

ELECTRICAL COMMUNICATION

INDEX TO
VOLUME 28
1951



Published Quarterly and Copyrighted by the
INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION
67 BROAD STREET, NEW YORK 4, NEW YORK, U.S.A.

SUBJECT INDEX

	NUMBER	PAGE
Accelerator to One Million Volts, Linear Electron. A. T. Starr, G. King, and L. Lewin.....	3	186
Acoustics:		
Acoustic Mill-Feed Controller.....	1	69
Anechoic Chamber for Acoustic Measurements. D. W. Robinson.....	1	70
Sound Reinforcement and Production for Royal Festival Hall. J. L. Goodwin.....	4	243
Amplification: Growth and Amplification. H. Busignies.....	3	235
Amplifiers: Periodic-Waveguide Traveling-Wave Amplifier for Medium Powers. G. C. Dewey, P. Parzen, and T. J. Marchese.....	3	220
Amplitude Measurement: Maximum-Amplitude Measuring Set.....	2	111
Anechoic Chamber for Acoustic Measurements. D. W. Robinson.....	1	70
Antenna for 174-216-Megacycle Band, Television Transmitting.....	4	299
Application of 12-Channel Carrier to the Open-Wire Line Between Rio de Janeiro and São Paulo. G. M. B. Wills.....	4	276
Attenuation: Behavior of Gas Discharge Plasma in High-Frequency Electromagnetic Fields. L. Goldstein and N. L. Cohen.....	4	305
Audio Channel: Television-Link Sound Diplexer. L. Staschover and H. G. Miller.....	2	108
Automatic Selective Pneumatic Tube System Installed at the Bridgeport Brass Company.....	4	251
Balance Indicator for Transmitters, Transmission-Line. G. T. Royden.....	2	110
Barrier Joints: Styrene Joints and Terminations. E. C. Lee and K. Konstantinowsky.....	1	21
Behavior of Gas Discharge Plasma in High-Frequency Electromagnetic Fields. L. Goldstein and N. L. Cohen.....	4	305
Biographical (see also Obituary): Etchings of Oliver Heaviside.....	1	45
Bonneville Power Administration:		
Fault Location by Pulse-Time Modulation. R. W. Hughes and N. Weintraub.....	2	90
Grand Coulee Dam (<i>Frontispiece</i>).....	2	82
Brazil: Application of 12-Channel Carrier to the Open-Wire Line Between Rio de Janeiro and São Paulo. G. M. B. Wills.....	4	276
Brentwood, Long Island, Mackay Radio and Telegraph Company Station at.....	3	162
Bridgeport Brass Company, Automatic Selective Pneumatic Tube System Installed at the.....	4	251
British House of Commons, Opening of the New Chamber of (<i>Frontispiece</i>).....	1	2
British Railways: Railways Modernize with Centralized Supervisory Control. C. G. White.....	1	3
Broadcasting:		
Mackay Radio and Telegraph Company Station at Brentwood, Long Island.....	3	162
Television-Link Sound Diplexer. L. Staschover and H. G. Miller.....	2	108
Television Picture Monitor.....	3	219
Television Scanner for Slides.....	2	156
Cables:		
Manufacture of Coaxial Cables.....	2	83
Styrene Joints and Terminations. E. C. Lee and K. Konstantinowsky.....	1	21
Carrier Telephony:		
Application of 12-Channel Carrier to the Open-Wire Line Between Rio de Janeiro and São Paulo. G. M. B. Wills.....	4	276
Interference in Multi-Channel Circuits. L. Lewin.....	2	142
Cathodes:		
Life of Valves with Oxide-Coated Cathodes. C. C. Eaglesfield.....	2	95
Secondary-Emitting Surfaces in the Presence of Oxide-Coated Cathodes. S. Nevin and H. Salinger.....	2	130
Centralized Control:		
Miniature Direct-Wire Remote Control at Loch Sloy Power Station.....	2	106
Railways Modernize with Centralized Supervisory Control. C. G. White.....	1	3
Chamber of British House of Commons, Opening of the New (<i>Frontispiece</i>).....	1	2
Coaxial Lines:		
Behavior of Gas Discharge Plasma in High-Frequency Electromagnetic Fields. L. Goldstein and N. L. Cohen.....	4	305
Manufacture of Coaxial Cables.....	2	83
Periodic-Waveguide Traveling-Wave Amplifier for Medium Powers. G. C. Dewey, P. Parzen, and T. J. Marchese.....	3	220
Common-Equipment System: Railways Modernize with Centralized Supervisory Control. C. G. White.....	1	3
Commons, Opening of the New Chamber of British House of (<i>Frontispiece</i>).....	1	2
Compression: Quantization Distortion in Pulse-Count Modulation with Nonuniform Spacing of Levels. P. F. Panter and W. Dite.....	2	121
Concert Hall:		
Royal Festival Hall as Seen from Victoria Embankment (<i>Frontispiece</i>).....	4	242
Sound Reinforcement and Production for Royal Festival Hall. J. L. Goodwin.....	4	243
Contacts, Selenium Rectifier for Protecting Electric.....	3	236
Cores: Some Properties and Tests of Magnetic Powders and Powder Cores. C. E. Richards, S. E. Buckley, P. R. Bardell, and A. C. Lynch.....	1	55
Cross Talk:		
Application of 12-Channel Carrier to the Open-Wire Line Between Rio de Janeiro and São Paulo. G. M. B. Wills.....	4	276
Cross-Talk Considerations in Time-Division Multiplex Systems. S. Moskowitz, L. Diven, and L. Feit.....	3	209

	NUMBER	PAGE
Crystals, Determination of the Piezoelectric Constants of Some Isomorphous. F. P. Spitzer	4	300
Crystal Triodes. T. R. Scott	3	195
Cylindrical Waveguides with Many Beams, Theory of Space-Charge Waves in. P. Parzen	3	217
Dam, Grand Coulee (<i>Frontispiece</i>)	2	82
Deaf-Aid System: Sound Reinforcement and Production for Royal Festival Hall. J. L. Goodwin	4	243
Delay Line, Magnetostrictive. E. M. Bradburd	1	46
Design of a Loran Transmitter. R. H. Myers	1	31
Determination of the Piezoelectric Constants of Some Isomorphous Crystals. F. P. Spitzer	4	300
Diplexer, Television-Link Sound. L. Staschover and H. G. Miller	2	108
Direct-Wire Remote Control at Loch Sloy Power Station, Miniature	2	106
Distortion: Quantization Distortion in Pulse-Count Modulation with Nonuniform Spacing of Levels. P. F. Panter and W. Dite	2	121
Distributor for Sorting Mail, Electromechanical. S. Scheuer, C. B. Neyt, and L. J. G. Nijs	3	163
DS13 Transmitter: Royal Air Force Radio Installation at Nairobi	3	236
Effect of Hydrostatic Pressure in an Electron Beam on the Operation of Traveling-Wave Devices. P. Parzen and L. Goldstein	3	228
Electromechanical Distributor for Sorting Mail. S. Scheuer, C. B. Neyt, and L. J. G. Nijs	3	163
Electron Beams:		
Effect of Hydrostatic Pressure in an Electron Beam on the Operation of Traveling-Wave Devices. P. Parzen and L. Goldstein	3	228
Linear Electron Accelerator to One Million Volts. A. T. Starr, G. King, and L. Lewin	3	186
Electron Gas:		
Magneto-Optics of an Electron Gas for Guided Microwaves: Propagation in Rectangular Waveguide. L. Goldstein, M. A. Lampert, and J. F. Heney	4	322
Magneto-Optics of an Electron Gas with Guided Microwaves. L. Goldstein, M. A. Lampert, and J. F. Heney	3	233
Emission:		
Life of Valves with Oxide-Coated Cathodes. C. C. Eaglesfield	2	95
Secondary-Emitting Surfaces in the Presence of Oxide-Coated Cathodes. S. Nevin and H. Salinger	2	103
Error Indication: Four/Two-Channel Time-Division Multiplex Telegraph System for Long-Distance Radio Circuits. W. C. Peterman and A. Minc	2	127
Etchings of Oliver Heaviside	1	45
Exchange: Largest Private Telephone Exchange in Great Britain	1	77
Fault Location by Pulse-Time Modulation. R. W. Hughes and N. Weintraub	2	90
Festival of Britain:		
Royal Festival Hall as Seen from Victoria Embankment (<i>Frontispiece</i>)	4	242
Sound Reinforcement and Production for Royal Festival Hall. J. L. Goodwin	4	243
Filters: Suppression of Harmonics in Radio Transmitters. G. T. Royden. [Correction, v. 28, n. 4, p. 321; December, 1951.]	2	112
Flying-Spot Scanner: Television Scanner for Slides	2	156
Four/Two-Channel Time-Division-Multiplex Telegraph System for Long-Distance Radio Circuits. W. C. Peterman and A. Minc	2	127
Frequency-Division Multiplex: Interference in Multi-Channel Circuits. L. Lewin	2	142
Frequency-Shift Keying: Four/Two-Channel Time-Division-Multiplex Telegraph System for Long-Distance Radio Circuits. W. C. Peterman and A. Minc	2	127
Fuel Processing: Acoustic Mill-Feed Controller	1	69
Gas Tubes:		
Behavior of Gas Discharge Plasma in High-Frequency Electromagnetic Fields. L. Goldstein and N. L. Cohen	4	305
Magneto-Optics of an Electron Gas for Guided Microwaves: Propagation in Rectangular Waveguide. L. Goldstein, M. A. Lampert, and J. F. Heney	4	322
Magneto-Optics of an Electron Gas with Guided Microwaves. L. Goldstein, M. A. Lampert, and J. F. Heney	3	233
Germanium: Crystal Triodes. T. R. Scott	3	195
Glass Working:		
Manufacture of a High-Frequency Transmitting Tube	3	171
Technique of Trustworthy Valves. E. G. Rowe	4	257
Grand Coulee Dam (<i>Frontispiece</i>)	2	82
Growth and Amplification. H. Busignies	3	235
Harmonics:		
Interference in Multi-Channel Circuits. L. Lewin	2	142
Suppression of Harmonics in Radio Transmitters. G. T. Royden. [Correction, v. 28, n. 4, p. 321; December, 1951.]	2	112
Heaviside, Oliver, Etchings of	1	45
High Frequencies:		
Manufacture of a High-Frequency Transmitting Tube	3	171
200-Kilowatt Triode	1	53
House of Commons, Opening of the New Chamber of British (<i>Frontispiece</i>)	1	2
Hydrostatic Pressure in an Electron Beam on the Operation of Traveling-Wave Devices, Effect of. P. Parzen and L. Goldstein	3	228
Impedance:		
Application of 12-Channel Carrier to the Open-Wire Line Between Rio de Janeiro and São Paulo. G. M. B. Wills	4	276
Note on the Measurement of Impedance with the Impedometer. W. Sichak	1	54

	NUMBER	PAGE
Inductors:		
Miniature Toroidal Inductor.....	2	155
Some Properties and Tests of Magnetic Powders and Powder Cores. C. E. Richards, S. E. Buckley, P. R. Bardell, and A. C. Lynch.....	1	55
In Memoriam—Herman T. Kohlhaas.....	2	157
Insulation:		
Manufacture of Coaxial Cables.....	2	83
Styrene Joints and Terminations. E. C. Lee and K. Konstantinowsky.....	1	21
Interchannel Cross Talk:		
Cross-Talk Considerations in Time-Division Multiplex Systems. S. Moskowitz, L. Diven, and L. Feit.....	3	209
Interference in Multi-Channel Circuits. L. Lewin.....	2	142
Interference: Suppression of Harmonics in Radio Transmitters. G. T. Royden. [Correction, v. 28, n. 4, p. 321; December, 1951.].....	2	112
Ionization:		
Behavior of Gas Discharge Plasma in High-Frequency Electromagnetic Fields. L. Goldstein and N. L. Cohen.....	4	305
Magneto-Optics of an Electron Gas for Guided Microwaves: Propagation in Rectangular Waveguide. L. Goldstein, M. A. Lampert, and J. F. Heney.....	4	322
Magneto-Optics of an Electron Gas with Guided Microwaves. L. Goldstein, M. A. Lampert, and J. F. Heney.....	3	233
Iron-Dust Cores:		
Miniature Toroidal Inductor.....	2	155
Some Properties and Tests of Magnetic Powders and Powder Cores. C. E. Richards, S. E. Buckley, P. R. Bardell, and A. C. Lynch.....	1	55
Isomorphous Crystals, Determination of the Piezoelectric Constants of Some. F. P. Spitzer.....	4	300
Joints and Terminations, Styrene. E. C. Lee and K. Konstantinowsky.....	1	21
Kenya: Royal Air Force Radio Installation at Nairobi.....	3	236
King George VI: Opening of the New Chamber of British House of Commons (<i>Frontispiece</i>).....	1	2
Kohlhaas, Herman T., In Memoriam.....	2	157
Largest Private Telephone Exchange in Great Britain.....	1	77
Levels, Quantization Distortion in Pulse-Count Modulation with Nonuniform Spacing of. P. F. Panter and W. Dite.....	2	121
Life of Valves:		
Life of Valves with Oxide-Coated Cathodes. C. C. Eaglesfield.....	2	95
Technique of Trustworthy Valves. E. G. Rowe.....	4	257
Linear Electron Accelerator to One Million Volts. A. T. Starr, G. King, and L. Lewin.....	3	186
Links:		
Fault Location by Pulse-Time Modulation. R. W. Hughes and N. Weintraub.....	2	90
Television-Link Sound Diplexer. L. Staschover and H. G. Miller.....	2	108
Loaded Waveguides:		
Linear Electron Accelerator to One Million Volts. A. T. Starr, G. King, and L. Lewin.....	3	186
Periodic-Waveguide Traveling-Wave Amplifier for Medium-Powers. G. C. Dewey, P. Parzen, and T. J. Marchese.....	3	220
Loch Sloy Power Station, Miniature Direct-Wire Remote Control at.....	2	106
Loran Transmitter, Design of a. R. H. Myers.....	1	31
Machine Switching:		
Automatic Selective Pneumatic Tube System Installed at the Bridgeport Brass Company....	4	251
Electromechanical Distributor for Sorting Mail. S. Scheuer, C. B. Neyt, and L. J. G. Nijs..	3	163
Largest Private Telephone Exchange in Great Britain.....	1	77
Miniature Direct-Wire Remote Control at Loch Sloy Power Station.....	2	106
Railways Modernize with Centralized Supervisory Control. C. G. White..	1	3
Mackay Radio and Telegraph Company Station at Brentwood, Long Island.....	3	162
Magnetic Powders and Powder Cores, Some Properties and Tests of. C. E. Richards, S. E. Buckley, P. R. Bardell, and A. C. Lynch.....	1	55
Magneto-Optics of an Electron Gas for Guided Microwaves: Propagation in Rectangular Waveguide. L. Goldstein, M. A. Lampert, and J. F. Heney.....	4	322
Magneto-Optics of an Electron Gas with Guided Microwaves. L. Goldstein, M. A. Lampert, and J. F. Heney.....	3	233
Magnetostrictive Delay Line. E. M. Bradburd.....	1	46
Mail, Electromechanical Distributor for Sorting. S. Scheuer, C. B. Neyt, and L. J. G. Nijs.....	3	163
Manufacture:		
Manufacture of a High-Frequency Transmitting Tube.....	3	171
Manufacture of Coaxial Cables.....	2	83
Technique of Trustworthy Valves. E. G. Rowe.....	4	257
Maximum-Amplitude Measuring Set.....	2	111
Microwaves:		
Behavior of Gas Discharge Plasma in High-Frequency Electromagnetic Fields. L. Goldstein and N. L. Cohen.....	4	305
Fault Location by Pulse-Time Modulation. R. W. Hughes and N. Weintraub.....	2	90
Magneto-Optics of an Electron Gas for Guided Microwaves: Propagation in Rectangular Waveguide. L. Goldstein, M. A. Lampert, and J. F. Heney.....	4	322
Magneto-Optics of an Electron Gas with Guided Microwaves. L. Goldstein, M. A. Lampert, and J. F. Heney.....	3	233

	NUMBER	PAGE
Mill-Feed Controller, Acoustic.....	1	69
Miniature Direct-Wire Remote Control at Loch Sloy Power Station.....	2	106
Miniature Toroidal Inductor.....	2	155
Monitor, Television Picture.....	3	219
Multiplexing:		
Cross-Talk Considerations in Time-Division Multiplex Systems. S. Moskowitz, L. Diven, and L. Feit.....	3	209
Four/Two-Channel Time-Division-Multiplex Telegraph System for Long-Distance Radio Circuits. W. C. Peterman and A. Minc.....	2	127
Interference in Multi-Channel Circuits. L. Lewin.....	2	142
Quantization Distortion in Pulse-Count Modulation with Nonuniform Spacing of Levels. P. F. Panter and W. Dite.....	2	121
Nairobi, Kenya: Royal Air Force Radio Installation at Nairobi.....	3	236
Navar: Magnetostrictive Delay Line. E. M. Bradburd.....	1	46
Navigation: Design of a Loran Transmitter. R. H. Myers.....	1	31
Nickel-Iron Compounds: Some Properties and Tests of Magnetic Powders and Powder Cores. C. E. Richards, S. E. Buckley, P. R. Bardell, and A. C. Lynch.....	1	55
Noise:		
Behavior of Gas Discharge Plasma in High-Frequency Electromagnetic Fields. L. Goldstein and N. L. Cohen.....	4	305
Effect of Hydrostatic Pressure in an Electron Beam on the Operation of Traveling-Wave Devices. P. Parzen and L. Goldstein.....	3	228
Note on the Measurement of Impedance with the Impedometer. W. Sichak.....	1	54
Obituary: In Memoriam—Herman T. Kohlhaas.....	2	157
Opening of the New Chamber of British House of Commons (<i>Frontispiece</i>).....	1	2
Open-Wire Lines:		
Application of 12-Channel Carrier to the Open-Wire Line Between Rio de Janeiro and São Paulo. G. M. B. Wills.....	4	276
Transmission-Line Balance Indicator for Transmitters. G. T. Royden.....	2	110
Outside Plant: Application of 12-Channel Carrier to the Open-Wire Line Between Rio de Janeiro and São Paulo. G. M. B. Wills.....	4	276
Oxide-Coated Cathodes:		
Life of Valves with Oxide-Coated Cathodes. C. C. Eaglesfield.....	2	95
Secondary-Emitting Surfaces in the Presence of Oxide-Coated Cathodes. S. Nevin and H. Salinger.....	2	103
Parliament: Opening of the New Chamber of British House of Commons (<i>Frontispiece</i>).....	1	2
Periodic-Waveguide Traveling-Wave Amplifier for Medium Powers. G. C. Dewey, P. Parzen, and T. J. Marchese.....	3	220
Permeability: Some Properties and Tests of Magnetic Powders and Powder Cores. C. E. Richards, S. E. Buckley, P. R. Bardell, and A. C. Lynch.....	1	55
Phase Velocity: Periodic-Waveguide Traveling-Wave Amplifier for Medium Powers. G. C. Dewey, P. Parzen, and T. J. Marchese.....	3	220
Piezoelectric Constants of Some Isomorphous Crystals, Determination of the. F. P. Spitzer.....	4	300
Plasma in High-Frequency Electromagnetic Fields, Behavior of Gas Discharge. L. Goldstein and N. L. Cohen.....	4	305
Pneumatic Tube System Installed at the Bridgeport Brass Company, Automatic Selective.....	4	251
Polarization:		
Behavior of Gas Discharge Plasma in High-Frequency Electromagnetic Fields. L. Goldstein and N. L. Cohen.....	4	305
Magneto-Optics of an Electron Gas with Guided Microwaves. L. Goldstein, M. A. Lampert, and J. F. Heney.....	3	233
Polystyrene:		
Manufacture of Coaxial Cables.....	2	83
Styrene Joints and Terminations. E. C. Lee and K. Konstantinowsky.....	1	21
Powdered-Iron Cores:		
Miniature Toroidal Inductor.....	2	155
Some Properties and Tests of Magnetic Powders and Powder Cores. C. E. Richards, S. E. Buckley, P. R. Bardell, and A. C. Lynch.....	1	55
Private Telephone Exchange in Great Britain, Largest.....	1	77
Propagation of Waves:		
Behavior of Gas Discharge Plasma in High-Frequency Electromagnetic Fields. L. Goldstein and N. L. Cohen.....	4	305
Linear Electron Accelerator to One Million Volts. A. T. Starr, G. King, and L. Lewin.....	3	186
Magneto-Optics of an Electron Gas for Guided Microwaves: Propagation in Rectangular Waveguide. L. Goldstein, M. A. Lampert, and J. F. Heney.....	4	322
Magneto-Optics of an Electron Gas with Guided Microwaves. L. Goldstein, M. A. Lampert, and J. F. Heney.....	3	233
Magnetostrictive Delay Line. E. M. Bradburd.....	1	46
Periodic-Waveguide Traveling-Wave Amplifier for Medium Powers. G. C. Dewey, P. Parzen, and T. J. Marchese.....	3	220
Theory of Space-Charge Waves in Cylindrical Waveguides with Many Beams. P. Parzen.....	3	217

	NUMBER	PAGE
Public-Address Equipment: Sound Reinforcement and Production for Royal Festival Hall. J. L. Goodwin.....	4	243
Pulse Transmission:		
Cross-Talk Considerations in Time-Division Multiplex Systems. S. Moskowitz, L. Diven, and L. Feit.....	3	209
Design of a Loran Transmitter. R. H. Myers.....	1	31
Fault Location by Pulse-Time Modulation. R. W. Hughes and N. Weintraub.....	2	90
Magnetostrictive Delay Line. E. M. Bradburd.....	1	46
Maximum-Amplitude Measuring Set.....	2	111
Quantization Distortion in Pulse-Count Modulation with Nonuniform Spacing of Levels. P. F. Panter and W. Dite.....	2	121
Quality Control: Technique of Trustworthy Valves. E. G. Rowe.....	4	257
Quantization Distortion in Pulse-Count Modulation with Nonuniform Spacing of Levels. P. F. Panter and W. Dite.....	2	121
Railways Modernize with Centralized Supervisory Control. C. G. White.....	1	3
Rectifier for Protecting Electric Contacts, Selenium.....	3	236
Reflection:		
Interference in Multi-Channel Circuits. L. Lewin.....	2	142
Note on the Measurement of Impedance with the Impedometer. W. Sichak.....	1	54
Regenerators: Four/Two-Channel Time-Division-Multiplex Telegraph System for Long-Distance Radio Circuits. W. C. Peterman and A. Minc.....	2	127
Relays: Selenium Rectifier for Protecting Electric Contacts.....	3	236
Remote Control:		
Miniature Direct-Wire Remote Control at Loch Sloy Power Station.....	2	106
Railways Modernize with Centralized Supervisory Control. C. G. White.....	1	3
Resistance, Cathode: Life of Valves with Oxide-Coated Cathodes. C. C. Eaglesfield.....	2	95
Rio de Janeiro and São Paulo, Application of 12-Channel Carrier to the Open-Wire Line Between. G. M. B. Wills.....	4	276
Royal Air Force Radio Installation at Nairobi.....	3	236
Royal Festival Hall:		
Royal Festival Hall as Seen from Victoria Embankment (<i>Frontispiece</i>).....	4	242
Sound Reinforcement and Production for Royal Festival Hall. J. L. Goodwin.....	4	243
São Paulo, Application of 12-Channel Carrier to the Open-Wire Line Between Rio de Janeiro and. G. M. B. Wills.....	4	276
Scanner for Slides, Television.....	2	156
Secondary-Emitting Surfaces in the Presence of Oxide-Coated Cathodes. S. Nevin and H. Salinger.....	2	103
Selenium Rectifier for Protecting Electric Contacts.....	3	236
Slides, Television Scanner for.....	2	156
Slow Waveguides:		
Linear Electron Accelerator to One Million Volts. A. T. Starr, G. King, and L. Lewin.....	3	186
Periodic-Waveguide Traveling-Wave Amplifier for Medium Powers. G. C. Dewey, P. Parzen, and T. J. Marchese.....	3	220
Smith Chart: Note on the Measurement of Impedance with the Impedometer. W. Sichak.....	1	54
SOJ-12 Carrier System: Application of 12-Channel Carrier to the Open-Wire Line Between Rio de Janeiro and São Paulo. G. M. B. Wills.....	4	276
Some Properties and Tests of Magnetic Powders and Powder Cores. C. E. Richards, S. E. Buckley, P. R. Bardell, and A. C. Lynch.....	1	55
Sorting Mail, Electromechanical Distributor for. S. Scheuer, C. B. Neyt, and L. J. G. Nijs.....	3	163
Sound (See also Acoustics): Sound Reinforcement and Production for Royal Festival Hall. J. L. Goodwin.....	4	243
Space-Charge Waves in Cylindrical Waveguides with Many Beams, Theory of. P. Parzen.....	3	217
Spark Quench: Selenium Rectifier for Protecting Electric Contacts.....	3	236
Styrene Joints and Terminations. E. C. Lee and K. Konstantinowsky.....	1	21
Supervisory Control:		
Miniature Direct-Wire Remote Control at Loch Sloy Power Station.....	2	106
Railways Modernize with Centralized Supervisory Control. C. G. White.....	1	3
Suppression of Harmonics in Radio Transmitters. G. T. Royden. [Correction, v. 28, n. 4, p. 321; December, 1951.].....	2	112
Technique of Trustworthy Valves. E. G. Rowe.....	4	257
Telegraphy: Four/Two-Channel Time-Division-Multiplex Telegraph System for Long-Distance Radio Circuits. W. C. Peterman and A. Minc.....	2	127
Television:		
Suppression of Harmonics in Radio Transmitters. G. T. Royden. [Correction, v. 28, n. 4, p. 321; December, 1951.].....	2	112
Television-Link Sound Diplexer. L. Staschover and H. G. Miller.....	2	108
Television Picture Monitor.....	3	219
Television Scanner for Slides.....	2	156
Television Transmitting Antenna for 174-216-Megacycle Band.....	4	299
Terminations, Styrene Joints and. E. C. Lee and K. Konstantinowsky.....	1	21
Theory of Space-Charge Waves in Cylindrical Waveguides with Many Beams. P. Parzen.....	3	217

	NUMBER	PAGE
Time-Division Multiplex:		
Cross-Talk Considerations in Time-Division Multiplex Systems. S. Moskowit, L. Diven, and L. Feit.....	3	209
Four/Two-Channel Time-Division-Multiplex Telegraph System for Long-Distance Radio Circuits. W. C. Peterman and A. Minc.....	2	127
Toroidal Inductor, Miniature	2	155
Transformers: Some Properties and Tests of Magnetic Powders and Powder Cores. C. E. Richards, S. E. Buckley, P. R. Bardell, and A. C. Lynch.....	1	55
Transistor: Crystal Triodes. T. R. Scott.....	3	195
Transmission Lines:		
Interference in Multi-Channel Circuits. L. Lewin.....	2	142
Manufacture of Coaxial Cables.....	2	83
Note on the Measurement of Impedance with the Impedometer. W. Sichak.....	1	54
Suppression of Harmonics in Radio Transmitters. G. T. Royden. [Correction, v. 28, n. 4, p. 321; December, 1951.].....	2	112
Transmission-Line Balance Indicator for Transmitters. G. T. Royden.....	2	110
Transmitters:		
Design of a Loran Transmitter. R. H. Myers.....	1	31
Mackay Radio and Telegraph Company Station at Brentwood, Long Island.....	3	162
Manufacture of a High-Frequency Transmitting Tube.....	3	171
Royal Air Force Radio Installation at Nairobi.....	3	236
Suppression of Harmonics in Radio Transmitters. G. T. Royden. [Correction, v. 28, n. 4, p. 321; December, 1951.].....	2	112
Transmission-Line Balance Indicator for Transmitters. G. T. Royden.....	2	110
200-Kilowatt Triode.....	1	53
Transposition Systems: Application of 12-Channel Carrier to the Open-Wire Line Between Rio de Janeiro and São Paulo. G. M. B. Wills.....	4	276
Traveling-Wave Tubes:		
Effect of Hydrostatic Pressure in an Electron Beam on the Operation of Traveling-Wave Devices. P. Parzen and L. Goldstein.....	3	228
Periodic-Waveguide Traveling-Wave Amplifier for Medium Powers. G. C. Dewey, P. Parzen, and T. J. Marchese.....	3	220
Triodes:		
Crystal Triodes. T. R. Scott.....	3	195
Manufacture of a High-Frequency Transmitting Tube.....	3	171
200-Kilowatt Triode.....	1	53
Trustworthy Valves, Technique of. E. G. Rowe.....	4	257
Tubes:		
Behavior of Gas Discharge Plasma in High-Frequency Electromagnetic Fields. L. Goldstein and N. L. Cohen.....	4	305
Effect of Hydrostatic Pressure in an Electron Beam on the Operation of Traveling-Wave Devices. P. Parzen and L. Goldstein.....	3	228
Life of Valves with Oxide-Coated Cathodes. C. C. Eaglesfield.....	2	95
Magneto-Optics of an Electron Gas for Guided Microwaves: Propagation in Rectangular Waveguide. L. Goldstein, M. A. Lampert, and J. F. Heney.....	4	322
Magneto-Optics of an Electron Gas with Guided Microwaves. L. Goldstein, M. A. Lampert, and J. F. Heney.....	3	233
Manufacture of a High-Frequency Transmitting Tube.....	3	171
Periodic-Waveguide Traveling-Wave Amplifier for Medium Powers. G. C. Dewey, P. Parzen, and T. J. Marchese.....	3	220
Secondary-Emitting Surfaces in the Presence of Oxide-Coated Cathodes. S. Nevin and H. Salinger.....	2	103
Technique of Trustworthy Valves. E. G. Rowe.....	4	257
200-Kilowatt Triode.....	1	53
Tube System Installed at the Bridgeport Brass Company, Automatic Selective Pneumatic.....	4	251
Two-Wire Lines: Transmission-Line Balance Indicator for Transmitters. G. T. Royden.....	2	110
Valves: See Tubes.		
Velocity Spread: Effect of Hydrostatic Pressure in an Electron Beam on the Operation of Traveling-Wave Devices. P. Parzen and L. Goldstein.....	3	228
Very High Frequencies: Television Transmitting Antenna for 174-216-Megacycle Band	4	299
Vibration: Technique of Trustworthy Valves. E. G. Rowe.....	4	257
Water-Cooled Tubes: Manufacture of a High-Frequency Transmitting Tube	3	171
Waveguides:		
Linear Electron Accelerator to One Million Volts. A. T. Starr, G. King, and L. Lewin.....	3	186
Magneto-Optics of an Electron Gas for Guided Microwaves: Propagation in Rectangular Waveguide. L. Goldstein, M. A. Lampert, and J. F. Heney.....	4	322
Magneto-Optics of an Electron Gas with Guided Microwaves. L. Goldstein, M. A. Lampert, and J. F. Heney.....	3	233
Periodic-Waveguide Traveling-Wave Amplifier for Medium Powers. G. C. Dewey, P. Parzen, and T. J. Marchese.....	3	220
Theory of Space-Charge Waves in Cylindrical Waveguides with Many Beams. P. Parzen....	3	217
X-Rays: Linear Electron Accelerator to One Million Volts. A. T. Starr, G. King, and L. Lewin..	3	186
200-Kilowatt Triode	1	53

AUTHOR INDEX

	NUMBER	PAGE
Bardell, P. R. Some Properties and Tests of Magnetic Powders and Powder Cores.....	1	55
Bradburd, E. M. Magnetostrictive Delay Line.....	1	46
Buckley, S. E. Some Properties and Tests of Magnetic Powders and Powder Cores.....	1	55
Busignies, H. Growth and Amplification.....	3	235
Cohen, N. L. Behavior of Gas Discharge Plasma in High-Frequency Electromagnetic Fields.....	4	305
Dewey, G. C. Periodic-Waveguide Traveling-Wave Amplifier for Medium Powers.....	3	220
Dite, W. Quantization Distortion in Pulse-Count Modulation with Nonuniform Spacing of Levels.....	2	121
Diven, L. Cross-Talk Considerations in Time-Division Multiplex Systems.....	3	209
Eaglesfield, C. C. Life of Valves with Oxide-Coated Cathodes.....	2	95
Feit, L. Cross-Talk Considerations in Time-Division Multiplex Systems.....	3	209
Goldstein, L.:		
Behavior of Gas Discharge Plasma in High-Frequency Electromagnetic Fields.....	4	305
Effect of Hydrostatic Pressure in an Electron Beam on the Operation of Traveling-Wave Devices.....	3	228
Magneto-Optics of an Electron Gas for Guided Microwaves: Propagation in Rectangular Waveguide.....	4	322
Magneto-Optics of an Electron Gas with Guided Microwaves.....	3	233
Goodwin, J. L. Sound Reinforcement and Production for Royal Festival Hall.....	4	243
Heney, J. F.:		
Magneto-Optics of an Electron Gas for Guided Microwaves: Propagation in Rectangular Waveguide.....	4	322
Magneto-Optics of an Electron Gas with Guided Microwaves.....	3	233
Hughes, R. W. Fault Location by Pulse-Time Modulation.....	2	90
King, G. Linear Electron Accelerator to One Million Volts.....	3	186
Konstantinowsky, K. Styrene Joints and Terminations.....	1	21
Lampert, M. A.:		
Magneto-Optics of an Electron Gas for Guided Microwaves: Propagation in Rectangular Waveguide.....	4	322
Magneto-Optics of an Electron Gas with Guided Microwaves.....	3	233
Lee, E. C. Styrene Joints and Terminations.....	1	21
Lewin, L.:		
Interference in Multi-Channel Circuits.....	2	142
Linear Electron Accelerator to One Million Volts.....	3	186
Lynch, A. C. Some Properties and Tests of Magnetic Powders and Powder Cores.....	1	55
Marchese, T. J. Periodic-Waveguide Traveling-Wave Amplifier for Medium Powers.....	3	220
Miller, H. G. Television-Link Sound Diplexer.....	2	108
Minc, A. Four/Two-Channel Time-Division-Multiplex Telegraph System for Long-Distance Radio Circuits.....	2	127
Moskowitz, S. Cross-Talk Considerations in Time-Division Multiplex Systems.....	3	209
Myers, R. H. Design of a Loran Transmitter.....	1	31
Nevin, S. Secondary-Emitting Surfaces in the Presence of Oxide-Coated Cathodes.....	2	103
Neyt, C. B. Electromechanical Distributor for Sorting Mail.....	3	163
Nijs, L. J. G. Electromechanical Distributor for Sorting Mail.....	3	163
Parzen, P.:		
Effect of Hydrostatic Pressure in an Electron Beam on the Operation of Traveling-Wave Devices.....	3	228
Periodic-Waveguide Traveling-Wave Amplifier for Medium Powers.....	3	220
Quantization Distortion in Pulse-Count Modulation with Nonuniform Spacing of Levels.....	2	121
Theory of Space-Charge Waves in Cylindrical Waveguides with Many Beams.....	3	217
Peterman, W. C. Four/Two-Channel Time-Division-Multiplex Telegraph System for Long-Distance Radio Circuits.....	2	127
Richards, C. E. Some Properties and Tests of Magnetic Powders and Powder Cores.....	1	55
Robinson, D. W. Anechoic Chamber for Acoustic Measurements.....	1	70
Rowe, E. G. Technique of Trustworthy Valves.....	4	257
Royden, G. T.:		
Suppression of Harmonics in Radio Transmitters. [Correction, v. 28, n. 4, p. 321; December, 1951.].....	2	112
Transmission-Line Balance Indicator for Transmitters.....	2	110
Salinger, H. Secondary-Emitting Surfaces in the Presence of Oxide-Coated Cathodes.....	2	103
Scheuer, S. Electromechanical Distributor for Sorting Mail.....	3	163
Scott, T. R. Crystal Triodes.....	3	195
Sichak, W. Note on the Measurement of Impedance with the Impedometer.....	1	54
Spitzer, F. P. Determination of the Piezoelectric Constants of Some Isomorphous Crystals.....	4	300
Starr, A. T. Linear Electron Accelerator to One Million Volts.....	3	186
Staschover, L. Television-Link Sound Diplexer.....	2	108
Weintraub, N. Fault Location by Pulse-Time Modulation.....	2	90
White, C. G. Railways Modernize with Centralized Supervisory Control.....	1	3
Wills, G. M. B. Application of 12-Channel Carrier to the Open-Wire Line Between Rio de Janeiro and São Paulo.....	4	276