynamic" Ammeter for V.H.F., by M. Lorant | 579 |
| Electro-mechanical Voltage Stabilizer, A Simple, by J. V. P. Long | 26 |
| Electron Tubes for Industry and Research, by C. C. Gee | 540 |
| Electronic Bridge-Balance, An, by J. W. Bayliss, B.Sc., A.M.I.E.E. | 577 |
| Electronic Coin Sorting Machine, An, by R. W. Brierley | 22 |
| Electronic Digital Computer, The Physical Realization of an, by A. D. Booth, D.Sc., Ph.D., F.Inst.P. | 442 |
| ELECTRONIC EQUIPMENT— | 44, 88, 136, 298, 344, 386, 430, 470, 512 |
| Alexander Equipment's Decals | 512 |
| Arcoelectric Signal Lamp Holder | 582 |
| Automatic Balancing Three-Channel Strain Gauge Bridge | 513 |
| Aviscope, The | 246 |
| Cable Sorting Machine, Automatic | 387 |
| Cable System, New Television Camera | 431 |
| Camera Drive Unit, Cossor | 471 |
| Capacitors, Dubilier | 179 |
| Capacitors, Electrolytic | 181 |
| Capacitors, Hunt's "Thermic" Miniature | 387 |
| Capacitors, Miniature Silvered Ceramic | 89 |
| Capacitors, Precision Variable | 250 |
| Cartridge, Cosmocord G.P.29 | 179 |
| Cathode-Ray Tube, Aluminized | 180 |
| Cathode-Ray Tube, G.E.C. New | 298 |
| Cathode-Ray Tube, Low Voltage Focus Glass | 137 |
| Cathode-Ray Tube, Mullard Rectangular | 430 |
| Cathode-Ray Tube, RCA-12SP7 12 in. | 44 |
| Co-Axial Connectors, Precision | 299 |
| Co-Axial Outlet Box, Wolsey | 430 |
| Co-Axial Socket, Chassis Mounting | 386 |
| Colour Filter, The "Elpico" | 299 |
| Components, New Bulgin | 178 |
| Component, Teledictor | 387 |
| Constant Frequency Supply Equipment | 512 |
| Continuous pH Recorder/Controller | 582 |
| Dispersion B.25S | 88 |
| Dose Rate Meter, Portable | 247 |
| Earphone, New Miniature Magnetic | 137 |
| Electrothermal Rubber Sheeting | 583 |
| Filter Characteristics, Equipment for the Examination of Flux, "Telecene" | 246 |
| Frequency Measuring Equipment, Precision | 44 |
| Germanium Diode GD4 | 250 |
| Gutter Clip, Wolsey | 344 |
| Hearing Aid, New Amplivox | 386 |
| Helvin Cable Straps | 44 |
| Hour Meters, Venner | 512 |
| Hygrometers, Gregory | 299 |
| Industrial Counter, S.T.C. | 88 |
| Ionization Test Set, Hivolt | 470 |
| L.E.M. Silvered Mica Capacitor | 345 |
| | 513 |

| | Page | | Page |
|---|--------------------|--|------|
| Leland-Maury Electronic Auscultoscope | 582 | Emission Stabilizer with D.C. Heater Supply, by D. E. Brown | 171 |
| Loudspeakers, Plessey Shrouded | 44 | Emms, T., B.Sc., A.R.C.S.— The Theory and Design of Television Frame Output Stages | 96 |
| Loudspeakers, The "Seraph" | 471 | The Required Figure of Merit of Frame Deflector Coils | 238 |
| Magnetic Material, New S.T.C. | 431 | Engineering Centre, The | 27 |
| Magnetic Tape Recorder, E.M.I. Portable, 431 | 180 | Engineering of Radar Equipments, The, by G. W. A. Dummer, M.B.E., M.I.E.E. | 348 |
| Magnetostriction Delay Line | 180 | Engine Indicators, Recent Developments in Electronic, by S. Hill, M.Sc. | 207 |
| Magnets, Sintered Permanent | 180 | Equipment for Acoustic Measurements, by D. E. L. Shorter, B.Sc., A.M.I.E.E., and W. Wharton, A.M.I.E.E.— Part 5.—A Portable 7½ Watt Loudspeaker Amplifier | 7 |
| Magnification Meter | 431 | Evans, C., Television I.F. Characteristics | 378 |
| Material, New Mycalex | 345 | Exhibition, Bombay Radio | 25 |
| Megistor, Morgan | 180 | Exhibition, The 36th Physical Society | 245 |
| Micanite, High Heat | 344 | Exponential Stimulator, An, by A. M. Andrew, B.Sc. | 334 |
| Microphone, Combined Hand-Desk | 181 | | |
| Microphone, Moving Coil | 88 | F | |
| Microphone, The 4035-A | 299 | Fedida, S., B.Sc., A.C.G.I., A.M.I.E.E., A System of Pulse Code Modulation | 356 |
| Microphone, Tube | 178 | Feedback in Time-Base Circuits, by A. E. Ferguson, M.E.E., A.M.I.E.E. Aust. | 280 |
| Multi-Winder, Douglas Automatic | 250 | Feedback-Pair Video Amplifier, A, by V. H. Attree, B.Sc. | 504 |
| Nyquist Diagram Plotter | 44 | Ferguson, A. E., Feedback in Time-base Circuits | 280 |
| Oscillator, Electronic | 344 | Finch, H. W., and M. G. Hammett, M.I.E.E., A.M.I.Mech.E., Beta-Particle and Gamma-Ray Thickness Gauges | 536 |
| Oscillograph, Cossor Portable | 299 | Fitzgerald, J. A., A.M.I.E.E., A New Frequency Divider | 413 |
| Oscilloscope, A Miniature | 386 | Flight Simulators | 395 |
| Oscilloscope, M950 Universal | 386 | Flowmeter, A Recording and Integrating, by D. C. Pressey, B.Sc. | 112 |
| Photo-Electric Yarn Irregularity Gauge | 248 | F.M. Broadcast Receivers, Proposed Test Procedure for, by D. Maurice, Ing.E.S.E., A.M.I.E.E., and G. F. Newell, and J. G. Spencer | 106 |
| Photometer, "EEL" Flame | 247 | Foster, B. C., A Simple Valve Comparator | 220 |
| Photo Slubber, "Lindra" | 179 | Frame Output Stages, The Theory and Design of Television, by Edward T. Emms, B.Sc., A.R.C.S. | 96 |
| Plug, "Cinch" Wander | 181 | Franco-British Joint Television Programme | 361 |
| Plug, Television/Radar | 344 | Frequency Divider, A New, by J. A. Fitzgerald, A.M.I.E.E. | 413 |
| Potentiometer, Sub-Miniature | 249 | | |
| Potentiometer Type D-72-A, D.C. | 246 | G | |
| Power Supply Type 698B | 89 | Gain Stabilized Mixer, A, by M. Lorant | 453 |
| Power Unit, A Stabilized A.C. | 251 | Gatfield, E. N., An Apparatus for Determining the Velocity of an Ultrasonic Pulse in Engineering Materials | 390 |
| Power Unit, Trans booster Regulated Voltage | 387 | Gee, C. C., Electron Tubes for Industry and Research, | 540 |
| Precision Drive, "Microdual" Two-Speed | 137 | Geiger Counter Tubes, A Production Range, by N. B. Balaam, B.Sc., A.M.I.E.E. | 558 |
| Proportional Controller | 45 | Generator, A Hand Valve Pulse, by D. A. Levell, B.Sc. | 507 |
| Radar, Cossor Mark II Marine | 430 | Generator, A Single Valve Delayed Pulse, by P. A. V. Thomas, B.Sc. | 132 |
| Radio Cabinet of Plastic | 178 | Gentry, C. H. R., B.Sc., A.R.I.C., A Precision Polarograph for Chemical Analysis | 19 |
| Recorder, Model DI Portable | 470 | German, J. P., M.S., A Timed R.C. Circuit | 461 |
| Recording Tube, High Speed | 431 | Glass Bulbs, The Quantity Production of | 327 |
| Remote Control for Transmitter/Receiver, Electrical | 298 | Glow Discharge Tubes and Associated Circuits, Some Recently Developed Cold Cathode, by G. H. Hough, Ph.D., and D. S. Ridler— Part 1 | 152 |
| Repeater Testing Equipment | 251 | Part 2 | 230 |
| Resistance Thermometer Controller | 136 | Part 3 | 272 |
| Resistor, Miniature Wire-Wound | 179 | Glow-Discharge Voltage-Regulator Tubes, A Study of the Characteristics of, by F. A. Benson, M. Eng., Ph.D., A.M.I.E.E., M.I.R.E.— Part 1 | 396 |
| R.F. Attenuation, Measurement of | 248 | Part 2 | 456 |
| Rotary Switches | 178 | Glow-Discharge Voltage Regulator Tubes, Mean Noise Characteristics of, by H. Bache, B.Sc., and F. A. Benson, M.Eng., A.M.I.E.E., M.I.R.E. | 328 |
| Saunders-Roe Technograph Foil Strain Gauge | 513 | Glow-Discharge Voltage-Regulator Tubes, Peak-Noise Characteristics of, by H. Bache, B.Eng., and F. A. Benson, M.Eng., A.M.I.E.E., M.I.R.E. | 278 |
| Signal Generator, Television Standard | 250 | Goldup, T. E., M.I.E.E., Industrial Applications of Electronics | 188 |
| Signal Lamp Holder, Arcoelectric | 299 | Gold, W. A., B.Sc., An Optical Projection Comparator | 27 |
| Signal Strength Meter, V.H.F. | 89 | Goulding, F. S., B.Sc., A Variable Voltage Stabilizer Employing a Cold Cathode Triode | 493 |
| "Slow Motion" Stroboscope | 512 | Gouriet, G. G., A.M.I.E.E., Dot-Interlaced Television | 166 |
| Soldering Iron, Miniature | 137 | A Method of Measuring Television Picture Detail | 308 |
| Soldering Irons, Wolf Electric | 89 | | |
| Standing Wave Meter Model 2 | 470 | | |
| Stentorian Pressure Type Tweeter Unit | 583 | | |
| Stop Watch Type MS. Venner | 45 | | |
| Suppressor, E.M.I. Mains | 345 | | |
| Switch, Arcoelectric Toggle | 471 | | |
| Switchboard Termination Unit | 583 | | |
| Switching Unit, Delayed Action | 387 | | |
| Switch, New Arcoelectric | 298 | | |
| Synchronous Motor, Venner | 88 | | |
| Tapes, Self-Adhesive | 136 | | |
| Telconal | 251 | | |
| Television Components, Plessey | 181 | | |
| Time Meter, Industrial | 181 | | |
| Toggle Switches, Painton | 45 | | |
| Transformers and Chokes, Totally Enclosed | 181 | | |
| Transformers, Push-Pull Output | 251 | | |
| Transmission Test Trolley | 296 | | |
| Transmitting Valves | 583 | | |
| Truvox Tape Deck | 249 | | |
| U.H.F. Measuring Equipment | 179 | | |
| Ultrasonic Thickness Gauge | 247 | | |
| Vacuum Gauge, Combined Philips-Pirani | 471 | | |
| Valveholders, Ediswan Clix | 251 | | |
| Valve Routiner | 344 | | |
| Valves, Ferranti Ceramic | 248 | | |
| Valves, The Testvac and Ceramic | 247 | | |
| Valve Voltmeter CT54, Portable | 298 | | |
| Vapour Detector, Hanovia Mercury | 45 | | |
| V.H.F. Walkie-Talkie, Pye Miniature | 180 | | |
| Vibration Generator | 137 | | |
| Voltage Indicators, Neon | 249 | | |
| Waveform Monitor, High Speed Recurrent | 299 | | |
| Winding Wires, P.T.F.E. | 500 | | |
| Electronic High Voltage Insulation Tester, An, by L. R. Hulls, B.Sc., A.Inst.P., and K. A. Mackenzie, A.M.I.E.E., A.M.Brit.I.R.E. | 529 | | |
| Electronic Inspection of Wire Ropes | 78 | | |
| Electronic Multiplier, An, by M. J. Somerville, B.Sc. | 52 | | |
| Electronic Servo Simulator, An, by N. T. van der Walt, B.Sc. | 466 | | |
| Electronic Square-Law Circuit for Use with a Graphic Recorder, An, by M. J. Tucker, B.Sc. | 535 | | |
| Electronic Sterilization of Foods | 380 | | |
| Electronic Time-Base and Stimulator Unit, An, by W. T. Catton, M.Sc. | 65 | | |
| Electronic Voltage Stabilizer, An, by C. Morton, B.Sc. | 189 | | |
| Electronics in Automobile Engineering Research, by J. R. Bristow, B.Sc., Ph.D., F.Inst.P., A.M.I.Mech.E. | 133, 187, 445, 517 | | |
| Electronics in Industry Supplement | 322 | | |
| Electronics in Naval Research | 526 | | |
| Electronics in Resistance Welding, by P. Huggins, A.M.Brit.I.R.E. | 530 | | |
| Electronics in the Textile Industry, The Applications of, by A. A. Atkins, B.Sc.(Eng.), A.M.I.E.E., A.M.I.Mech.E. | | | |

| | Page |
|---|------|
| Gramophone Pick-up Pre-Amplifier, A, by E. J. Miller, B.Sc. | 498 |
| Graphic Recorder, An Electronic Square-Law Circuit for Use with a, by M. J. Tucker, B.Sc. | 466 |
| Gray, J. L., B.Sc., Industrial Applications of an Electronic Position Control Servo-Mechanism | 196 |
| Gregson, M., Calibration Bars for Single Sweep Time-Bases | 239 |
| Gunn-Russell, C., M.A., F. A. Peachey, M.I.E.E., and R. Toombs, B.Sc., A.M.I.E.E., B.B.C. New Automatic Unattended Transmitter Technique— | |
| Part 1 | 446 |
| Part 2 | 490 |

H

| | |
|--|-----|
| Hammett, M. G., M.I.E.E., A.M.I.Mech.E., and H. F. Finch, Beta-Particle and Gamma-Ray Thickness Gauges | 536 |
| Harbour Radar at Esbjerg | 561 |
| Hard Valve Pulse Generator, A, by D. A. Levell, B.Sc. | 507 |
| Hatfield, P. M.Sc., A.Inst.P., and R. G. Patton, Ultrasonic Techniques in the Rubber Industry | 522 |
| Heart-Rate Recorder for Biological Experiments, A, by W. E. Boyd, M.A., M.D., M.Brit.I.R.E., and W. R. Eadie | 102 |
| Heritage, R. J. Metal Film Resistors | 324 |
| Hickling, G. H., B.Sc., A.M.I.E.E., The Activities and Equipment of an Industrial Electronics Laboratory— | |
| Part 1 | 2 |
| Part 2 | 70 |
| Part 3 | 120 |
| Part 4 | 148 |
| Part 5 | 236 |
| High Frequency Heating Practice, by C. E. Eadon-Clarke, Assoc.I.E.E. | 210 |
| High Speed Crystal Clutch, A, by M. Lorant | 165 |
| Hill, S., M.Sc., Recent Developments in Electronic Engine Indicators | 207 |
| Hillier, G. H., The Clavoline | 454 |
| Hinton, W. R., A.M.I.E.E., Piezo-Electric Crystal Constants | 76 |
| Holland, L., The Deposition of H.F. Crystal Electrodes by Vacuum Coating | 10 |
| Hough, G. H., Ph.D., and D. S. Ridler, Some Recently Developed Cold Cathode Glow Discharge Tubes and Associated Circuits— | |
| Part 1 | 152 |
| Part 2 | 230 |
| Part 3 | 272 |
| Huggins, P., A.M.Brit.I.R.E.— | |
| Changing the Phase of a Low Frequency Sinusoid | 462 |
| A Combined Timer and Cycle Counter | 578 |
| A Direct Reading Mains Frequency Cycle Counter | 276 |
| Electronics in Resistance Welding | 526 |
| Hughes, V. E., Television Filming | 318 |
| Hulls, L. R., B.Sc., A.Inst.P., and K. A. Mackenzie, A.M.I.E.E., A.M.Brit.I.R.E., An Electronic High Voltage Insulation Tester | 500 |
| Hunt, G. A., B.Sc., and A. R. A. Rendall, Ph.D., B.Sc., M.I.E.E., Transmitter Combining Circuits | 550 |

I

| | |
|--|-----|
| I.F. Characteristics, Television, by C. Evans | 378 |
| Image Converter Tubes, Some New, by J. A. Jenkins, and R. A. Chippendale | 302 |
| Improved Stabilization from a Voltage-Regulator Tube, by M. D. Armitage, B.Sc., A.Inst.P. | 568 |
| Industrial Applications of an Electronic Position Control Servo-Mechanism, by J. L. Gray, B.Sc. | 196 |
| Industrial Applications of Electronics, by T. E. Goldup, M.I.E.E. | 188 |
| Industrial Applications, Nuclonics and, by D. Taylor, M.Sc., Ph.D., M.I.E.E., A.M.I.Mech.E. | 533 |
| Industrial Electronics Laboratory, The Activities and Equipment of an, by G. H. Hickling, B.Sc., A.M.I.E.E.— | |
| Part 1 | 2 |
| Part 2 | 70 |
| Part 3 | 120 |
| Part 4 | 148 |
| Part 5 | 236 |
| Industrial Servo Mechanism, An, by P. H. Briggs, B.Sc. | 58 |

| | Page |
|---|------|
| Insulation Tester, An Electronic High Voltage, by L. R. Hulls, B.Sc., A.Inst.P., and K. A. Mackenzie, A.M.I.E.E., A.M.Brit.I.R.E. | 500 |
| Integrating Flowmeter, A Recording and, by D. C. Pressey, B.Sc. | 112 |

J

| | |
|---|-----|
| Jenkins, J. A., M.A., A.Inst.P., and R. A. Chippendale, B.Sc., Some New Image Converter Tubes | 302 |
|---|-----|

K

| | |
|---|-----|
| Kandiah, K. and Brown, D. E., A Very High Impedance Valve Voltmeter | 320 |
|---|-----|

L

| | |
|---|--|
| LETTERS TO THE EDITOR— | 40, 87, 134, 184, 245, 295, 343, 385, 469, 514 |
| Advanced Theory of Waveguides | 469 |
| Amplifier, A High Quality Power | 469 |
| Audio Frequency Spectrum Analysis | 581 |
| Baird, John Logie | 184 |
| Computing, Electrical | 41, 135 |
| Current Noise in 100 Megohm Resistors | 385 |
| Design of Series-Parallel Voltage Stabilizers, The | 385 |
| Distributed Amplification | 295 |
| Effect of Valve Impedance on Phase Shift Oscillators, The | 135 |
| Electro-Mechanical Voltage Stabilizer | 135 |
| Electronic Apparatus in the Laboratory | 41 |
| Informational Intensity of Graphical Computers | 245 |
| Input Balance Control for Biological Amplifiers | 184 |
| Linear Staircase Generator, A | 87 |
| Linear Transducer for the Electrical Measurement of Displacement, A | 514 |
| Minimum Phase Principle, A Note on the | 40 |
| Mutual Inductance Between Coaxial Coils of Equal Diameter | 87 |
| Optical Projection Comparator, The | 184 |
| Principles of Radio | 514, 580 |
| Pulse Brightening Discrimination | 514 |
| Recording of Noise in Vehicles | 469 |
| Standardization? Are we Becoming Slaves to | 87, 134 |
| Standardized Abbreviations | 40, 87 |
| Ultramicrometer, An Electric | 134 |
| Versatile Phase-Angle Meter | 343 |
| Volume Compression and Expansion | 580 |
| Levell, D. A., B.Sc., A Hand Valve Pulse Generator | 507 |
| Linear Accelerator, A 15Mev | 311 |
| Linear Scanning with Wide-Angled Cathode-Ray Tubes, by K. G. Beauchamp, A.M.Brit.I.R.E. | 176 |
| Linear Transducer for the Electrical Measurement of Displacement, A, by M. J. Tucker, B.Sc. | 420 |
| Local Authority Aids Exports | 492 |
| London Radio-Telephone Terminal, The | 329 |
| Long, J. V. P., A Simple Electro-Mechanical Voltage Stabilizer | 26 |
| Lorant, M.— | |
| Adhesive Tape Resistors | 129 |
| A Diaphragm Type Micromanometer | 80 |
| A Gain Stabilized Mixer | 453 |
| "Electrodynamic" Ammeter for V.H.F. | 579 |
| A High Speed Crystal Clutch | 165 |
| A New Magnetic Attenuator | 506 |
| A Radio-Frequency Micropotentiometer | 415 |

M

| | |
|--|-----|
| Mackenzie, K. A., A.M.I.E.E., A.M.Brit.I.R.E., and L. R. Hulls, B.Sc., A.Inst.P., An Electronic High Voltage Insulation Tester | 500 |
| Magnetic Attenuator, A New, by M. Lorant | 506 |
| Magnetic Cores, Tape Wound, by A. Langley Morris, M.I.E.E. | 416 |
| Magnetic Tape, Recording Low Frequency Phenomena on, by L. Molyneux, B.Sc. | 130 |
| Maine, A. E.— | |
| Chart for Determining Acceleration | 377 |
| Temperature/Resistance Chart for Electrical Copper | 111 |
| Mains Frequency Cycle Counter, A Direct Reading, by P. Huggins, A.M.Brit.I.R.E. | 276 |
| Marconi Jubilee, A Further Note on the | 81 |
| Matric Theory Applied to Thermionic Valve Circuits, by S. R. Deards | 264 |
| Maurice, D., Ing.E.S.E., A.M.I.E.E., Proposed Test Procedure for F.M. Broadcast Receivers | 106 |
| McAuslan, J., B.Sc., and K. J. Brimley, B.Sc., A Dekatron Timer | 408 |
| McAuslan, J., B.Sc., A Dekatron C.R.O. Time Marker | 567 |

| | Page | P | Page |
|---|--|---|------|
| McLusky, G. J. R., B.Sc., M. O. Deighton, B.Sc., and N. F. Moody, A.M.I.E.E., Millimicrosecond Pulse Techniques— | | | |
| Part 1 | 214 | | |
| Part 2 | 287 | | |
| Part 4 | 330 | | |
| McQueen, J. G., The Monitoring of High-Speed Waveforms | 436 | | |
| Mean-Noise Characteristics of Glow-Discharge Voltage-Regulator Tubes, by H. Bache, B.Eng., and F. A. Benson, M.Eng., A.M.I.E.E. | 328 | | |
| Measurements, Equipment for Acoustic, by D. E. L. Shorter, B.Sc., A.M.I.E.E., and W. Wharton, A.M.I.E.E.— | | | |
| Part 5—A Portable 7½ Watt Loudspeaker Amplifier | 7 | | |
| Measuring Valve Parameters, Two Bridges for, by G. Smith, B.Sc. | 127 | | |
| Meetings this Month | 46, 94, 142, 186, 256, 257, 476, 516 | | |
| Metal Film Resistors, by R. J. Heritage | 324 | | |
| Meter, A Versatile Phase-Angle, by G. N. Patchett, Ph.D., B.Sc., A.M.I.E.E. | 224 | | |
| Meters, Counting-Rate, by G. D. Smith | 14 | | |
| Method of Measuring Television Picture Detail, by G. G. Gouriet, A.M.I.E.E. | 308 | | |
| Micromanometer, A Diaphragm Type, by M. Lorant | 80 | | |
| Micropotentiometer, A Radio-Frequency, by M. Lorant Miller, E. J., B.Sc.— | | | |
| A Gramophone Pick-Up Pre-Amplifier | 498 | | |
| A Stable, High Quality, Power Amplifier | 366 | | |
| Miller Transitron, The, by O. C. Wells | 407 | | |
| Millimicrosecond Pulse Techniques, by N. F. Moody, A.M.I.E.E., G. J. R. McLusky, B.Sc., and M. O. Deighton, B.Sc.— | | | |
| Part 1 | 214 | | |
| Part 2 | 287 | | |
| Part 3—Only by N. F. Moody, A.M.I.E.E. | 289 | | |
| Part 4 | 330 | | |
| Modulation, A System of Pulse Code, by S. Fedida, B.Sc., A.C.G.I., A.M.I.E.E. | 356 | | |
| Molyneux, L., B.Sc., Recording Low Frequency Phenomena on Magnetic Tape | 130 | | |
| Monitor Circuits, Peak Signal | 365 | | |
| Monitoring of High-Speed Waveforms, The, by J. G. McQueen | 436 | | |
| Moody, N. F., A.M.I.E.E., J. G. R. McLusky, B.Sc., and M. O. Deighton, B.Sc., Millimicrosecond Pulse Techniques— | | | |
| Part 1 | 214 | | |
| Part 2 | 287 | | |
| Part 3 | 289 | | |
| Part 4 | 330 | | |
| Morgan, G. D., Ph.D., Diode Valve Voltmeter Errors | 575 | | |
| Morris, Langley, A.M.I.E.E., Tape Wound Magnetic Cores | 416 | | |
| Morton, C., B.Sc., An Electronic Voltage Stabilizer | 65 | | |
| Multiplier, An Electronic, by M. J. Somerville, B.Sc. | 78 | | |
| Multivibrators, Some New, by Lt.-Col. Chang Sing, B.Sc., and Capt. Chu Yao-I, B.Sc. | 270 | | |
| N | | | |
| Naval Research, Electronics in | 322 | | |
| Network Analysis by Repeated Voltage Superposition, by J. E. Parton, B.Sc., Ph.D., M.I.E.E., A.M.I.Mech.E. | 570 | | |
| Nucleonics and Industrial Applications, by D. Taylor, M.Sc., Ph.D., M.I.E.E., A.M.I.Mech.E. | 533 | | |
| Newell, G. F., Proposed Test Procedure for F.M. Broadcast Receivers | 106 | | |
| New Television Studio, A | 235 | | |
| Nisbet, J. S., B.Sc.(Eng.), Special Applications to Industry | 198 | | |
| Notes from the Industry | 39, 93, 141, 185, 255, 300, 346, 388, 429, 475, 515, 587 | | |
| Nuclear Reactors, University Lectures on | 318 | | |
| O | | | |
| On the Background of Pulse-Coded Computers, by T. J. Rey, M.A., B.Sc., A.M.I.E.E.— | | | |
| Part 1 | 28 | | |
| Part 2 | 66 | | |
| Optical Projection Comparator, An, by W. A. Gold, B.Sc. | 27 | | |
| Organ, The Chord, A New Domestic Musical Instrument, by Alan Douglas | 562 | | |
| Panoramic Receiver, A V.H.F. Multi-band, by E. W. Crompton | 478 | | |
| Paris-London Television, by T. H. Bridgewater, M.I.E.E. | 410 | | |
| Parton, J. E., B.Sc., Ph.D., M.I.E.E., A.M.I.Mech.E., Network Analysis by Repeated Voltage Superposition | 570 | | |
| Patchett, G. N., Ph.D., B.Sc., A.M.I.E.E., A Versatile Phase-Angle Meter | 224 | | |
| Patton, R. G., and P. Hatfield, M.Sc., A.Inst.P., Ultrasonic Techniques in the Rubber Industry | 522 | | |
| Peachey, F. A., M.I.E.E., R. Toombs, B.Sc., A.M.I.E.E., and C. Gunn-Russell, M.A., B.B.C. New Automatic Unattended Transmitter Technique— | | | |
| Part 1 | 446 | | |
| Part 2 | 490 | | |
| Peak-Noise Characteristics of Glow-Discharge Voltage-Regulator Tubes, by H. Bache, B.Eng., and F. A. Benson, M.Eng., A.M.I.E.E., M.I.R.E. | 278 | | |
| Peak Signal Monitor Circuits | 365 | | |
| Phase-Angle Meter, A Versatile, by G. N. Patchett, Ph.D., A.M.I.E.E. | 224 | | |
| Phase Measuring Device, A Simple Variable Frequency, by J. C. West, B.Sc., A.M.I.E.E., and J. Potts, B.Sc. | 402 | | |
| Physical Realization of an Electronic Digital Computer, The, by A. D. Booth, D.Sc., Ph.D., F.Inst.P. | 442 | | |
| Physical Society Exhibition, The 36th | 245 | | |
| Piezo-Electric Crystal Constants, by W. R. Hinton, A.M.I.E.E. | 76 | | |
| Polarograph for Chemical Analysis, A Precision, by H. A. Dell, Ph.D., and C. H. R. Gentry, B.Sc., A.R.I.C. | 19 | | |
| Pope, G. J., A Design for a Constant Volume Amplifier | 464 | | |
| Portable 7½ Watt Loudspeaker Amplifier, A, by D. E. L. Shorter, B.Sc., A.M.I.E.E., and W. Wharton, A.M.I.E.E.— | | | |
| Part 5 | 7 | | |
| Potts, B.Sc., and J. C. West, B.Sc., A.M.I.E.E., A Simple Variable Frequency Phase Measuring Device | 402 | | |
| Pre-Amplifier, A Gramophone Pick-Up, by E. J. Miller, B.Sc. | 498 | | |
| Precision Polarograph for Chemical Analysis, A, by H. A. Dell, Ph.D., and C. H. R. Gentry, B.Sc., A.R.I.C. | 19 | | |
| Prediction of Audio-Frequency Response in Two Reactance Elements, The, by N. H. Crowhurst, A.M.I.E.E.— | | | |
| No. 2 : Part 2.—Circuits with Two Reactance Elements | 33 | | |
| No. 2 : Part 3 | 82 | | |
| No. 3 | 241 | | |
| No. 4 | 337 | | |
| Pressey, D. C., B.Sc., A Recording and Integrating Flowmeter | 112 | | |
| Projection Comparator, An Optical, by W. A. Gold, B.Sc. | 27 | | |
| Proportional Temperature Control, by R. Scott, B.Sc., Ph.D. | 117 | | |
| Proposed Test Procedure for F.M. Broadcast Receivers, by D. Maurice, Ing.E.S.E., A.M.I.E.E., G. F. Newell and J. G. Spencer | 106 | | |
| Publications Received | 39, 92, 140, 185, 256, 300, 342, 388, 434, 474, 587 | | |
| Pulse Brightening Discrimination, by A. L. Whitwell, A.M.Brit.I.R.E. | 362 | | |
| Pulse-Coded Computers, On the Background of, by T. J. Rey, M.A., B.Sc., A.M.I.E.E.— | | | |
| Part 1 | 28 | | |
| Part 2 | 66 | | |
| Pulse Code Modulation, A System of, by S. Fedida, B.Sc., A.C.G.I., A.M.I.E.E. | 356 | | |
| Pulse Code Telemetry System, A Ten-Channel, by A. J. Bayliss, B.Sc. | 485 | | |
| Pulse Dekatron, The Single, by J. R. Acton | 48 | | |
| Pulse Generator, A Hand Valve, by D. A. Levell, B.Sc. | 507 | | |
| Pulses, A Timing Circuit for Controlling Related High Energy, by K. S. W. Champion, Ph.D., A.Inst.P., and N. L. Allen | 423 | | |
| Pulse Techniques, Millimicrosecond, by N. F. Moody, A.M.I.E.E., G. J. R. McLusky, B.Sc., and M. O. Deighton, B.Sc.— | | | |
| Part 1 | 214 | | |
| Part 2 | 287 | | |
| Part 3—Only by N. F. Moody, A.M.I.E.E. | 289 | | |
| Part 4 | 330 | | |
| Q | | | |
| Quantity Production of Glass Bulbs, The | 327 | | |

| | Page |
|---|----------|
| R | |
| Radar Approach System, A New | 126 |
| Radar Equipments, The Engineering of, by G. W. A. Dummer, M.B.E., M.I.E.E. | 348 |
| Radio Beacons for Lighthouses and Light Vessels | 283 |
| Radio Direction Finding | 6 |
| Radio-Telephone Terminal, The London | 329 |
| Radio Telescope, A New | 277 |
| RC Circuit, A Timed, by John P. German, M.Sc. | 461 |
| Receiver, A V.H.F. Multi-Band Panoramic, by E. W. Crompton | 478 |
| Recent British Standards | 346, 515 |
| Recent Developments in Dielectric Heating, by V. L. Atkins | 200 |
| Recent Developments in Electronic Engine Indicators, by S. Hill, M.Sc. | 207 |
| Recent Developments in Television Outside Broadcasting, by T. H. Bridgewater, M.I.E.E. | 158 |
| R.E.C.M.F. Exhibition Preview (see Electronic Equipment) | 178 |
| Recorder for Biological Experiments, A Heart-Rate, by W. E. Boyd, M.A., M.Brit.I.R.E., and W. R. Eadie | 102 |
| Recording and Integrating Flowmeter, A, by D. C. Pressey, B.Sc. | 112 |
| Recording Blood Flow, An Electrical Flowmeter for, by I. G. Baxter, B.Sc., A.R.C.S. | 162 |
| Recording Low Frequency Phenomena on Magnetic Tape, by L. Molyneux, B.Sc. | 130 |
| Rectifier Circuits, Special, by D. B. Corbyn, B.Sc., A.M.I.E.E. | 418 |
| Remote Control of BBC High-Power Transmitter | 229 |
| Rendall, A. R. A., Ph.D., B.Sc., M.I.E.E., and G. A. Hunt, B.Sc., Transmitter Combining Circuits | 550 |
| Required Figure of Merit of Frame Deflector Coils, The, by E. T. Emms, B.Sc., A.R.C.S. | 238 |
| Resistors, Adhesive Tape, by M. Lorant | 129 |
| Resistors, Metal Film, by R. J. Heritage | 324 |
| Resistors, The Design of Wire Wound | 372 |
| Resolution of Complex Quantities, The, by N. H. Crowhurst, A.M.I.E.E. | 426 |
| Rey, T. J., M.A., B.Sc., A.M.I.E.E., On the Background of Pulse-Coded Computers— | |
| Part 1 | 28 |
| Part 2 | 66 |
| Ridler, D. S., and G. H. Hough, Ph.D., Some Recently Developed Cold Cathode Glow Discharge Tubes and Associated Circuits— | |
| Part 1 | 152 |
| Part 2 | 230 |
| Part 3 | 272 |
| Robot Capacitor Grader | 77 |
| Royal Society Conversazione, The | 336 |
| Rubber Industry, Ultrasonic Techniques in the, by R. G. Patton and P. Hatfield, M.Sc., A.Inst.P. | 522 |

| | Page |
|---|------|
| S | |
| Sargrove, I. A., M.I.E.E., M.Brit.I.R.E., Automatic Product Handling and Qualitative Control | 193 |
| Scott, R., B.Sc., Ph.D., Proportional Temperature Control | 117 |
| Scott-Taggart, J., M.I.E.E., M.I.Mech.E., F.Inst.P., Standardisation of Technical Terms | 63 |
| Self-Interpolating Crystal Calibrator, A, by D. Cooke .. | 23 |
| Selig, K. L., A.M.I.E.E., The Design of Wire Wound Resistors | 372 |
| Series-Parallel Valve Voltage Stabilizers, The Design of, by F. A. Benson, M.Eng., A.M.I.E.E., M.I.R.E. | 118 |
| Servo-Mechanism, An Industrial, by P. H. Briggs, B.Sc. | 58 |
| Servo-Mechanism, Industrial Applications of an Electronic Position Control, by J. L. Gray, B.Sc. | 196 |
| Servo-Simulator, An Electronic, by N. T. van der Walt, B.Sc. | 52 |
| Shone, A. B., B.Eng., A.M.I.E.E., An A.G.C. Amplifier with Constant Output | 374 |
| Shore, G. C., Batching, Counting and Sorting | 205 |
| Shorter, D. E. L., B.Sc., A.M.I.E.E., and W. Wharton, Equipment for Acoustic Measurements— | |
| Part 5 | 7 |
| Simple Capacitance-Meter, A, by V. H. Attree, B.Sc. | 284 |
| Simple Electro-Mechanical Voltage Stabilizer, A, by J. V. P. Long | 26 |
| Simple Valve Comparator, A, by B. C. Foster | 220 |
| Simple Variable Frequency Phase Measuring Device, A, by J. C. West, B.Sc., A.M.I.E.E., and J. Potts, B.Sc. | 402 |

| | Page |
|--|----------|
| Simulator, An Electronic Servo, by N. T. van der Walt, B.Sc. | 52 |
| Single Pulse Dekatron, The, by J. R. Acton | 48 |
| Single Valve Delayed Pulse Generator, A, by P. A. V. Thomas, B.Sc. | 132 |
| Sinusoid, Changing the Phase of a Low Frequency, by P. Huggins, A.M.Brit.I.R.E. | 462 |
| Smith, Caldwell P., The Analysis and Automatic Recognition of Speech Sounds | 368 |
| Smith, G., B.Sc., Two Bridges for Measuring Valve Parameters | 127 |
| Smith, G. D., Counting-rate Meters | 14 |
| Smith, H. G., B.Sc., A Transductor-Controlled Stabilizer for Medium Direct Currents | 173 |
| Soanes, S. V., M.A., Ph.D., Assoc.Brit.I.R.E., Audio Frequency Analysis— | |
| Part 1 | 268 |
| Part 2 | 312 |
| Some Features of American Electrocardiograph Design, by E. E. Suckling, M.Sc., A.M.I.E.E. | 243 |
| Some New Image Converter Tubes, by J. A. Jenkins and R. A. Chippendale, M.A., A.Inst.P., B.Sc. | 302 |
| Some New Multivibrators, by Lt.-Col. Chang Sing, B.Sc. and Capt. Chu Yao-I, B.Sc. | 270 |
| Some Recently Developed Cold Cathode Glow Discharge Tubes and Associated Circuits, by G. H. Hough, Ph.D.— | |
| Part 1 | 152 |
| Part 2 | 230 |
| Part 3 | 272 |
| Somerville, M. J., B.Sc., An Electronic Multiplier | 78 |
| Special Applications to Industry, by J. S. Nisbet, B.Sc. (Eng.) | 198 |
| Special Rectifier Circuits, by D. B. Corbyn, B.Sc., A.M.I.E.E. | 418 |
| Spectrum Analysis, Audio Frequency, by S. V. Soanes, M.A., Ph.D., Assoc.Brit.I.R.E.— | |
| Part 1 | 268 |
| Part 2 | 312 |
| Speech Equipment at St. Paul's Cathedral | 62 |
| Speech Sounds, The Analysis and Automatic Recognition of, by Caldwell P. Smith | 368 |
| Spencer, J. G., Proposed Test Procedure for F.M. Broadcast Receivers | 106 |
| Stabilizer, An Electronic Voltage, by C. Morton, B.Sc. | 65 |
| Stabilizer, A Simple Electro-Mechanical Voltage, by J. V. P. Long | 26 |
| Stabilizer Employing a Cold-Cathode Triode, A Variable Voltage, by F. S. Goulding, B.Sc. | 493 |
| Stabilizer for Medium Direct Currents, A Transductor-Controlled, by H. G. Smith, B.Sc. | 173 |
| Stabilizers, The Design of Series-Parallel Valve Voltage, by F. A. Benson, M.Eng., A.M.I.E.E., M.I.R.E. | 118 |
| Stabilizer with D.C. Heater Supply, Emission, by D. E. Brown | 171 |
| Stable, High Quality, Power Amplifier, A, by E. J. Miller, B.Sc.(Eng.) | 366 |
| Standardization of Technical Terms, by J. Scott-Taggart, M.I.E.E., M.I.Mech.E., F.Inst.P. | 63 |
| Sterilization of Foods, Electronic | 535 |
| Stimulator, An Exponential, by A. M. Andrew, B.Sc. | 334 |
| Stimulator Unit, An Electronic Time-Base and, by W. T. Catton, M.Sc. | 380 |
| Study of the Characteristics of Glow-Discharge Voltage-Regulator Tubes, A, by F. A. Benson, M.Eng., Ph.D., A.M.I.E.E., M.I.R.E.— | |
| Part 1 | 396 |
| Part 2 | 456 |
| Suckling, E. E., M.Sc., A.M.I.E.E., Some Features of American Electrocardiograph Design | 243 |
| Superposition, Network Analysis by Repeated Voltage, by J. E. Parton, B.Sc., Ph.D., M.I.E.E., A.M.I.Mech.E. | 570 |
| Supplement, Electronics in Industry | 187, 517 |
| Synchronizing Circuit for Variable Input Voltages, A, by P. A. V. Thomas, B.Sc. | 509 |
| System of Pulse Code Modulation, A, by S. Fedida, B.Sc., A.C.G.I., A.M.I.E.E. | 356 |

| | Page |
|---|------|
| T | |
| Tape Wound Magnetic Cores, by A. Langley Morris, M.I.E.E. | 416 |
| Taylor, D., M.Sc., Ph.D., M.I.E.E., A.M.I.Mech.E., Nucleonics and Industrial Applications | 533 |
| Technical Terms, Standardization of, by J. Scott-Taggart, M.I.E.E., M.I.Mech.E., F.Inst.P. | 63 |

