

INDEX.

VOL. VIII. The Wireless Engineer & Experimental Wireless. 1931.

I. GENERAL INDEX.

	PAGE		PAGE
A BSTRACTS AND REFERENCES (<i>see separate Index</i>), 28, 88, 143, 202, 261, 315, 373, 432, 490, 548, 604		Testing Radio Sets, J. H. Reyner	87
Adjustments, Coarse and Fine (<i>Patents</i>)	400	Funk-Empfangs-Technik, M. von Ardenne	87
Aerial Coupling Circuits (<i>Patent</i>)	663	Rundfunk-Schaltungstechnik, M. von Ardenne	134
Aerial Earthing Switches (<i>Patents</i>)	231	Abacs Dealing with Complex Numbers, L. Abeles	134
Aerials, (<i>Patents</i>), .. 57, 229, 232, 342, 402, 520, 633, 634, 635, 665		Electrical Condenser Tissues, R. Fletcher & Sons, Ltd.	134
Aircraft Navigation (<i>Patents</i>)	173	The Theory and Practice of Radio-Frequency Measurements, E. B. Moullin	311
Aircraft, Radio on (<i>Illustrated</i>)	293	Cours élémentaire de Télégraphie et Téléphonie sans Fil, F. Bedeau	311
Alignment Representation of Valve Data, W. A. Barclay	75	N.P.L. Collected Researches, Vol. XXII.	372
Alternative Equivalent Circuit for the Valve (<i>Correspondence</i>)	200	Radiotelefonía-Radiotelegrafia ad onde Guidate	421
Amplification of Transients, Distortionless, C. W. Oatley	244, 307	Quartz Resonators and Oscillators, P. Vigoureux	602
Amplifiers, Interaction in, L. Bainbridge-Bell	18	H.F. Alternating Currents, K. McIlwain and J. G. Brainerd	603
Amplifiers, (<i>Patents</i>) 57, 231, 345, 459, 460, 576, 578		Braun Tube, Further Advances in the Technique of, M. von Ardenne	127
Amplifiers, R.C. Coupled, Variation of Magnification with Pitch, W. A. Barclay	362	Bridge, A. C., Method of Testing Radio Valves, C. S. Bull	70
Amplifying Circuits (<i>Patents</i>)	116, 289, 635	British Wireless Exhibition (<i>Editorial</i>)	521
Amplitude of Driven Loud Speaker Cones, M. J. O. Strutt	238	Broadcasting (<i>Patents</i>) .. 174, 289, 459, 518, 520	
(<i>Correspondence</i>)	312, 313	"Broadcasting House" (<i>Illustration</i>)	3
Analysis of Distortion in Resistance Amplification, E. B. Moullin	118	C alibrating Ultra-Short Wave Receivers Employing Super-regeneration, C. Whitehead	370
Anode Resistance, A Saturated Diode, J. F. Herd	192	Capacitative Potential Divider for H.F. Measurements, Dr. K. Schlesinger	532
Anti-fading Control (<i>Patents</i>)	229	Capacities, Small, Measurement of, V. V. Sathe and T. S. Rangachari	543
Apparent Demodulation of a Weak Station by a Stronger One, F. M. Colebrook	409	Capacity Test Set, A Simple, W. H. F. Griffiths	21
(<i>Correspondence</i>)	538	(<i>Correspondence</i>)	140
Approximate Formulae for the Inductance of Solenoids and Astatic Coils, W. G. Hayman	422	Carrier Waves and Side Bands (<i>Correspondence</i>)	259, 312, 429, 538
Australian Short-Wave Transmitter (<i>Illustration</i>)	303	Carrier-Wave Signalling (<i>Patents</i>)	288
Automatic Grid-bias (<i>Patents</i>)	290	Cathode Ray Tube, Further Advances in the Technique, M. von Ardenne	127
Automatic Volume Control (<i>Patents</i>)	115, 171	Cathodes, High Emission (<i>Patents</i>)	172
Auxiliary Tuning Indicators (<i>Patents</i>)	231	Change of Title "The Wireless Engineer"	408
" B and" Couplings (<i>Patents</i>)	58	Circuits Tuned to Fulfil Predetermined Conditions, A. L. M. Sowerby	23
Band-Pass Filter in Radio Receivers (<i>Editorial</i>) .. 233 (<i>Correction</i>)	293	(<i>Correspondence</i>)	199
Beam Aerials (<i>Patents</i>)	342	Circuits, Selective Input (<i>Patents</i>)	635
Beam Arrays and Transmission Lines (<i>I.E.E. Paper</i>), T. Walmsley	25	Coil Resistance Shunts, Graphical Construction, W. A. Barclay	482
Beam Signalling (<i>Patents</i>)	230	"Cold" Amplifiers (<i>Patents</i>)	576
BOOKS RECEIVED: 20, 139, 201, 260, 369, 421, 484, 542, 584, 658		Combined Television and Telephony (<i>Patents</i>)	56
BOOK REVIEWS:		Condensers, Variable, Air, The Losses in, W. H. F. Griffiths	124
Elementary Principles of W/T and T, R. D. Bangay	17	Constant-Reaction Circuits (<i>Patents</i>)	289
Alternate Current Bridge Methods, B. Hague	17		

	PAGE		PAGE
Controlling Tone or Quality (<i>Patents</i>)	343, 346	Field-strength Measurements, Notes on, A. L. Green	61
Correction of a Wireless D.F. for Deviations due to Metalwork (<i>I.E.E. Paper</i>), C. E. Horton	195	Filaments, High-emission (<i>Patents</i>)	400
CORRESPONDENCE, 20, 140, 199, 257, 312, 372, 427, 488, 538, 599		Formulae for Inductance of Solenoids, etc., W. G. Hayman	422
D emodulation, Apparent, of a Weak Station by a Stronger one, F. M. Colebrook (<i>Correspondence</i>)	409 538	Frequency Adjustment, Double Beat Method, F. M. Colebrook	639
Demodulation, Mutual and Allied Problems (<i>Editorial</i>) 405 (<i>Correspondence</i>)	600	Frequency Measurement and Control, (<i>I.E.E. Paper</i>), Lt.-Col. A. S. Angwin	659
Design of High-Frequency Transformers, M. Reed	349	Frequency Measurements of High Accuracy, J. J. Vormer and C. van Geel	298
Design of Power Rectifier Circuits, D. McDonald	522	Frequency-modulated Systems (<i>Patents</i>)	401
Design of Tuned Circuits to Fulfil Predetermined Conditions, A. I. M. Sowerby (<i>Correspondence</i>)	23 199	Further Advances in the Technique of the Braun Tube, M. von Ardenne	127
Direct Reading Modulation Meter, A. H. Cooper and G. F. Smith	647	G anged Condensers (<i>Patents</i>)	113
Direction-finder, Corrections for Deviations due to Metalwork (<i>I.E.E. Paper</i>), C. E. Horton	195	Glow-discharge Tubes for Reception (<i>Patents</i>)	115
Direction-finding Systems (<i>Patents</i>), 58, 174, 343, 346, 403, 462, 663		Gramophone Pick-ups &c. (<i>Patents</i>), 113, 344, 403, 517, 518, 634, 663	
Directional Aerials (<i>Patents</i>)	56, 517, 665	Grid-Emission, Preventing (<i>Patents</i>)	578
Directional Broadcasting (<i>Patents</i>)	56	Grid-leak Detection (<i>Patents</i>)	461
Distant Control (<i>Patents</i>)	460	Gridless Triodes (<i>Editorial</i>)	1
Distortion, Frequency, Effect of Output Load, H. A. Thomas	11	H eterodyne Receivers (<i>Patents</i>)	403, 519
Distortion in Resistance Amplification, An Analysis, E. B. Moullin	118	High Frequency Feeders, H. O. Roosenstein	294
Distortion in Valve Characteristics, G. S. C. Lucas (<i>Correspondence</i>)	595 660	High-Frequency Generators (<i>Patents</i>)	56
Distortionless Amplification of Electrical Transients, C. W. Oatley	244, 397	High-Frequency Resistance of Coils, A. L. Green	183
Disturbance, Local, Cutting Out (<i>Patents</i>)	462	High-Frequency Signalling (<i>Patents</i>)	633
Double Beat Method of Frequency Adjustment, F. M. Colebrook	639	How Many Ionised Layers? (<i>Editorial</i>)	463
Dry Rectifiers (<i>Patents</i>)	58	"Hum." Preventing (<i>Patents</i>)	290, 460, 636
Duplex Signalling Systems (<i>Patents</i>)	460, 462	I NSSTITUTION OF ELECTRICAL ENGINEERS (<i>Papers Read</i>):	
Dynatron Oscillator (for Very High Frequencies), F. M. Colebrook (<i>Correspondence</i>)	581 661	Beam Arrays and Transmission Lines, T. Walmsley	25
E ffect of Output Load upon Frequency Distortion in Resistance Amplifiers, H. A. Thomas	11	Resistance and Reactance, New Method of Measuring, F. M. Colebrooke and R. M. Wilmotte	83
Electrostatic Speakers (<i>Patents</i>)	519, 520	Variable-Capacitance Cylindrical Condenser and a Wavemeter for Short Waves, E. B. Moullin	84
Eliminators for Mains Supply (<i>Patents</i>)	174	Some Measurements of a Loud Speaker <i>in vacuo</i> , P. K. Turner	129
"Empress of Britain" Telephone Equipment (<i>Illustration</i>)	361	Practical Correction of D.F. for Deviations due to Metalwork of a Ship, C. E. Horton	195
ERRATUM:		Propagation of Waves, R. Naismith	253
"Parmeko" Public Address Amplifier	20	Technical Problems in Connection with Television (<i>Discussion</i>)	310
E XHIBITIONS:		Frequency Measurement and Control, Lt.-Col. A. S. Angwin	659
Physical and Optical Societies	17, 117, 135	Interaction in Amplifiers, L. Bainbridge-Bell	18
British Wireless (<i>Editorial</i>)	521	Ionised Layers, How Many? (<i>Editorial</i>)	463
Olympia 1931 (<i>Impressions</i>)	585	L ight-Sensitive Amplifier Circuits (<i>Patents</i>)	115
Experiments with a Quartz Crystal Receiver, A. Palmgren	250	Light-Sensitive Cells (<i>Patents</i>)	171
F ading, Prevention of (<i>Patents</i>), 115, 229, 289, 343, 345, 401, 518		Light-Sensitive Devices (<i>Patents</i>)	57
Feeders, High Frequency, H. O. Roosenstein	294	Losses in Variable Air Condensers, W. H. F. Griffiths	124
		Loud Speaker Cones, Amplitude of, M. J. O. Strutt (<i>Correspondence</i>)	238 312, 313

	PAGE		PAGE
Loud Speaker <i>in vacuo</i> , Some Measurements (<i>I.E.E. Paper</i>), P. K. Turner ..	129	Prague Broadcasting Station (<i>Illustration</i>) ..	638
Loud Speaker, The Moving Coil, H. M. Clarke	304	Propagation of Waves (<i>I.E.E. Paper</i>), R. Naismith ..	253
Loud Speakers (<i>Correspondence</i>) ..	142	Push-Pull Amplifiers (<i>Patents</i>) ..	345, 578
Loud Speakers (<i>Patents</i>), 229, 232, 290, 345, 400, 459, 519, 520, 664		Q uality Detectors, W. Greenwood and S. J. Preston ..	648
M agnetron Detectors (<i>Patents</i>) ..	404	Quartz Crystal Receiver, Experiments with, A. Palmgren ..	250
Mains "Ripple," Eliminating (<i>Patents</i>) ..	346, 400	R adio City "America's New Broadcasting Centre" (<i>Illustration</i>) ..	191
Mains-Voltage, Regulating (<i>Patents</i>) ..	174	Radio on Modern Aircraft (<i>Illustration</i>) ..	293
Measurement of Resistance and Reactance, A New Method (<i>I.E.E. Paper</i>), F. M. Colebrooke and R. M. Wilmotte ..	83	Reaction Control (<i>Patents</i>) ..	57, 520
Measurement of Small Capacities, V. V. Sathe and T. S. Rangachari ..	543	Rebroadcasting Distant Transmissions (<i>Editorial</i>) ..	59
Measurements of a Loud Speaker <i>in vacuo</i> (<i>I.E.E. Paper</i>), P. K. Turner ..	129	Receivers (<i>Patents</i>) ..	57, 346, 403, 460, 663, 664
Measuring Distances by Radio (<i>Patents</i>) ..	403	Receivers, Wiring-up (<i>Patents</i>) ..	114
Modulation and the Heterodyne, W. Jackson	425	Receiving Circuits (<i>Patents</i>) ..	462
Modulation and Side Bands, N. F. S. Hecht ..	471	Rectifier Circuits, Design of, D. McDonald ..	522
Moving-Coil Loud Speaker, H. M. Clarke ..	304	Rectifiers, (<i>Patents</i>) ..	114, 288, 459, 636
Moving Coil Speakers (<i>Patents</i>) ..	229, 459	Rectifying Sets (<i>Patents</i>) ..	232
Multiplex Signalling (<i>Patents</i>) ..	290, 404	Reflex Circuits (<i>Patents</i>) ..	114
Multi-Frequency Generator, Single-Valve, A. T. Starr ..	465	Relaying System, (<i>Patents</i>) ..	634, 636
Mutual Demodulation and Allied Problems (<i>Editorial</i>) ..	405	Remote Control Systems (<i>Patents</i>) ..	400, 634
	(Correspondence) 600	Resistance and Reactance at Radio Frequencies, A New Method of Measurement (<i>I.E.E. Paper</i>), F. M. Colebrook and R. M. Wilmotte ..	83
N avigational Wireless (<i>Patents</i>) ..	344	Resistance, Anode, A Saturated Diode, J. F. Herd ..	192
N.P.L. Annual Visit ..	431	Resistance Capacity Coupled Transformer, F. Aughtie and W. R. Cope ..	177
N.P.L., Standard Frequency Transmission from G5HW ..	531	(<i>Correspondence</i>) ..	312, 372, 427
New Development in L.F. Transformer Design ..	412	Resistance, H.F., of Coils, Measurement, A. L. Green ..	183
Nodal Lines on Vibrating Diaphragms (<i>Correspondence</i>) ..	540	Resistances and Capacities of Valves, Variation of, L. Hartshorn ..	413
		(<i>Correspondence</i>) ..	488, 600
O lympia 1931, Impressions of the Radio Show ..	585	Resonance Meters (<i>Patents</i>) ..	114
Oscillation Generators (<i>Patents</i>) ..	230, 665	Rule for the Impedance of Parallel Circuits (<i>Correspondence</i>) ..	20
"Parmeko" Public Address Amplifier (<i>Correction</i>) ..	20	S afety Devices for Power Generators (<i>Patents</i>) ..	58
PATENTS, 56, 113, 171, 229, 288, 342, 400, 459, 517, 576, 633, 663		Saturated Diode as an Anode Resistance, J. F. Herd ..	192
P.C.J. Short-Wave Station at Hilversum. Masts (<i>Illustration</i>) ..	252	Scattered Radiation from Short-Wave Beams (<i>Editorial</i>) ..	579
Percentage Harmonic Distortion (<i>Editorial</i>) ..	347	Screened Grid Detectors (<i>Patents</i>) ..	342
(<i>Correspondence</i>) ..	372, 428, 599	Secret Duplex Systems (<i>Patents</i>) ..	171
Photo-Electric Cells (<i>Patents</i>), 57, 172, 174, 404, 461		Selective Reception (<i>Patents</i>) ..	576, 577, 663
Physical and Optical Societies' Exhibition ..	17, 117, 135	Selectivity and Response, E. E. Wright ..	133
Physical Reality of Side-bands, F. M. Colebrook ..	4	Selectivity, The Definition of (<i>Correspondence</i>) ..	140, 199
(<i>Correspondence</i>) ..	257, 314, 660	Short-Wave Beams, Scattered Radiation from (<i>Editorial</i>) ..	579
Picture Telegraphy Recorders (<i>Patents</i>) ..	289	Short-Wave Generators (<i>Patents</i>) ..	115
Picture Transmission (<i>Patents</i>) ..	172, 288, 577	Short-Wave Oscillators (<i>Patents</i>) ..	520
Piezo-Crystal Control (<i>Patents</i>) ..	116	Short-Wave Receiver (<i>Patents</i>) ..	288, 520
Piezo-Electric Circuits (<i>Patents</i>) ..	229, 462	Short-Wave Signalling (<i>Patents</i>) ..	113
Piezo-Electric Crystals (<i>Patents</i>) ..	461, 633	Short-Wave Single Sideband Telephony (<i>Illustration</i>) ..	348
Piezo-Electric Loud Speakers (<i>Patents</i>) ..	345	Sidebands and Modulation, N. F. S. Hecht ..	471
Piezo-Electric Oscillators (<i>Patents</i>), 345, 401, 517, 578		Sidebands, The Physical Reality, F. M. Colebrook ..	4
Portable Sets (<i>Patents</i>) ..	171	(<i>Correspondence</i>) ..	257, 314, 427, 540, 660
Potential Divider for H.F. Measurements, Dr. K. Schlesinger ..	532		
Potential Dividers (<i>Patents</i>) ..	344		

	PAGE		PAGE
Simple Capacity Test Set, W. H. F. Griffiths..	21	Transients and Telephony, T. S. E. Thomas..	485
(<i>Correspondence</i>)	140	(<i>Correspondence</i>)	540, 599, 661
Single-Valve Multi-frequency Generator, A. T. Starr	465	Transmission of Standard-Frequency Waves from the N.P.L.	531
Slaithwaite, B.B.C. Station, Main Control Panel (<i>Illustration</i>)	237	Tuning and Volume Control (<i>Patents</i>)..	56, 636
Sound-Reproduction (<i>Patents</i>).. .. .	114	U ltra-Short Wave Communication (<i>Correspondence</i>).. .. .	209, 314
Stabilising Amplifiers (<i>Patents</i>)	401	Ultra Short-Wave Generators (<i>Patents</i>)	462
Stenode (<i>Correspondence</i>)	314, 427, 540, 662	Ultra-Short Wave Receivers, Calibrating, C. Whitehead	370
Stenode Radiostat (<i>Editorial</i>)	637	V alve Characteristics, Distortion in G. S. C. Lucas	595
Stereophonic Reproduction (<i>Patents</i>)	404	(<i>Correspondence</i>)	660
Super-Rejector Circuit (<i>Editorial</i>)	175	Valve Data, The Alignment Representation, W. A. Barclay	75
Supply Connections (<i>Patents</i>)	342	Valve Generators (<i>Patents</i>)	113
T elephony on 18 Centimetres (<i>Illustration</i>)	249	Valve Triangle (<i>Editorial</i>)	291
Telephony, Short-Wave, Single Sideband (<i>Illustration</i>)	348	Valves (<i>Patents</i>) 172, 173, 230, 232, 290, 517, 577, 578, 664	578, 664
Television Apparatus &c. (<i>Patents</i>).. 58, 114, 116, 230, 346, 402, 577, 665	665	Valves, Detector (<i>Patents</i>)	57
Television, Technical Problems (<i>I.E.E. Discussion</i>)	310	Variable-Capacitance Cylindrical Condenser and a Wavemeter for Short Wavelength (<i>I.E.E. Paper</i>), E. B. Moullin	84
Testing Radio Valves, The A.C. Bridge Method, C. S. Bull.. .. .	70	Variable-Impedance Couplings (<i>Patents</i>)	344
Thermionic Filaments (<i>Patents</i>)	342	Variation of Magnification with Pitch in R.C. Coupled Amplifiers, W. A. Barclay	362
Thermo-Junctions at High Radio-Frequencies, F. M. Colebrook	356	Variation of Resistance and Inter-Electrode Capacity of Valves, L. Hartshorn	413
Tone-Correcting Circuits (<i>Patents</i>).. 346, 404, 517, 576, 634	634	(<i>Correspondence</i>)	488, 600
Transatlantic Telephony (<i>Patents</i>)	116	"Visual" Heterodyne Reception (<i>Patents</i>)	519
Transformer Couplings (<i>Patents</i>)	461	Volume Control (<i>Patents</i>) .. 290, 402, 636, 664	664
Transformer Design L.F., New Development (R.I. "Parafeed")	412	W ave Traps (<i>Patents</i>)	288, 461
Transformer, Resistance Capacity Coupled, F. Aughtie and W. F. Cope	177	Wired-Wireless Signalling (<i>Patents</i>)	578
(<i>Correspondence</i>)	312, 372, 427	"Wireless Engineer," Change of Title	408
Transformers, H.F., Design of, M. Reed	349		

II. INDEX TO AUTHORS.

ANGWIN, LT.-COL. A.S. (<i>I.E.E. Paper</i>)	659	NAISMITH, R. (<i>I.E.E. Paper</i>).. .. .	253
AUGHTIE, F. and COPE, W. F.	177	OATLEY, C. W.	244, 307
BAINBRIDGE-BELL, L.	18	PALMGREN, A.	250
BARCLAY, W. A.	75, 362, 482	PRESTON, S. J. and GREENWOOD, W.	648
BULL, C. S.	70	RANGACHARI, T. S. and V. V. SATHE	543
CLARKE, H. M.	304	REED, M.	349
COLEBROOK, F. M.	4, 356, 409, 581, 639	ROSENSTEIN, H. O.	294
COLEBROOK, F. M. and WILMOTTE, R. M. (<i>I.E.E. Paper</i>)	83	SATHE, V. V. and T. S. RANGACHARI	543
COOPER, A. H. and SMITH, G. F.	647	SMITH, G. F. and COOPER, A. H.	647
COPE, W. F. and AUGHTIE, F.	177	SCHLESINGER, K.	532
GREEN, A. L.	61, 183	SOWERBY, A. L. M. S.	23
GREENWOOD, W. and PRESTON, S. J.	648	STARR, A. T.	465
GRIFFITHS, W. H. F.	21, 124	STRUTT, M. J. O.	238
HARTSHORN, L.	413	THOMAS, H. A.	11
HAYMAN, W. G.	422	THOMAS, T. S. E.	485
HECHT, N. F. S.	471	TURNER, P. K. (<i>I.E.E. Paper</i>).. .. .	129
HERD, J. F.	192	VON ARDENNE, M.	127
HORTON, C. E.	195	VORMER, J. J. and VAN GEEL, C.	298
JACKSON, W.	425	WALMSLEY, T. (<i>I.E.E. Paper</i>)	25
LUCAS, G. S. C.	595	WHITEHEAD, C.	370
MCDONALD, D.	522	WILMOTTE, R. M. and COLEBROOK, F. M. (<i>I.E.E. Paper</i>)	83
MOULLIN, E. B. (<i>I.E.E. Paper</i>)	84	WRIGHT, E. E.	133
MOULLIN, E. B.	118		

III. ABSTRACTS AND REFERENCES.

PROPAGATION OF WAVES.

- Sur l'Absorption des Radiations dans la basse Atmosphère et le Dosage de l'Ozone (The Absorption of Radiations in the Lower Atmosphere, and the Estimation of the Ozone Density).—Ch. Fabry and H. Buisson, p. 262.
- Effect of Transmitting Height on Received Signals from Aircraft : Fading Elimination, etc.—Wireless Division, German Aircraft Research Establishment, p. 550.
- Airplane Radiophone Communication [on 30-190 m. Waves].—C. H. Vincent, p. 32.
- The Electrical Layers of the Atmosphere.—W. C. Reynolds, p. 377.
- Le Sondage simultané par les Parasites atmosphériques à Zurich et au Sahara (Simultaneous "Sounding" by Atmospherics at Zurich and in the Sahara).—J. Lugeon, p. 29.
- Quelques Résultats de la Mission Radio-météorologique Suisse au Sahara en 1929 (Some Results of the Swiss Radio-meteorological Mission to the Sahara in 1929 ["Sounding" of the Atmosphere by Atmospherics and Short Waves]).—J. Lugeon, p. 492.
- Negative Attenuation of Wireless Waves at Broadcast Frequencies.—S. R. Kantelet, p. 315.
- Investigation of the Attenuation of Electro-magnetic Waves and the Distances Reached by Radio Stations in the Wave Band from 200 to 2000 Metres [including Effect of Transmitting Height].—H. Fassbender, F. Lisner and G. Kuribau, p. 550.
- Note of the Accuracy of Roll's Graphs of Sommerfeld's Attenuation Formula.—W. H. Wise, p. 90.
- Sur l'Aurore polaire du 3 Septembre et sur son Action dans les Transmissions radiotélégraphiques (The Polar Aurora of 3rd September, and Its Action on Radio Transmissions).—P. Helbrønner, p. 28.
- Experiments in Störmers Polarlicht-theorie (Experiments on Störmer's Aurora Theory).—E. Brüche: E. Brüche and W. Ende, pp. 89 and 551. See also Echos.
- Australian R.R.B.—Work on Heavyside Layer, p. 55.
- Papers on Meteorological Balloons.—See under "Directional Wireless."
- Bibliography on Radio Wave Phenomena and Measurement of Radio Field Intensity.—Bureau of Standards, p. 493.
- Über die Ausbreitung der Rundfunkwellen (The Propagation of Broadcast Waves [particularly Fading Phenomena]).—O. Böhm, p. 605.
- Some Abnormal Values of Signal Intensity from Broadcasting Stations.—M. N. Doraswami and S. R. Kantelet, p. 261.
- Effects of Short Lengths of Cable on Travelling Waves.—McEachron, Hemstreet and Seelye, p. 90.
- Radio Field Strength Survey of the City of Calcutta and its Suburbs.—H. Rakshit, p. 205.
- Wave Motion and the Equation of Continuity.—R. B. Lindsay, p. 552.
- Field-Strength Measurements on Daventry 5XX.—R. Naismith: Reyner, pp. 378 and 491.
- 1929-1930 Developments in the Study of Radio Wave Propagation.—T. L. Eckersley, p. 606.
- On the Change of the Dielectric Constant produced by Free Electrons.—S. Benner, p. 490.
- The Diffraction of a Circularly Symmetrical Electro-magnetic Wave by a Coaxial Circular Disc of Infinite Conductivity.—J. Bardeen, p. 90.
- Die Beugung elektromagnetischer Wellen an kapazitiv erregten Sekundärstrahlern (The Diffraction of Electromagnetic Waves at Capacitively Excited Secondary Radiators).—F. Ollendorff, p. 376.
- Beugung einer ebenen Welle an einem Spalt von endlicher Breite (Diffraction of a Plane Wave at a Slit of Finite Breadth).—M. J. O. Strutt, p. 493.
- Diffraction Reflection and Scattering.—Boyle and Lehmann, p. 158.
- On Radiative Diffusion in the Atmosphere.—O. F. T. Roberts, p. 32.
- Diffusion Regarded as a Compensation for Smoothing.—L. F. Richardson and J. A. Gaunt, p. 317.
- Note on Frequency Shifts in Dispersing Media.—G. Breit and E. O. Salant, p. 31.
- Über die Fortpflanzung von Signalen in dispergierenden Systemen (On the Propagation of Signals in Systems with Dispersion).—H. G. Baerwald, pp. 32, 202 and 551.
- La Dispersion des Ondes hertziennes dans les Solides (The Dispersion of Hertzian Waves in Solids [Seignette Salt, etc.]).—J. Errera, pp. 205 and 435.
- Ein allgemeiner Satz über den Zusammenhang zwischen Eigenfrequenzen und Gruppenlaufzeit in linearen verlustfreien Dispersionsystemen (A General Law for the Connection Between Natural Frequencies and Group Transit Time in Linear Loss-free Dispersive Systems).—H. G. Baerwald, p. 435.
- Radio Telephony Distortion [on Short Waves: Partial Disappearance of Modulation with Retention of Carrier].—T. L. Eckersley, p. 374.
- Earth.—See Ground, Soil.
- Theory of Earthquake Waves.—B. Gutenberg, p. 263.
- Remarques au Sujet des Observations d'Échos radioélectriques faites à Poulou-Condore en Mai, 1929 (Remarks on the Echo Observations in Indo-China, 1929).—Gallin, p. 30.
- Circuits for Propagation Researches: Pulse-Transmitting Circuit using Neon Tube: Binaural Measuring Circuit for Echo Times.—Ferris, Bonnemaire, Jouaust and Decaux, p. 434.
- Wireless Reflections and Echos.—J. Larmor, p. 30.
- Eine Methode der Aufnahme der Echos bei Wellen der drahtlosen Telegraphie (A Method of Recording Wireless Echos).—J. Zenneck, p. 30.
- Messung von Echos bei der Ausbreitung elektromagnetischer Wellen in der Atmosphäre (The Measurement of Echos in the Propagation of Electromagnetic Waves in the Atmosphere).—G. Goubau and J. Zenneck, p. 432.
- The Timing of Wireless Echos.—E. V. Appleton, p. 205.
- A Simple Method of Investigating Wireless Echos of Short Delay.—E. V. Appleton and G. Builder, p. 492.
- Electron Beam Experiments in connection with the Long Delay Echos.—E. Brüche, p. 262. See also Aurora.
- Zur Frage nach der Natur der Langzeitechos (On the Question of the Nature of the Long-Delay Echos).—G. Joos, p. 374.
- Über die Vorgänge im elektromagnetischen Felde, dargestellt durch die Kraftlinien (On the Representation by Lines of Force of the Phenomena in the Electromagnetic Field).—G. Siemens, p. 145.
- Über die Ausbreitung elektromagnetischer Wellen über eine ebene Erde (On the Propagation of Electromagnetic Waves over a Plane Earth).—B. van der Pol and K. F. Niessen, p. 30.
- Über die Ausbreitung elektromagnetischer Wellen (The Propagation of Electromagnetic Waves).—B. van der Pol, p. 375.
- Some Remarks on the Analogy of Certain Cases of Propagation of Electromagnetic Waves and the Motion of a Particle in a Potential Field.—W. de Groot, p. 31.
- Das Verhalten elektromagnetischer Wellen bei räumlich veränderlichen elektrischen Eigenschaften (The Behaviour of Electromagnetic Waves in the Presence of Spatially Varying Electrical Characteristics).—G. J. Elias, p. 315.
- Considérations électroniques sur l'Émission radioélectrique (Radioelectric Emission from the Electronic Standpoint).—M. Boil, p. 493.
- Nabludenia nad zamiraniem signalov Korotkvolnih stancy (Observations on the Fading of Short Wave Radio Signals).—A. N. Shtchukin, pp. 90 and 202.
- Über die Beziehungen zwischen Empfangs-Störungen bei Kurzwellen und den Störungen des magnetischen Feldes der Erde (On the Connection between Short Wave Fading and Disturbances of the Earth's Magnetic Field).—H. Mögel, p. 144.
- Beiträge zum Fadingstudium bei Kurzwellen (Contribution to the Study of Short-Wave Fading).—H. Mögel, p. 605.
- The Unequal Fading of Carrier and Side Bands.—A. W. Ladner: G. Wilde: T. L. Eckersley, p. 204.
- Wide Range Scales for Fading Records by Electrical Means.—G. D. Robinson, p. 262.
- Een statistische Theorie over snelle Fading (A Statistical Theory of Rapid Fading).—H. J. de Boer, p. 373.
- Visual Studies of Radio Fading.—E. Merritt, T. McLean and W. E. Bostwick, p. 432.
- Application of Fermat's Theorem to the Propagation of Radio Waves.—H. Nagaoka, p. 606.
- Über eine Erweiterung der Gleichungen des elektromagnetischen Feldes (On an Extension of the Electromagnetic Field Equations).—B. Laganoff, p. 32.
- Some Notes on Field-Strength Measurement.—A. L. Green, p. 205.
- Recent Field-Strength Measurements on Broadcast and Longer Waves.—M. von Ardenne, p. 550.
- Field-Strength Measurements and their Practical Application: Contour Charts of Swedish Stations.—Lemoine, p. 165.
- Feldstärkemessungen deutscher Kurzwellessender in England: Vergleich von Fernfrequenzmessungen zwischen New York, London und Berlin (Field Strength Measurements in England of German Short-Wave Stations. Comparison of Distant Frequency Measurements made in New York, London and Berlin).—H. Mögel, p. 604.
- A New Field Strength Measuring Equipment.—von Ardenne, p. 106.
- The Conductivity of Gases in Uniform Electric Fields.—S. P. McCallum and F. I. J. Jones, p. 608.
- The Dielectric Coefficients of Gases. Part I.—The Rare Gases and Hydrogen.—H. E. Watson, G. Gundu Rao and K. L. Ramaswamy, p. 607.
- Über die "Glashauswirkung" der Erdatmosphäre und das Zustandekommen der Troposphäre (The "Greenhouse" Effect of the Earth's Atmosphere, and the Formation of the Troposphere).—F. Albrecht, p. 493.
- Messung der elektrischen Erdbodeneigenschaften zwischen 20 und 2×10^7 Hertz (Measurement of the Electrical Properties of the Ground at Frequencies between 20 and 2×10^7 Cycles per Second).—M. J. O. Strutt, p. 28

- Group Velocity and Wave Mechanics.**—H. S. Allen, p. 32.
- Zur Theorie der elektrischen Heizung (On the Theory of Electric Heating) [Mathematical Investigation of the Reflection and Refraction of Electromagnetic Waves at Metallic Surfaces and Calculation of the Energy Absorbed in the Metal].—F. Walter, p. 146.
- Measurement of the Heaviside Layer Heights.—D. F. Martyn, p. 29.
- Kennelly-Heaviside Layer Height Observations for 4,045 and 8,650 kc.—T. R. Gilliland, pp. 88 and 204.
- Discussion on Kennelly-Heaviside Layer Height Observations for 4,045 kc. and 8,650 kc. [Lunar Effect on Heaviside Layer].—Gilliland and F. K. Vreeland, p. 549.
- Kennelly-Heaviside Layer Studies.—P. A. de Mars, T. R. Gilliland and G. W. Kenrick, p. 204.
- Height of Kennelly-Heaviside Layer.—Bureau of Standards, p. 492.
- Heaviside Layer Observations in the Antarctic.—Hanson, p. 549.
- A Simple Small-power Equipment for the Study of Heaviside Layer Height by the Pulse Echo Method.—I. Ranzi, p. 549.
- A Method of Continuous Observation of the Equivalent Height of the Kennelly-Heaviside Layer.—E. L. C. White, p. 606.
- Heaviside Layer.—See also Ionised, Higher Layers, Atmosphere, Upper Atmosphere and Stratosphere.
- Über die experimentelle Erforschbarkeit der höheren Schichten der Atmosphäre (On the Explorability of the Higher Layers of the Atmosphere).—H. Benndorf, p. 262.
- The Diurnal and Seasonal Performance of High Frequency Radio Transmission over Various Long Distance Circuits.—M. L. Prescott, p. 89.
- Note on High Frequency [20 and 25 Megacycles] Transmission during the Summer of 1930.—G. W. Kenrick, A. H. Taylor and L. C. Young, p. 261.
- Polarisation of High Frequency Waves and their Direction Finding.—S. Namba, E. Iso and S. Ueno, p. 491.
- High Frequency Waves.—See also Short Waves.
- Application of Integral Equations to Diffraction and Characteristic Vibrations in the Electromagnetic Theory of Light.—Sternberg, p. 55.
- A Method of Measuring Upper Atmospheric Ionisation.—E. V. Appleton, p. 202.
- On some Radio-Frequency Properties of Ionised Air.—E. V. Appleton and E. C. Childs, p. 88.
- Radio Frequency Properties of Ionised Air.—R. T. Lattey and W. G. Davies, p. 315.
- Sur les Phénomènes de Propagation dans les Gaz ionisés par les Décharges de très haute fréquence (On the Propagation Phenomena in Gases Ionised by Very High Frequency Discharges).—M. Chenot, p. 261.
- The Cylindrical Ionised Field and the Path Time of the Ions.—Pauthner and Moreau-Hanot, p. 398.
- Mechanische Analogieën van de Uitbreiding van electromagnetische Golven in een geïoniseerd Gas (Mechanical Analogies for the Propagation of Electromagnetic Waves in an Ionised Gas).—W. de Groot, p. 261.
- Sur les Propriétés des Gaz ionisés dans les Champs électromagnétiques de haute fréquence (The Properties of Ionised Gases in high Frequency Electromagnetic Fields).—C. Gutton, p. 30.
- Sur la Constante diélectrique et la Conductibilité des Gaz ionisés (The Dielectric Constant and Conductivity of Ionised Gases).—Th. V. Jonecu and C. Mihul, pp. 144 and 204.
- Les Gaz ionisés et la Loi de Coulomb (Ionised Gases and Coulomb's Law).—Th. V. Jonecu, p. 315.
- Sur la Vibration propre des Gaz ionisés (The Natural Vibration of Ionised Gases).—J. Macinteanu, p. 551.
- How Many Ionised Layers?—G. W. O. H., p. 606.
- Fortpflanzung einer elektromagnetischen Welle in einem ionisierten magnetischen Medium (The Propagation of an Electro-magnetic Wave in an Ionised, Magnetically Active Medium).—L. Schekulin (Zhekulin), p. 88.
- Papers dealing with the Propagation of Waves read before the April, 1931, Joint Annual Convention of the Three Electrical Institutes in Japan.—Namba, Yokoyama and Tanimura; Tanimura and Iso, p. 548.
- Contemporary Theories of Light.—W. F. G. Swann, p. 32.
- The Velocity of Light.—M. E. J. Gheury de Bray, p. 317.
- The Propagation of Energy by Waves and the Amplitude of a Light Wave.—W. W. Sleator, p. 318.
- The Dispersion of Light in Metals.—J. B. Nathanson, p. 32.
- Electro-optical Modifications of Light Waves.—L. H. Stauffer, p. 32.
- Polarisation elliptique par Réflexion à la Surface des Liquides: Application à l'Étude des Couches monomoléculaires superficielles (Elliptical Polarisation by Reflection at Liquid Surfaces: Application to the Study of Superficial Monomolecular Layers).—Ch. Bouhet, p. 205.
- Readability of Long Distance Radio Communications.—T. Nakagami and C. Anazawa, p. 435.
- Long-Wave Radio Receiving [Field Strength] Measurements at the Bureau of Standards in 1929.—L. W. Austin, p. 30.
- Short-Distance Observations on Long-Wave Phenomena.—R. Naismith, pp. 375 and 491.
- Low-Frequency Radio Transmission [Field Strengths, Polarisation and Magnetic Storms].—P. A. de Mars, G. W. Kenrick and G. W. Pickard, p. 29.
- Twenty-four-hour Receiving Measurements of Low-Frequency Radio Stations—Bollins, Bordeaux, Kahuku, Malabar and Saigon.—E. Yokoyama and I. Tanimura, p. 376.
- Polarisation Phenomena of Low-Frequency Waves: Part I.—Measurements on Polarisation Error in Direction Finding.—S. Namba, p. 490.
- A Study in Radio-Transmission [Solar and Lunar Effects on the Heaviside Layer].—H. F. Breckel, p. 607.
- Correlation of Long Wave Daytime Radio Transmission with Magnetic Disturbances.—T. Minohara and T. Inouye, p. 434.
- The Propagation of Electromagnetic Waves in a Refracting Medium in a Magnetic Field.—D. R. Hartree, p. 143.
- A New Theory of Magnetic Storms.—S. Chapman and V. C. A. Ferraro, p. 29.
- On the Variability of the Quiet-Dav Diurnal Magnetic Variation. Part II.—S. Chapman and J. M. Stagg, p. 317.
- Über die elektrische Wellenausbreitung in Metallen (On the Propagation of Electric Waves in Metals).—F. Walter, p. 90.
- A Note on the Relation of Meteor Showers and Radio Reception.—G. W. Pickard, p. 549.
- Versagen der kurzen Wellen auf der Linie Europa-Nordamerika in der Zeit vom 8. bis 12. August 1930 (Short Wave Failure on the Europe-N. America Service, 8th to 12th August, 1930 [and a Possible Connection with Meteoric Showers]).—E. Quäck: Nagaoka, p. 374.
- The Effect of Meteors on Radio Transmission through the Kennelly Heaviside Layer.—A. M. Skellett, p. 549.
- Osservazioni sui Rapporti tra le Condizioni meteorologiche della Troposfera e la Propagazione delle Radioonde (Observations on the Relation between the Meteorological Condition of the Troposphere and the Propagation of Wireless Waves).—I. Ranzi, p. 549.
- Influence of the Moon on Radio Reception.—H. T. Stetson: Breckel, pp. 317 and 375. See also Lunar Effect.
- On the Correlation of Radio Reception with the Position of the Moon in the Observer's Sky.—H. T. Stetson, p. 375.
- Effect of the Moon on the Atmospheric Pressure in the Far East, p. 435.
- Moon's Effect on Heaviside Layer.—Gilliland and Vreeland, p. 549.
- Multiple Images in Car Windows.—H. M. Reese, p. 435.
- Multiple Reflection or Multiple Layers.—Goubau and Zenneck, p. 434.
- Optical Properties of the Atmosphere: Diffusion and Absorption.—Y. Rocard, p. 32.
- Beiträge zur Optik endlicher Wellenzüge (Contributions to the Theory of Optics of Finite Wave Trains).—D. Eiert, p. 143.
- The Optics of Radio-Transmission.—E. Merritt, p. 203.
- Optics in Radio Transmission and Other Fresh Fields.—F. Twyman, p. 318.
- A Theory of Upper-Atmospheric Ozone.—S. Chapman, p. 89.
- Observations of the Amount of Ozone in the Earth's Atmosphere, and its Relation to other Geographical Conditions. Part IV.—G. M. B. Dobson, H. H. Kimball and E. Kidson, p. 89.
- A Photoelectric Spectrophotometer for Measuring the Amount of Atmospheric Ozone.—G. M. B. Dobson, p. 376.
- Ozone in the Upper Atmosphere and its Relation to Meteorology.—G. M. B. Dobson, p. 377.
- Méthode nouvelle pour le Dosage optique de l'Ozone Atmosphérique (New Method for Estimating by Optical Means the Amounts of Ozone in the Atmosphere).—A. I. Duninowski, p. 89.
- Sur la Distribution de l'Ozone dans l'Atmosphère (The Distribution of Ozone in the Atmosphere).—D. Chalonge and E. Dubois, p. 317.
- Ozongehalt der unteren Atmosphärenschichten (Ozone Content of the Lower Layers of the Atmosphere).—F. W. P. Götz and R. Ladenburg, p. 376.
- Over de Ionisatie bij de Ontbinding van Ozon (Ionisation in the Breaking-up of Ozone).—R. Ruysen, p. 493.
- Estimation of Ozone Density.—Fabry and Buisson. See Absorption.
- Zur Phasen-anomalie bei einer Kugelwelle (On the Phase Anomaly in a Spherical Wave).—J. Picht, p. 90.
- High Frequency Behaviour of a Plasma.—L. Tonks, pp. 374 and 490.
- Wyniki z-Serji Badan nad Rozchodzeniem sie Fal Krótkich (Results of the Second [Polish] Investigations on the Propagation of Short Waves).—D. M. Sokolow and J. Bylewski, p. 261.
- Propagation of Polyphase H.F. Currents along Power Lines, and the Selective Protection of Electric Networks.—J. Fallou, p. 608.
- An Early Note on Wave Propagation.—L. de Forest, p. 33.
- Propagation Measurements on 200-600 Metre Waves.—M. Baumler, p. 145.
- Recherches expérimentales sur la Propagation d'Ondes aériennes dans un long Tuyau cylindrique (Experimental Researches on the Propagation of Air Waves in a Long Cylindrical Tube).—Th. Vautier, p. 146.
- Conditions for the Propagation of Waves in the Atmosphere.—S. Krutschkow, p. 88.
- Progress during the Past Year in the Study of the Propagation of Waves [Double-Layer Hypothesis: Slow Group Velocities and

- Long-Delay Echoes, etc.]—Am.I.E.E. Electrophysics Committee, p. 548.
- Polarisation, Dispersion, Photoelectric Effect and Compton Effect from the Standpoint of the [Writer's] "Tubes of Force" Theory of Light Quanta.—W. Anderson, p. 31.
- Messungen im Strahlungsfeld einer zwischen zwei parallelen, leitenden Flächen erregten Linearantenne (Measurements in the Field Radiated by a Linear Antenna Excited in the Space Between Two Parallel, Conducting Surfaces).—L. Bergmann and W. Doerfel, p. 316.
- The Absorption and Dissociative or Ionizing Effect of Monochromatic Radiation in an Atmosphere on a Rotating Earth.—S. Chapman, p. 202.
- Messungen im Strahlungsfeld einer in der Grundschiwingung ungedämpft erregten Dipolantenne (Measurements in the Radiation Field of a Dipole Aerial excited to its Undamped Fundamental).—H. Peters, p. 30.
- Radiation Measurements of the High Frequency Commission of the Wurtemberg Electrical Union.—R. Thomson and A. Theurer, p. 316.
- Radiation of Multipoles.—K. F. Herzfeld, pp. 262 and 552.
- Notes on Radio Transmission [Inverse Distance Law: Austin-Cohen Formula: Daylight Absorption Band round 40 Kilocycles: Effect of Solar Disturbances].—C. N. Anderson, p. 550.
- On the Connection between the Ray Theory of Electric Waves and Dynamics.—T. L. Eckersley, p. 548.
- Het Reciprociteitstheorema in de Electriciteit (The Reciprocity Theorem in Electricity).—J. W. Alexander, p. 553.
- Das Reciprocitäts-Theorem der drahtlosen Telegrafie (The Reciprocity Theorem of Wireless Telegraphy).—A. Sommerfeld, p. 373.
- Reflection of Waves in an Inhomogeneous Absorbing Medium.—P. S. Epstein, p. 31.
- Zur Metallreflexion (On Metallic Reflection).—J. Zahradníček, p. 88.
- Zur Reflexionspolarisation der Elektronenwellen (On Polarisation of Electron Waves on Reflection).—O. Halpern, p. 262.
- On Reflection of Electromagnetic Waves at Ionised Media with Variable Conductivity and Dielectric Constant.—G. J. Elias, p. 373.
- Over Reflectie van Electromagnetische Golven (On Reflection of Electromagnetic Waves).—G. J. Elias, p. 373.
- Reflexion des Ondes électromagnétiques très courtes sur l'Eau salée (Reflection of Ultra-Short Electromagnetic Waves at the Surface of Salt Water).—R. Guyot, p. 551.
- Sur la Reflexion des Ondes électromagnétiques (The Reflection of [Ultra-short] Electromagnetic Waves).—C. Gutton and G. Beauvais, p. 143.
- Sur les Perturbations diurnes de la Réfraction (The Diurnal Disturbances of Refraction [in the Atmosphere]).—Th. Banachiewicz, p. 205.
- A Method of Representing Radio Wave Propagation Conditions.—L. W. Austin, p. 606.
- Weiterführung der Riemannschen Methode zur Integration der Differentialgleichung der gedämpften Wellen (Further Development of Riemann's Method for the Integration of the Differential Equation of Damped Waves).—A. Korn, p. 262.
- On the Direct Measurement of Wavelength and Damping of Electromagnetic Waves in Rock.—A. A. Petrowsky, p. 317.
- Experimentelle Untersuchungen über Blechschirme im elektromagnetischen Strahlungsfeld (Experimental Investigations into the Effects of Metal Screens in an Electromagnetic Radiation Field).—W. Seiler, p. 262.
- Damping in Bodily Seismic Waves [Theoretical Investigation of the Velocity of Damped Seismic Waves].—H. Jeffreys, p. 493.
- The Instrumental Phase-Difference of Seismograph Records; an Illustration of the Properties of Damped Oscillatory Systems.—F. J. Searse, p. 377.
- Papers on Sersat's "Curve of Pursuit" Hypothesis of the Optics of Moving Bodies.—V. Lalan; Sersat, p. 608.
- Dispersion of a Shock in Echoing- and Dispersive-Elastic Bodies.—K. Sezawa and G. Nishimura, p. 263.
- The Propagation of Short Radio Waves over the North Atlantic.—C. R. Burrows, p. 604.
- La Propagation des Ondes radioélectriques courtes (The Propagation of Short Radio-electric Waves).—R. Jouaust and N. Stöyko, p. 434.
- Some Experiences with Short-Wave Wireless Telegraphy.—N. H. Edes, p. 145.
- Experiences de Communications par Ondes courtes (Short Wave Communication Tests [Italian Navy: Noble Polar Expedition]).—G. Pession and G. Montefinale, p. 435.
- Field Strength Measurements of Short Wave Transmissions.—T. L. Eckersley, p. 491.
- Short Wave Field Strength Measurements.—G. Leithäuser, p. 145.
- Le Sondage des hautes Couches ionisées par les Ondes courtes au Lever du Soleil entre Paris et la Sahara (The "Sounding" of the High Ionised Layers by Short Waves at Sunrise between Paris and the Sahara).—J. Lugeon, p. 29.
- The Multiple Refraction and Reflection of Short Waves.—N. H. Edes, pp. 492 and 606.
- Short Waves.—See also High Frequency, Meteoric Showers, Polish Skineffekt (Skin Effect).—M. J. O. Strutt, p. 608.
- Note on Skip Distance Effects on Super-Frequencies [30-40 Megacycles per Sec.].—A. Hoyt Taylor, p. 203.
- The Relation connecting Skip Distance, Wave-length, and the Constants of the Ionized Layers.—N. H. Edes, p. 605.
- The Electrical Properties of the Soil at Radio Frequencies.—J. A. Ratcliffe and F. W. G. White, p. 28.
- A Theoretical Discussion of the Electrical Properties of the Soil.—F. W. G. White, p. 434.
- Note on the Fifteen-Month Period in Solar Activity, Terrestrial Magnetism and Radio Reception.—Pickard, p. 319.
- Solar and Magnetic Activity and Radio Transmission.—L. W. Austin, E. B. Judson and I. J. Wymore-Shiel, p. 145.
- Wireless Observations during the Total Solar Eclipse of October 21st, 22nd, 1930.—M. A. F. Barnett, p. 607.
- Schallgeschwindigkeit und Temperatur in der Stratosphäre (Sound Velocity and Temperature in the Stratosphere).—B. Gutenberg, pp. 317 and 435.
- The Sparking Potential of Air for High-Frequency Discharges.—E. W. B. Gill and R. H. Donaldson, p. 607.
- Application of Spinor Analysis to the Maxwell and Dirac Equations.—O. Laporte and G. E. Uhlenbeck, p. 377.
- A Correlation of Long-Wave Radio Field Intensity with the Passage of Storms.—I. J. Wymore Shiel, p. 607.
- Optical and Equivalent Paths in a Stratified Medium, Treated from a Wave Standpoint.—D. R. Hartree, p. 432.
- Recent Investigations on the Structure of the Stratosphere.—C. C. Conroy, p. 607.
- Striated Discharges.—Huxley, p. 630.
- The Influence of Sun Spots on Radio Reception.—H. T. Stetson, p. 29.
- Effects of Sun Spots and Terrestrial Magnetism on Long-Distance Reception of Low-frequency Waves.—E. Yokoyama and T. Nakai, p. 375.
- Sunspots. See also under "Atmospherics."
- À propos des Phénomènes électromagnétiques à la Surface de Séparation de deux Milieux (On the Electromagnetic Phenomena at the Surface of Separation of two Media).—Kotelnikoff, Liénard and Margand, p. 552.
- Radio Broadcast Transmission in the Neighbourhood of Sydney N.S.W.—L. S. C. Tippet and W. G. Baker, p. 145.
- Overseas Radio Extensions to Wire Telephone Networks.—Espenschied and Wilson, p. 454.
- Sur la Lumière transmise dans le Cas de Réflexion dite totale (On the Light Transmitted in So-called "Total Reflection").—A. de Gramont, p. 146.
- Sinusoidal Currents in Linearly Tapered Loaded Transmission Lines.—J. W. Arnold and P. F. Bechberger, p. 263.
- Wave Propagation at Velocities much less than that of Light [Experiments with the Electrodeless Discharge at Ultra-high Frequencies].—M. Chenot; G. Ferrié, p. 145.
- Application of [Ultra-high] Frequencies above 30,000 Kilocycles to Communication Problems.—H. H. Beverage, H. O. Peterson and C. W. Hansell, p. 550.
- Ultra-Short Wave Propagation.—Whitehead, p. 89.
- Telephony on Ultra-Short Waves with Vertical Radiation.—J. J. Long, Jr., p. 32.
- The Present Position in the Development of the Ultra-Short Waves, with regard to their Practical Possibilities for Broadcasting.—Gerth, p. 397.
- Communication radiotéléphonique sur Ondes très courtes (Radio-telephonic Communication on Ultra-Short Waves [France to Corsica]).—G. A. Beauvais, p. 32.
- Les Ondes électriques ultracourtes at leurs Applications (Ultra-Short Electric Waves and their Applications).—J. Marique, p. 551.
- Long Ranges with Ultra-Short Waves.—p. 317.
- Range Results on [Ultra-Short] 5-Metre Waves.—Lamb; Hull, p. 492.
- Some Details relating to the Propagation of Very [Ultra-] Short Waves.—R. Jouaust, p. 317.
- Aircraft Tests of Ultra-Short Wave Beam.—Fassbender, p. 32.
- Rezultaty opytnyh rabot s metrovymi volnami (The Experimental Investigation of Ultra-Short Waves).—P. V. Shmakov, p. 316.
- Influences de l'Atmosphère sur les Ondes ultra-courtes (Influences of the Atmosphere on Ultra-Short Waves).—G. Beauvais, p. 204.
- Radio Transmission on Ultra-Short Waves of the Order of 17 Centimetres.—Ferrié, p. 377.
- Telephony on 18 Centimetres [England-France—Ultra-Short-Wave Beam].—p. 339.
- Ultra-Short-Wave Broadcasting.—German State P.O.: E. Rhein, p. 89.
- Ultra-Short Wave Broadcasting.—Schwandt, p. 397.
- Some Phenomena of the Upper Atmosphere.—S. Chapman, p. 607.
- La haute Atmosphère et l'Évolution des Applications de la Radio-électricité (The Upper Atmosphere and the Evolution of the Applications of Radio-electricity).—G. Ferrié, p. 143.
- Radio Transmission Studies of the Upper Atmosphere.—J. P. Schafer and W. M. Goodall, p. 548.
- Method of Obtaining a Visible Spectrum of Waves of Radio Frequency.—McLennan and Burton, p. 54.
- Sur l'existence hypothétique dans l'Eau de Résonateurs de Fréquence hertzienne (On the Supposed Existence in Water

or Resonators of Hertzian Frequency).—P. Girard and P. Abadie, p. 146.
 Die Entwicklung des Wellenbegriffes. II, III, IV (The Development of the Wave Conception. Parts II, III and IV).—K. Uller, p. 432.
 A Method of Weather Forecasting [by Signal Intensity].—Colwell, p. 341.
 Pfeif-tone aus der Erde (Whistling Tones from the Earth).—H. Barkhausen: A. M. Curtis, pp. 206 and 376.
 Wavelength Change of X-Rays passing through an Absorbing Medium.—J. M. Cork : B. B. Ray, p. 205.

ATMOSPHERICS AND ATMOSPHERIC ELECTRICITY.

A Curious Phenomenon Shown by Highly Charged Aerosols.—W. Cavood and H. S. Patterson, p. 610.
 Specimen Record of Atmospheric on the Atlantic.—G. H. Huber, p. 206.
 Untersuchungen über luftelektrische Phänomene und die atmosphärischen Störgeräusche der Radiotelegraphie (Researches on Atmospheric Electrical Phenomena and Radiotelegraphic Atmospherics).—J. Fuchs and J. Scholz, p. 33.
 Réfraction et Propagation des Atmosphériques dans la Troposphère (Refraction and Propagation of Atmospherics in the Troposphere).—J. Lugon, p. 318.
 Les Atmosphériques et les Masses d'Air (Atmospherics and Air Masses).—A. Viaut, p. 318.
 Note on a Phenomenon connected with the Aurora.—A. C. Burton, p. 206.
 A Low Aurora and its Effect on a Radio Receiver.—p. 147.
 A Polar Aurora and its Action on Radio Transmissions.—Helbrunner, p. 28.
 Störmer's Aurora Theory: Demonstration of Electron Ray entering a Magnetic Field.—Brüche, p. 91.
 Wie tief dringen die Polarlichter in die Erdatmosphäre ein? (How Deep does the Aurora Penetrate into the Atmosphere?).—C. Störmer, p. 265.
 Observations of a Low Altitude Aurora and Simultaneous Phenomena.—A. Corlin, p. 319.
 The Low Altitude Aurora of Nov. 16th, 1929.—A. Corlin, p. 494.
 Low Altitude Aurora.—G. C. Simpson, p. 377.
 The Aurora Borealis.—J. C. McLennan, H. Wynne-Roberts and H. J. C. Ireton, p. 494.
 Aurora Display and Magnetic Disturbance.—J. P. Rowland, p. 147.
 Aurora Glow Reproduced in Laboratory.—J. Kaplan, p. 494.
 The Audibility and Lowestmost Altitude of the Aurora Polaris.—S. Chapman, p. 264.
 The Audibility and Lowestmost Altitude of the Aurora Polaris.—E. Ruggles Gates, p. 319.
 The Diurnal Variation of the Aurora Polaris.—E. O. Hulburt, p. 552.
 Die Sonnenelichteten Nordlichtstrahlen und die Konstitution der höheren Atmosphärenschichten (The Sun-lit Auroral Rays and the Constitution of the Upper Atmospheric Layers).—L. Vegard, p. 264.
 The Auroral Spectrum.—J. Kaplan, p. 609.
 Australian Atmospherics on Receivers tuned to 3,000 and 30,000 Metres.—Australian Radio Research Board, p. 263.
 Meteorological Balloons.—See under "Directional Wireless."
 Der Stoss durchschlag der Luft nach Untersuchungen mit dem Kathodenszillographen (Impulsive Breakdowns of the Air, Investigated with the Cathode Ray Oscillograph).—H. Viehmann, p. 377.
 Durchschlag und Überschlag in Luft bei Drucken von 1 bis 30 at. (Breakdown and Spark-over in Air at Pressures from 1 to 30 atmos.).—C. Reher, p. 377.
 The Present State of British Research on Atmospherics.—R. A. Watson Watt, p. 436.
 Submarine Cable Interference.—E. T. Burton : A. L. Meyers, p. 34.
 Simultaneous Atmospheric and Cable Disturbances.—M. Baumler, p. 206.
 [Atmospheric] Interference in Ocean Cable Telegraphy.—J. W. Milnor, p. 377.
 Electrical Carriers in the Atmosphere during Rainstorms.—K. Kähler, p. 263.
 Über die Koagulation von Wolken und Nebel (On the Coagulation of Clouds and Mist).—E. Frankenberger, p. 91.
 Über die Messmethoden der elektrischen Leitfähigkeit der Atmosphäre (On the Methods of Measuring the Electrical Conductivity of the Atmosphere).—J. Scholz, p. 263.
 La Conductibilité électrique de l'Air à Paris (The Electrical Conductivity of the Air at Paris).—F. Bayard-Duclaux, p. 320.
 La Couronne solaire étudiée en dehors des Eclipses (The Solar Corona Studied apart from Eclipse Times).—Lyot, p. 91.
 An Attempt to Measure the Energy of the Cosmic Electrons by Magnetic Deflection.—L. M. Mott-Smith, p. 377.
 Vergleichende Höhenstrahlungsmessungen auf Nördlichen Meeren (Comparative Cosmic Ray Measurements over the North Sea).—W. Bothe and W. Kolhörster, p. 264.
 The Residual Ionization in Air at New High Pressures, and its Relation to the Cosmic Penetrating Radiation.—J. W. Broxon, p. 435.
 Ultra Radiation (Penetrating [Cosmic] Radiation): Annual Varia-

tion and Variation with the Geographical Latitude.—J. Clay, p. 264.
 Ergebnisse der Ultrastrahlungsmessungen in Nord-Schweden (Results of Cosmic Radiation Measurements in North Sweden).—A. Corlin, p. 147.
 Die Sternzeitschwankungen der Höhenstrahlung (Sidereal Time Variations of Cosmic Rays).—A. Corlin, p. 147.
 Messungen der Höhenstrahlungsintensität zwischen 55 und 70° nördlicher geographischer Breite (Measurements of Cosmic Ray Intensity between 55 and 70° N. Preliminary Communication).—A. Corlin, p. 264.
 An Indication of a Correlation between Cosmic Ultra-Radiation and Terrestrial Magnetism.—A. Corlin, p. 552.
 Origin of Cosmic Penetrating Radiation.—A. K. Das, p. 377.
 Aurores polaires et Rayons cosmiques (Polar Aurorae and the Cosmic Rays).—A. Dauvillier, p. 609.
 Note on the Nature of Cosmic Rays.—P. S. Epstein, p. 146.
 Remarks on a Paper "Note on the Nature of Cosmic Rays," by Paul S. Epstein.—C. Störmer, p. 207.
 Note on the Nature of Cosmic Rays. Answer to Professor Störmer's Remark.—P. S. Epstein : C. Störmer, p. 319.
 Evidence for a Stellar Origin of the Cosmic Ultra-penetrating Radiation.—V. F. Hess, p. 147.
 Ein experimentelles Argument für den stellaren Ursprung der Ultrastrahlung (An Experimental Argument for the Stellar Origin of Cosmic Radiation).—V. F. Hess, p. 147.
 A Survey of New Researches on Cosmic Radiation.—V. F. Hess, p. 552.
 Über die solare Komponente der Ultrastrahlung (On the Solar Component of Cosmic Radiation).—V. F. Hess and W. S. Pforde, p. 609.
 Über exakte Intensitätsmessungen der Hessschen Ultrastrahlung (On Exact Intensity Measurements of Cosmic Radiation).—G. Hoffmann, p. 494.
 Atmospheric Ionization by Cosmic Radiation.—E. O. Hulburt, p. 207.
 Origin of Cosmic Radiation.—J. H. Jeans, p. 319.
 Der Absorptionskoeffizient der Höhenstrahlung zwischen 2,000 und 9,000 m. Höhe über Meer (The Absorption Coefficient of Cosmic Radiation between 2,000 and 9,000 m. above Sea-Level).—W. Kolhörster, p. 494.
 Entstehung der Elementar- und kosmische Strahlung (Genesis of the Elements and Cosmic Radiation).—M. v. Laue, p. 436.
 On the Question of the Constancy of the Cosmic Rays and the Relation of these Rays to Meteorology.—R. A. Millikan, p. 148.
 A More Accurate and More Extended Cosmic-Ray Ionization-Depth Curve, and the Present Evidence for Atom-Building.—R. A. Millikan and G. H. Cameron, p. 264.
 Zur Struktur der Ultrastrahlung (On the Structure of the Cosmic Radiations).—W. S. Pforde, p. 264.
 Spectrum of Cosmic Rays.—E. Regener, p. 207.
 Über die durchdringende Komponente der Ultrastrahlung, festgestellt durch Absorptionsmessungen im Bodensee (The Penetrating Component of the Ultra-Radiation [Cosmic Rays], determined by Absorption Measurements in Lake Constance).—E. Regener, p. 264.
 Über die durchdringendste Komponente der Ultrastrahlung—Hesschen Strahlung (On the Most Penetrating Component of the Cosmic Radiation—Hess Radiation).—E. Regener, p. 264.
 Über die Herkunft der Ultrastrahlung—Hessschen Strahlung (On the Origin of Cosmic Radiation—Hessian Radiation).—E. Regener p. 435.
 Absolute Bestimmungen der Intensität der kosmischen Ultrastrahlung (The Absolute Measurement of the Intensity of the Cosmic Rays).—A. Reitz, p. 435.
 Die Evesche Konstante (Eve's Constant [with Supplement giving results of High Altitude Flights to Investigate the Distribution of Intensity of Hess' Cosmic Radiation with Height]).—A. W. Reitz, p. 435.
 Magnetic Experiments on the Cosmic Rays.—B. Rossi, p. 609.
 Untersuchung über die Beziehung der Höhenstrahlung zur erdmagnetischen Störungen (Investigation of the Relation of Cosmic Radiation to Terrestrial Magnetic Disturbances).—W. M. H. Schulze, p. 147.
 Über Schwankungen und Barometereffekt der Kosmischen Ultrastrahlung im Meeresniveau (On Variation and Barometer Effect in Cosmic Ultraradiation at Sea Level).—E. Steinke, p. 146.
 Die Übergangseffekte der kosmischen Ultrastrahlung bei Variation des Absorptionsmediums (Transition Effects of Cosmic Radiation on Change of Absorbing Medium).—E. Steinke, p. 147.
 Richtungsmessungen der Höhenstrahlung mit einem Zählrohr (Directional Measurements on the Cosmic Rays by means of an Ion Counter Tube).—L. Tuwim, p. 552.
 The Results of a Least-Square Adjustment of Cosmic Ray Observations.—L. R. D. Weld, p. 436.
 Cosmic Radiations.—See also Penetrating, Ultra Penetrating.
 Observations sur les Détonations atmosphériques précédant les Perturbations solaires et terrestres (Observations on Atmospheric Detonations preceding Solar and Terrestrial Disturbances).—A. Nodon, p. 377.
 The Dielectric Constant of Air at High Pressures.—J. W. Broxon, p. 436.

- Dielectric Phenomena at High Voltages.**—Goodlet, Edwards and Perry, pp. 513 and 626.
- A Note on the Directional Observations of Grinders in Japan.**—E. Yokoyama and T. Nakai, p. 436.
- Directional Recorder for Atmospherics.**—Bureau, p. 213.
- Sur la Variation diurne des Courants telluriques enregistrés à l'Observatoire du Parc Saint-Maur (The Diurnal Variation of the Earth Currents Registered at the Parc St. Maur Observatory).**—P. Rougerie, p. 147.
- Étude des Courants telluriques (A Study of Earth Currents).**—D. Stenquist, p. 319.
- Report of the Earth-Potential Observations during the Total Eclipse of the Sun on 9th May, 1929.**—S. T. Nakamura and E. Hukusima, p. 264.
- Earths for Lightning Conductors.**—V. Schaffers, p. 610.
- Su Inversioni del Campo elettrico terrestre a Cielo sereno e una loro possibili Spiegazione (On Inversions of the Earth's Electric Field under a Clear Sky, and their Possible Explanation).**—G. Aliverti and M. C. Monti, p. 319.
- On Atmospheric Electricity.**—C. S. Dorchester and L. W. Butler, p. 552.
- Om Luftelektricitet og luftelektriske Maaling (On the Atmospheric Electricity and Its Measurement).**—H. Petersen, p. 436.
- Wo erreichen kosmische Elektronenstrahlen die Erdoberfläche? (Where do Cosmic Electron Beams strike the Earth?).**—E. Brüche, p. 207.
- Periodische Elektronenbahnen im Felde eines Elementarmagneten und ihre Anwendung auf Brüche Modelversuche und auf Eschenhagens Elementarwellen des Erdmagnetismus (Periodic Electron Paths in the Field of an Elementary Magnet, and their Application to Brüche's Model Tests and to Eschenhagen's Elementary Waves of Terrestrial Magnetism).**—C. Stormer, p. 207.
- Le Roufflement des Lignes aériennes et les Perturbations atmosphériques (The Humming of Aerial Lines, and Disturbances in the Atmosphere).**—A. Nodon, p. 91.
- Atmospherics considered as Impulsed Oscillations on Quasi-stationary and Non-stationary Circuits.**—Müller, p. 34.
- Über die Isolation von Strahlungsapparaten (On the Insulation of [Kolhorster] Radiation Measuring Apparatus).**—W. M. H. Schulze, p. 609.
- Zur Methodik der Ionenzählung in der freien Atmosphäre (On the Theory of a Method of Ion Counting in the Free Atmosphere).**—Yo Iiawara; and Bemerkungen zur vorstehenden Arbeit des Herrn Yo Iiawara (Remarks on the foregoing Paper by Mr. Yo Iiawara).—V. F. Hess, p. 207.
- The Mobility of Aged Ions in Air.**—N. E. Bradbury, p. 263.
- The Mobility of Aged Ions in Air in Relation to the Nature of Gaseous Ions.**—N. E. Bradbury, p. 436.
- Ein einfacher Demonstrationsversuch über Wanderung und Raumladung von Luftionen (A Simple Demonstration Experiment Showing the Movement and Space Charge of Atmospheric Ions).**—H. Greinacher, p. 436.
- Gegenfelduntersuchungen und Beweglichkeitsmessungen kleiner Ionen (Investigations of Counter-Fields and Measurements of the Mobilities of Small Ions).**—J. Scholz, p. 609.
- Continuously-recording Klydonograph.**—F. A. Foerster, p. 147.
- The Influence of Polarity on High-Voltage Discharges (Lichtenberg Figures).**—F. O. McMillan and E. C. Starr, p. 91.
- Irregular Lichtenberg Figures Due to the Presence of Resistance and Inductance in Series with the Electrode.**—T. Terada, p. 147.
- Experience with Lightning.**—P. Sporn, p. 494.
- Sur la Mort en Foule des Végétaux par l'Éclair fulgurant (Group Destruction of Vegetation by Lightning).**—E. Mathias, p. 265.
- Noise associated with Lightning.**—M. H. D. Gunther and E. R. Gunther, p. 91.
- Beobachtung eines Kugelblitzes (An Observation of Ball Lightning).**—W. Westphal, p. 147.
- Ball Lightning.**—R. W. Wood, p. 91.
- Ball Lightning.**—C. M. Botley, p. 91.
- La Foudre globulaire (Spherical Lightning).**—E. Mathias, p. 265.
- Sur l'Existence ou la Non-existence du Filet des Éclairs en Chapelet (On the Existence or Non-Existence of "Bead Necklace" Lightning).**—E. Mathias, p. 265.
- Field Tests on Thyrite Lightning Arresters.**—K. B. McFachron and E. J. Wade, p. 320.
- Results of Recent Investigations on Lightning Disturbances: Six Articles based on Twelve Am.I.E.E. Papers.**—Peek, Fortescue and Conwell, Bewley and others, p. 552.
- Sur la Confusion des Effets de la Foudre proprement dite avec ceux de la Matière Fulminante (On the Confusion of the Effects of a True Lightning Flash with those of the Fulminant Matter).**—E. Mathias, p. 147.
- Holes Produced in Ground by Lightning Flash.**—W. Hall, p. 91.
- The Head Velocity of Electric Sparks and Lightning Flashes.**—R. Rüdtenberg, p. 553.
- Instruments for Lightning Measurements.**—C. M. Foust, p. 320.
- Le Parafoudre universel "Corona" à Chambre d'Ionisation (The "Corona" Universal Lightning Protector with Ionisation Chamber [and Radio-active Salts]).**—C. Franck, p. 91.
- Lightning Protectors using Ionised Gases.**—Thomson-Houston Company, p. 147.
- Die Einwirkung unmittelbarer Blitzentladungen auf Hochspannungsnetze und ihre Bekämpfung (The Effect of Direct Lightning Strokes on High Voltage Networks, and the Counter-Measures to be Adopted).**—D. Müller-Hillebrand, p. 436.
- Direct Lightning Strokes to Transmission Lines.**—W. W. Lewis and C. M. Foust, p. 553.
- Der Blitzschlag in Hochspannungsanlagen und seine Folgen (Lightning Strokes on High Voltage Systems, and their Results).**—E. Flegler, p. 265.
- Étude de l'Influence de quelques Facteurs géophysiques sur les Points de Chute de la Foudre (On the Influence of Certain Geophysical Factors on the Points of Incidence of Lightning Strokes).**—L. N. Bogoiavlensky, p. 494.
- Areas Liable to Lightning Troubles—Influence of Radio-activity in the Soil.**—C. Dauzère, p. 553.
- Comparison of Lightning Waves and Laboratory Waves.**—F. W. Peek, p. 91.
- Long-Distance Transmission of Static Impulses.**—S. W. Deau, p. 609.
- Variations des Parasites atmosphériques pendant l'Eclipse de Lune du 2 Avril 1931 (Variations of Atmospherics during the Lunar Eclipse of 2nd April, 1931).**—R. Bureau, p. 318.
- The Geographical Distribution of Magnetic Disturbance.**—W. F. Wallis, p. 552.
- Values of the Magnetic Elements at Val-Joyeux, Dec., 1930, and Jan., 1931.**—E. Eblé and J. Itié, p. 263.
- De l'Influence du Champ magnétique terrestre sur les Atmosphériques de la Télégraphie sans Fil (The Influence of the Earth's Magnetic Field on the Atmospherics encountered in Wireless).**—F. Schindelhauser, p. 206.
- Violent Magnetic Storms occur a little more than One Day after a Solar Hydrogen Flare.**—G. H. Hale, p. 436.
- Annual Variations in Magnetic Storms.**—H. B. Maris, p. 552.
- Sur les Relations des Orages magnétiques avec les Courants telluriques (The Relations between Magnetic Storms and Earth Currents).**—J. Bosler, p. 90.
- A New Theory of Magnetic Storms.**—Chapman and Ferraro.—See under "Propagation of Waves."
- Earth Movements and Terrestrial Magnetic Variations.**—R. Gunn, p. 319.
- Relations between Atmospherics and Meteorological Phenomena at Saint Cyr.**—Buftault, p. 206.
- Zur Vergleichbarkeit meteorologischer Strahlungsmessungen (On the Comparability of Meteorological Radiation Measurements).**—W. Moriköfer and F. Levi, p. 377.
- On the Meteorological Relations of Atmospherics.**—R. A. Watson Watt; R. Bureau, p. 608.
- Utilisation de l'Enregistrement des Atmosphériques dans l'Analyse météorologique (The Use of the Recording of Atmospherics in the Analysis of the Meteorological Situation).**—R. Bureau, p. 436.
- Cinématique des Éléments de Lignes et de Surfaces d'égale Cote appliquée à la Météorologie (Kinetics of the Elements of "Iso" Lines and Surfaces applied to Meteorology).**—Mezin, p. 91.
- L'Évolution récente de la Météorologie électrique et de ses Méthodes (Recent Evolution of "Electrical Meteorology" and Its Methods).**—R. Bureau, p. 206.
- 16,000,000 Volts from Skies to Produce Super X-Rays (Monte Generoso Experiments).**—F. Lange and A. Brasch, p. 494.
- Over-Voltage Problems.**—A. H. von Altmann, p. 495.
- Observations on the Penetrating Radiation in the Antarctic.**—K. Grant, p. 494.
- Durchdringende Höhenstrahlung — Ultra-Strahlung — und kosmisches Geschehen (The Penetrating Radiation—Cosmic Rays— and Cosmic Processes).**—E. Regener, p. 146.
- Residual Ionisation in Air at New High Pressures and its Relation to the Cosmic Penetrating Radiation.**—J. W. Broxon, p. 319.
- Über den Ursprung der durchdringenden Korpuskularstrahlung der Atmosphäre (The Origin of the Penetrating Corpuscular Radiation of the Atmosphere).**—B. Rossi, pp. 264 and 377.
- Ricerche sull' Azione del Campo magnetico terrestre sopra i Corpuscoli della Radiazione penetrante (Researches on the Action of the Earth's Magnetic Field on the Corpuscles of the Penetrating Radiation).**—B. Rossi, p. 552.
- Thunderstorms and the Penetrating Radiation.**—B. F. J. Schonland, pp. 34, 91 and 146.
- Power Lines and Their Influence on Meteorological Processes: An Argument.**—Franck, Dauzère, Ledoux, p. 553.
- Atmospheric Pressure and the State of the Earth's Magnetism.**—J. M. Slagg, p. 263.
- Electrical Discharge in Air and the Probabilities of Its Occurrence.**—K. Schaposhnikov, p. 610.
- Some Considerations on the Artificial Production of Rain.**—N. A. Bulgakov, p. 207.
- Zur Dynamik des Regens (On the Dynamics of Rain).**—F. Alhorn, p. 263.
- The Influence of Rain on the Atmospheric-Electric Field.**—A. V. R. Telang, p. 320.
- Sur la Portée des Parasites atmosphériques d'après les Enregistrements simultanés de Paris-Zurich-El Goleá (Sahara) et Rochers-de-Nave (Suisse)-Varsovie (The Range of Atmospherics, according to Simultaneous Records at Paris-Zurich-El Goleá [Sahara] and Rochers-de-Nave [Switzerland]-Warsaw).**—J. Lugeon and E. Nicola, p. 493.

L'Enregistrement des Atmosphériques à Saint-Cyr ([Apparatus used in] the Recording of Atmospherics at Saint-Cyr)—P. Dowry: R. Bureau, p. 206.

On the Influence of the **Residual Charge** on Discharges.—I. Study with a Resonant Wave.—S. Mochizuki, p. 610.

A **Rocket** to Forecast the Weather [Exploration of the Upper Atmosphere by Rockets].—W. J. Humphreys, p. 320.

Sur un Cas particulier de Parasites écoutés sur petites Ondes (A Particular Case of Atmospherics heard on Short Waves).—E. Rougetet, p. 319.

Note on the Fifteen-Month Period in **Solar Activity, Terrestrial Magnetism and Radio Reception**.—G. W. Pickard, p. 319.

New Zealand Observations on Atmospherics during the **Solar Eclipse** of 21st-22nd October, 1930.—Barnett, p. 610.

L'Été 1930 et les Variations solaires (The Summer of 1930 and **Solar Variations**).—H. Mémery, p. 91.

"**Sounding**" by Atmospherics and Short Waves at Zurich and in the Sahara.—Lugeon, p. 29.

"**Sounding**" the Atmosphere by Atmospherics and Short Waves (Swiss Mission to Sahara).—Lugeon, p. 493.

A Visual Study of the Initial Stages of **Spark Breakdown in Air**.—F. G. Dunnington, p. 265.

Various Aspects of the **Spark Discharge** and the Process of Developing into Break-Down.—T. Nishi and Y. Ishiguro, p. 553.

Optische Untersuchung der Funkenzündung in Luft von Atmosphärendruck mittels des Kerreffektes (Optical Investigation of **Spark Discharge in Air** at Atmospheric Pressure by means of the Kerr Effect).—L. v. Hámos, p. 207.

Variation of **Spark-Potential** with Temperature in Gases.—H. C. Bowker, p. 284.

Frequenzabhängigkeit der Funkenspannung in Luft (Variation with Frequency of the **Spark Voltage** in Air).—H. Lassen, pp. 112 and 436.

Spark Discharges.—See also Discharges under "General Physical Articles."

On the Electrostatic Field of the **Sun** due to its Corpuscular Rays.—H. P. Berlage, Jr., p. 265.

A Recombination in Ionized Streams of Corpuscles from the **Sun**.—V. C. A. Ferraro, p. 436.

Zur Kathodenstrahlung der Sonne (Radiation of Electrons from the **Sun**).—H. Rudolph, p. 147.

Effect of **Sunrise** on Power Transmission.—p. 495.

Possible Origin of **Sun Spots** [Tidal Effect of Planets].—D. Alter, p. 319.

Sun Spots and a Tidal Effect of the Planets.—H. T. Stetson, p. 319.

Sun Spots.—See also under "Propagation of Waves."

Surge Investigations on Overhead Lines and Cable Systems: Discussion [particularly on Klydonograph Results].—Melsom, Arnan and Bibby, p. 610.

Surge Phenomena in Overhead Networks during Storms: Present Position of their Study in Switzerland.—K. Berger, p. 610.

The Deformation of a **Surge** by a Transformer Winding.—W. Krug, p. 610.

Einige Versuche über Stossspannungen (Some Researches on **Surge Potentials**).—Y. Satoh, p. 553.

Wandervellenaufnahmen an zusammengesetzten Betriebsleitungen (Oscillographs of **Surge Voltages** on Composite Cables).—J. Röhrig, p. 610.

Reception of Messages through Atmospherics by Use of **Television**.—Bray, p. 610.

The Electric Field of Overhead **Thunderclouds**.—S. K. Banerji, p. 33.

Gewitterherde und Gewitterzüge in Schlesien (**Thunderstorm** Groups and Trains in Silesia).—Langbeck, p. 263.

The Present Position of Theories of the Electricity of **Thunderstorms**.—R. A. Watson Watt, p. 608.

Origin of Local Heat **Thunderstorms**.—Part I.—H. von Ficker, p. 609.

Messungen von Gewitterüberspannungen mittels Staffelfunkentrecke (Measurement of Over-Voltages in **Thunderstorms** by means of Echelon Spark Gaps).—H. Heyne, p. 147.

Statistical Inquiry into Frequency of **Thunderstorms** in British Isles, p. 320.

High Potentials from **Thunderstorms**.—See Monte Generoso.

Vertical Electric Currents below **Thunderstorms** and **Showers**.—T. W. Wornell, p. 33.

Zur Theorie der Atmosphärischen Turbulenz (The Theory of Atmospheric **Turbulence**).—H. Fritzel, p. 553.

The Relation of Atmospheric Space-Charge to **Turbulence** and **Convection**.—J. G. Brown, p. 609.

Ultra-Penetrating Rays.—H. Geiger, p. 377.

The Nature and Origin of **Ultra-Penetrating Rays**.—Discussion at the Royal Society, p. 494.

Discussion on **Ultra-Penetrating Rays**.—H. Geiger and others, p. 552.

Atmospherics in **Ultra-Short Wave** Services.—G. Beauvais, p. 205.

The **Ultra-Violet "Flare"** Theory.—E. O. Hulburt, p. 90.

The **Ultra-Violet Light** Theory of Aurorae and Magnetic Storms (Continued).—E. O. Hulburt, p. 90.

Whistling Tones from the Earth.—Barkhausen, p. 378.

Whistling Tones from the Earth: Discussion.—A. M. Curtis and H. Barkhausen, p. 206.

Zodiacal Light and Magnetic Disturbance.—C. Bittering and E. O. Hulburt, p. 436.

PROPERTIES OF CIRCUITS.

Correct Aerial Coupling.—W. T. Cocking, p. 266.

Aperiodic Amplification and Rectifying Amplification using the Entire Amplification Factor of Triodes.—Kudolph, p. 41.

Analysis of Uniform R.F. **Amplification**.—E. A. Lehling, p. 148.

Étude de l'Amplification d'un Etage basse Fréquence à Transformateur en Fonction de la Fréquence et de l'Amplitude (The **Amplification** of a Low-Frequency Transformer-coupled Stage as a Function of Frequency and Amplitude).—R. Watrin, pp. 321 and 379.

The **Amplification** of Small Direct Currents.—L. A. DuBridge, p. 322.

The **Amplification** of Very Small Currents.—J. F. Thovert, p. 626.

Maximum **Amplification** in Capacity-Coupled Circuits.—W. van B. Roberts, p. 496.

Theorie der Niederfrequenz-Verstärkerketten (Theory of Chains of Low Frequency **Amplification Stages**).—R. Feldtkeller and F. Strecker, p. 92.

Die Kennlinienfelder der Widerstandsverstärkerröhre (The Characteristic Curve Fields of Resistance-coupled **Amplifier** Valves).—R. Feldtkeller, p. 35.

The Multistage Valve **Amplifier** [Mathematical Theory].—A. C. Bartlett, p. 35.

Die rückgekoppelte Hochfrequenzverstärkerstufe (The Retroactive H.F. **Amplifier** Stage).—E. Zepier, p. 35.

The Theory of the Valve **Amplifier**.—S. O. Pearson, p. 148.

The Design Calculations of a Distortionless Low-frequency **Amplifier** with Transformer Coupling.—Forstmann, p. 442.

Band-Pass **Amplifier Stages**.—Couillard, p. 382.

Resonanz und Mitnahmeeffekt an rückgekoppelten Verstärkersystemen, welche nur Kapazitäten und Widerstände oder nur Induktivitäten und Widerstände enthalten (Resonance and Pulling into Tune in Reactively Coupled **Amplifier** Systems possessing only Capacities and Resistances or Inductances and Resistances).—F. Tank and L. Zelzer, p. 36.

Tuned Condenser-Coupled **Amplifiers**.—L. Cohen, p. 148.

O generaciji mnogokaskadnyh rezonansnykh usiliteli (On Self-Oscillations in Multi-Stage Tuned **Amplifiers**).—V. I. Siforov, p. 320.

Parasitic Reactive Couplings in Multi-Stage **Amplifiers**.—V. I. Siforov, p. 320.

The Variation of Magnification with Pitch in Resistance-Capacity Coupled **Amplifiers**.—Barclay, p. 504.

Künstlicher Lichtbogen mit Doppelgitterröhren (**Artificial Arc** [Negative Resistance] Circuits Using Two-Grid Valves).—T. von Nemes, p. 610.

Système "Rejecteur de Bande" Hopkins (The Hopkins "**Band Rejector**" System).—P. Leroy, p. 209.

Ballistic and Perfect Balances in **Bridges** treated by the Operational Calculus.—A. T. Starr, p. 611.

Die Eigenschaft eines mit Selbstinduktion, Kapazität und Verlustwiderstand (L, C und R) behafteten Kreises (The Property of a **Circuit Containing Inductance, Capacity and Ohmic Resistance**).—M. Osnos, p. 553.

Die Fortleitung hochfrequenter elektrischer Schwingungsenergie (The **Conduction** of H.F. Oscillating Energy).—H. O. Roosenstein, p. 36.

Note on Radio-frequency Transformer Coupled **Circuit Theory**.—J. R. Nelson, p. 554.

Untersuchung der erzwungenen Koppelschwingungen eines elektromechanischen Systems unter Verwendung eines graphischer Verfahrens (Investigation of Forced **Coupled Oscillations** of an Electromechanical System by a Graphical Method).—E. Lehr, p. 36.

Zur Theorie zweier gekoppelter Schwingungskreise. II. (On the Theory of Two **Coupled Oscillatory** Circuits. Part II.).—V. Petzalka, p. 378.

Über gekoppelte Oszillatoren (On **Coupled Oscillators**).—W. Kossel, p. 265.

Zur Demonstration von Koppelschwingungen (A Demonstration of the Oscillations of **Coupled Systems**).—W. Kossel, p. 378.

Theory and Operation of Tuned Radio-frequency **Coupling Systems**.—H. A. Wheeler and W. A. MacDonald, p. 378.

Stroomverdeling in een eenlagiche Spoel met inachtname van de wederkeerige Inductie tusschen elk Paar Spoeelementen (The **Current Distribution** in a Single Layer Bobbin, taking into consideration the Mutual Induction between Each Pair of Elements).—K. Posthumus, p. 93.

Zur Theorie Gedämpfter elektrischer Schwingungen (Contribution to the Theory of **Damped Electrical Oscillations**).—A. Kneschke, p. 36.

Entartungen sinusförmiger Schwingungen (The **Degeneration** [into Relaxation Oscillations] of Sinusoidal Oscillations).—W. Reichardt, p. 610.

Electrical **Delay** Circuits for Radio Telephony.—R. T. Holcomb, p. 323.

The Theory of Volume Equalisation and Optimum Matching of Receivers on a **Delay Network**.—Fischer, p. 505.

- Über eine bemerkenswerte Eigenschaft der Verzögerungsketten (A Noteworthy Property of Delay Networks).—F. A. Fischer, p. 36.
- A Further Note on the Apparent Demodulation of a Weak Station by a Stronger One.—F. M. Colebrook: Beatty: Butterworth, p. 610.
- The Detection of Two Modulated Waves which Differ Slightly in Carrier Frequency.—C. B. Aiken, p. 208.
- Linear Detection of Heterodyne Signals.—Terman, p. 324.
- Berechnung der Verstärkung des Zwischenfrequenz-Gleichrichters (Calculation of the Amplification of the Intermediate Circuit Detector).—P. Hermannsppann, p. 379.
- On the Propagation of Signals in Dispersive Systems: Discontinuous (Symmetrical Quadripole Chains) and Mixed Systems.—Baerwald, p. 553.
- An Analysis of Distortion in Resistance Amplification.—Moulin, p. 271.
- Dynamic Grid Characteristics.—Hagen, p. 210.
- The "Grid" Dynatron Circuit.—Ito, p. 98.
- The Theory of the Dynatron.—Ito, p. 386.
- Über einige Untersuchungen an Hochfrequenzleitungen (Some Investigations on H.F. Conductors [Feeders]).—H. O. Roosenstein, p. 147.
- The Field Produced by a Simple Conductor of Infinite Length Traversed by an Alternating Current.—F. Pollaczek: J. B. Pomey, p. 437.
- The Efficiency of the Mixed Filter.—Cocking, p. 323.
- Theory of the Three Element Filter.—A. G. Lurié, p. 36.
- New Band-Pass Filter.—Page, p. 268.
- On the Theory of Filter Amplifiers.—S. Butterworth, p. 36.
- Band-Pass Filtering by Diverse Tuning of Cascading Circuits.—Bayly, p. 379.
- Inductive Band-Pass Filters.—L. E. T. Branch, p. 209.
- Band-Pass Filters.—I. V. Koptev, p. 209.
- Band-Pass Filters in Radio Receivers.—G.W.O.H., p. 383.
- Extensions to the Theory and Design of Electric Wave Filters.—O. J. Zobel, p. 436.
- Impedance Correction of Wave Filters. Development of Impedance Requirements.—E. B. Payne, p. 93.
- Theorie und Konstruktion der Siebketten konstanter Resonanzbreite (Theory and Design of Wave Band Filters of Constant Breadth of Resonance).—G. Schweikert, pp. 36 and 322.
- Determination of Frequency and Damping of Resonating Circuits.—J. Tykocinski-Tykociner, p. 322.
- A Simplified Calculation of Valve Frequency Changers.—P. N. Ramlau; and On Frequency Doubling by Electron Tubes.—V. J. Bunimovitch, p. 209.
- Frequency Division.—J. Groszkowski, p. 92.
- Note sur le Calcul d'un Doubleur de Fréquence (Note on the Calculation of a Frequency Doubler).—B. P. Asséf, p. 209.
- Group Theory and the Electric Circuit.—N. Howitt, pp. 380 and 553.
- Sur les Propriétés communes à divers Phénomènes d'Oscillation et sur des Analogies gyroscopiques des Phénomènes électromagnétiques (On Properties common to Various Oscillation Phenomena, and Some Gyroscopic Analogies with Electromagnetic Phenomena).—B. Salomon, p. 553.
- Triode Harmonic Amplifier.—Y. Fukuta, p. 322.
- Die Frage der Frequenz bei der induktiven Erwärmung (The Part Played by Frequency in the Heating produced by Induction).—W. Fischer, p. 380.
- A System for Suppressing Hum by a New Filter Arrangement.—P. H. Craig, p. 395.
- A Method of Impedance Correction.—H. W. Bode, p. 93.
- Der Anstoss quasistationärer und nicht-stationärer Schwingungskreise durch aperiodisch gedampfte Kondensatorkreise mit Selbstinduktion bei induktiver Kopplung (The Impulsing of Quasi-stationary and Non-stationary Oscillatory Circuits by Aperiodic Damped Condenser Circuits with Inductance, by Inductive Coupling).—H. Müller, p. 34.
- Variation of the Inductance of Coils due to the Magnetic Shielding Effect of Eddy Currents in the Cores.—K. L. Scott, p. 37.
- The Inductance Coefficients of a Part of a Circuit, and their Applications (in connection with Cables and their Sheaths).—A. Russell, p. 209.
- Concerning Kusunose's Dynamic Diagrams.—Marique: Kusunose, p. 42.
- Die Streuung zweier magnetisch gekuppelter Stromkreise in analytischer und synthetischer Entwicklung (The Leakage of Two Magnetically Coupled Current Carrying Circuits in Analytic and Synthetic Development).—G. Benischke, p. 611.
- Choice of Characteristic Constants for Telegraph Lines and Circuits.—V. I. Kovalenkov, p. 209.
- The Magnetic Field of Circular Currents.—H. Nagaoka, p. 148.
- Sur l'Existence d'un Flux magnétique anormal (On the Existence of an "Anomalous" Magnetic Flux).—P. Fourmarier: Mitkevitch, p. 496.
- Die Anpassung der Rundfunkgeräte an die Antenne (Matching the Broadcast Receiver with Its Aerial [Theoretical Investigation of Inductive and Capacitive Couplings]).—W. Kautter, p. 495.
- Calculation of Maximum Electrical Stress between Two Wire Conductors, Arranged in Different Ways with Air as the Dielectric.—G. Yoganandani, p. 380.
- Über die Mitnahmeercheinungen an Röhrengeneratoren bei verschiedenen Frequenzverhältnissen (On the "Mitnahme" [Pulling the Tune] Effects in Valve Oscillators, for Various Frequency Ratios).—H. Winter-Günther, p. 265.
- Resonance and "Mitnahme" Effect . . .—Tank and Zelzer, p. 36.
- Zur Theorie des Mitnehmens von van der Pol (On van der Pol's Theory of Forced Oscillations).—A. Andronov and A. Witt, p. 37.
- Modulation and the Heterodyne.—W. Jackson, p. 611.
- A Note on the Mathematical Theory of the Multielectrode Tube.—P. Caporale, p. 35.
- Mutual Impedances of Ground Return Circuits. Some Experimental Studies.—A. E. Bowen and C. L. Gilkeson, p. 93.
- The Mutual Repulsion between Currents in Parallel and Concentric Conductors.—W. Beetz, p. 266.
- Negative Circuit Constants.—L. C. Verman, p. 379.
- Fastlineare Netzwerke (Networks in which Currents and Voltages of Small Amplitude have an Approximately Linear Relation).—R. Feldtkeller and W. Wolman, p. 611.
- Studies in Non-Linear Circuits.—C. G. Suits, p. 323.
- On the Operational Solution of Linear Finite Difference Equations [Theory applicable to Wave Filter Chains].—L. M. Milne-Thomson, p. 209.
- Oscillation in Tuned Radio-Frequency Amplifiers.—B. J. Thomson, p. 320.
- Discussion of "Oscillation in Tuned Radio-Frequency Amplifiers."—B. J. Thomson; J. R. Nelson; H. A. Wheeler, p. 554.
- The Triode Oscillation Generator and Amplifier; Limitations on Sinoidal Performance.—L. B. Turner and L. A. Meacham, p. 34.
- Oscillations in the Circuit of a Strongly Damped Triode.—F. Vecchiacci, p. 380.
- Over de Trillingen van Regulatoren en van Triodelampen (On the Oscillations of Regulators and of Triodes).—Ph. le Corbeiller, p. 380.
- Output Networks for Radio-frequency Power Amplifiers.—W. L. Everitt, p. 380.
- The Parallel Connection of Identical Nets.—A. E. Kennelly, p. 266.
- Resonant Impedance and Effective Series Resistance of High-Frequency Parallel Resonant Circuits.—H. Inuma, p. 321.
- Ausgleichsströme bei parallelen Einzelleitungen, von denen die eine in der Erde liegt und unendlich lang ist (Compensating Currents in Separate Parallel Lines, One of which is Buried and of Infinite Length).—J. Riordan, p. 380.
- Papers on Phase Distortion in Filter and Other Circuits.—Steinberg: Lane: Nyquist and Brand, p. 44.
- An Analysis of a Piezo-Electric Oscillator Circuit.—Wheeler, p. 335.
- Un nouveau Tube amplificateur de Puissance avec Tension de Grille positive (A New Power Amplifier Stage with Positive Grid).—B. Decaux: L. Thompson, p. 379.
- Pre-Selection.—W. I. G. Page, p. 148.
- The Hysteresis Damping of Purnished Lines.—W. Doebke, p. 612.
- Über die Wirkungs- und Betriebsweise der Gegentaktschaltung in Niederfrequenzverstärkern (The Method of Operation and Working Conditions of the Push-Pull Connection in L.F. Amplifiers).—A. Forstmann, p. 611.
- Push-Pull Problems.—W. I. Cocking, p. 611.
- On the Theory of the Quadripole Connection. Three Remarks on the Quadripole Theory.—E. Selach: H. König, p. 553.
- Quadripole Theory.—J. Wallot: F. Strecker and R. Feldtkeller, p. 148.
- Die Anodenrückwirkung bei verschiedenen Röhrensaltungen und ihre Verminderung (The Unwanted Reaction Effect of the Anode Circuit in Various Types of Valve Circuits, and its Reduction).—F. Below, p. 266.
- Reciprocity Theorem.—See under "Propagation of Waves."
- Oscillographic Comparison of the Characteristics of Anode and Grid Rectification.—K. Okada, p. 322.
- The Theory of the Straight Line Rectifier.—F. M. Colebrook, p. 35.
- Zur Theorie eines Gleichrichters mit fallender, hyperbelförmiger Kennlinie (The Theory of a Rectifier with Falling Characteristic of Hyperbolic Form).—O. Sierstadt, p. 379.
- The Estimation of the Sensitivity of the Grid Rectifier for Large Inputs.—C. D. Hall, p. 92.
- Rectifiers.—See also under "Subsidiary Apparatus."
- The Operating Frequency of Regenerative Oscillatory Systems.—H. Benioff, p. 553.
- On Regenerative Receiving.—U. B. Kobsarev, p. 322.
- The Van der Pol Four-Electrode Tube Relaxation Oscillation Circuit.—R. M. Page and W. F. Curtis, p. 91.
- The Development of New Method for the Superpositions of Electric Waves [Relaxation Oscillation Triode Circuits for C-R. Oscillograph].—Y. Miyamoto, p. 92.
- Oscillations de Relaxation produites par un Oscillateur à Quartz piézoélectrique (Relaxation Oscillations produced by a Quartz Oscillator).—P. T. Kao, p. 92.
- Electrical and Mechanical Oscillations the Period of which is Proportional to a Time Constant (Relaxation Oscillations).—B. van der Pol, p. 610.
- Zur Theorie der Rückkopplung bei Hochfrequenzempfängern (On

- the Theory of Retroaction in High Frequency Receivers).—R. Feldtkeller and W. Kautter, p. 377.
- Screen-Grid Valve as Low Frequency Amplifier.**—D. McDonald, p. 148.
- On the Definition of **Selectivity.**—P. David, p. 266.
- Definition of **Selectivity.** Correspondence.—F. M. Colebrook: P. David, p. 322.
- Selectivity, A Simplified Mathematical Treatment.**—B. de F. Bayly, p. 378.
- K voprosu o zafuhanii i selektivnosti regenerativnogo preimnika (**Selectivity and Damping in a Regenerative Radio Receiver**).—E. S. Antselovitch, p. 208.
- Selectivity and Response.**—E. E. Wright, p. 266.
- Selbsterregung von Systemen mit periodisch veränderlichen Induktivitäten (**Self-Excited Oscillations of Systems with Periodically Changing Inductances**).—H. Winter-Günther, p. 437.
- Simplified H.F. Calculations.**—W. A. Barclay, p. 612.
- Discussion on the Resistance of Spark and Its Effect on the Oscillations of Electrical Oscillators.—J. Stone Stone: E. Amelotti, p. 554.
- Die Stabilität und Selbsterregung elektrischer Kreise mit Organen fallender Charakteristik (**The Stability and Self-Excitation of Electrical Circuits containing Organs with Falling Characteristics [Negative Resistance]**).—K. Steinel, p. 92.
- Spule und Wanderwelle (Coil and Surge).—E. Flegler, p. 266.
- Die Umbildung der Wellenform durch Kapazitäten und Induktivitäten bei durch Funken Ausgelösten Wanderwellen (The Changes Produced by Capacities and Inductances in the Waveform of Surges Produced by Sparks).—W. Schilling, p. 206.
- A Two-Valve Circuit Emitting Trains of Undamped Waves with Intervals up to Several Minutes.—La Rosa and Sesta, pp. 37 and 237.
- Übersetzungsverhältnis bei kapazitiver Spannungs transformation (**Transformation Ratio in Capacitive Voltage Transformation**).—E. Zakarias, p. 380.
- Beitrag zur Theorie des Resonanztransformators (Contribution to the Theory of the Resonance Transformer).—H. Lamb, p. 36.
- The Resistance Capacity Coupled Transformer.—F. Aughtie and W. F. Cope, p. 321.
- The Design of High Frequency Transformers.—W. G. Baker, p. 148.
- The Design of High-Frequency Transformers.—M. Reed, p. 496.
- Emschaltvorgang der kapazitiv belasteten endlichen Leitung bei endlicher Störzeit der Schaltwelle nach der Operatorenrechnung (**Transient Phenomena in the Capacity Loaded, Finite Cable with Finite Initial Steepness of the Transient Wave, on the Operational Calculus**).—W. Schilling, p. 380.
- Transients in Parallel Grounded Circuits, One of which is of Finite Length.**—L. C. Peterson, p. 92.
- The **Tuned Anode Coupling.**—S. O. Pearson, p. 209.
- The Design of **Tuned Circuits to Fulfil Predetermined Conditions.**—A. L. M. Sowerby, p. 148.
- "The Design of **Tuned Circuits to Fulfil Predetermined Conditions**": Correspondence.—S. Butterworth: A. L. M. Sowerby, p. 322.
- The **Tuned Transformer Coupling.**—S. P. Pearson, p. 322.
- Investigation of "Ziehen" Effect and Critical Coupling.—S. G. Ginsburg, p. 208.

TRANSMISSION.

- Twenty-Watt Aircraft Transmitter (333-9,700 Kilocycles).—A. P. Bock, p. 614.
- New Radio Transmitters for Airways Applications.—R. S. Bair, p. 267.
- The Oscillating Arc: Elements of Group VI.—Stowell, p. 516.
- Reissdiagramme bei Barkhausenschwingungen und ihre Theorie ("Break-off" Diagrams of Barkhausen Oscillations, and their Theory).—H. G. Möller and W. Hirsch, p. 381.
- Der Barkhausen-Kurz-Effekt nach der Wellenmechanik (The Barkhausen-Kurz Effect according to Wave Mechanics).—K. Schuster, p. 95.
- Practical Electron Transmitters and Receivers [Barkhausen-Kurz Oscillator].—J. N. Dyer, p. 613.
- Über die Frequenz der Barkhausenschwingungen (The Frequency of the B.-K. Oscillations).—H. G. Möller, p. 95.
- Über freie Schwingungen einer Elektronenröhre mit Lecher-System. Barkhausen-Kurz-Schaltung (Free Oscillations of a [Flat Electrode] Valve with Lecher Wire System, B.-K. Circuit).—R. Wundt, p. 94.
- Simultaneous Transmission of Beacon Signals and Telephony.—U. S. Bureau of Standards, p. 150.
- Tests on the H.F. Alternator Broadcasting Transmitter at Munich.—Baumgartner: Teilmann, p. 40.
- Broadcasting Transmitters.—See under "Stations, Design and Operation."
- The First Pupinised Broadcasting Cable in Russia.—M. Jurjew, p. 267.
- Long Distance Cable Circuit for Program Transmission.—A. B. Clark and C. W. Green, p. 40.
- Kabelleitungen für die Übertragung von Rundfunkdarbietungen. (Cable Lines for the Transmission of Broadcast Programmes).—K. Höpfner, p. 267. See also Programme, under "Stations."
- Decreasing the Number of Turns in R.F. Chokes.—Telefunken, p. 439.

- Modern Quartz-controlled Common-Wave Broadcasting Transmitters.—Gerth and Hahnemann, p. 397.
- Oscillations Produced by Gaseous Diodes [Tungar Rectifiers, etc.].—P. H. Craig, p. 554.
- Oscillations in Discharge-Tubes and Allied Phenomena.—J. J. Thomson, p. 283.
- Sur la Poste émetteur à Quartz de Pontoise (The Distortion Characteristic—Degree of Modulation/Frequency—of the Quartz-controlled Pontoise Transmitter).—Bigorgue and Vigueron, p. 149.
- Über Gitterschwinglinien (Dynamic Grid Characteristics).—C. Hagen, p. 210.
- Tone Modulation of Telegraphic Transmitters [for the Neutralisation of Fading].—N. Wells, p. 39.
- Untersuchungen über Schwunderscheinungen bei kurzer Wellen (Investigation of Short Wave Fading).—K. Krüger and H. Pfendl, pp. 40 and 93.
- The Influence of Certain Factors [Filament Temperature] on the Output of a Triode Oscillator.—G. S. Field: C. H. West, p. 150.
- Raschet lampovogo generatora pri ploskoi forme impulsa anodnogo toka (The Design of a Thermionic Valve Oscillator for a Flat-Topped Anode Current Wave).—A. I. Berg, p. 438.
- Arrangement for Maintaining Constant the Frequency of a Transmitter.—Lorenz, p. 149.
- A Valve Generator Circuit of Very Constant Frequency.—David, pp. 448 and 570.
- Multiple-grid Valve in Improved [More Constant Frequency] Numans-Koostenstein Circuit.—Wolf, p. 381.
- Frequenzdurchlässigkeit und nichtlineare Verzerrungen fremdgesteuerter Telephoniesender (Frequency Pass Factor [Ratio of Amplitude of Anode Current or Potential for Side Band to that for Carrier Wave] in Telephony Transmitters with Master Drive).—R. Hofer, p. 613.
- Frequency Stabilisation of Heterodyne Oscillators throughout a Wide Continuous Frequency Range.—A. Wainberg and N. Titoff, p. 95.
- Frequency Stabilisation of Radio Transmitters.—Y. Kusunose and S. Ishikawa, p. 496.
- More Power with Better Frequency Stability.—G. Grammer, p. 267.
- A New Frequency-Stabilized Oscillator System.—Ross Gunn, p. 37.
- The Frequency Variation of Valve Generators: Characteristics of the Hartley Oscillator and the Stabilising Action of External Anode Resistance.—S. Ishikawa, p. 149.
- Harmonic Attenuation.—W. T. Ditcham, p. 37.
- Elimination of Harmonics in Valve Transmitters.—Y. Kusunose, p. 496.
- The Suppression of Radio-frequency Harmonics in Transmitters.—J. W. Labus and H. Roder, p. 496.
- Hartley Circuit without Radio-frequency Choke.—R. M. Wilson, p. 439.
- The Heating of Dielectrics in a [Ultra-] High Frequency Field.—Pätzold, p. 39.
- Telephone Transmitting Equipment on Board the "Homeric".—p. 498.
- New Long Wave Commercial Radio Telephone-Telegraph Transmitters.—D. B. Mirk and S. G. Knight, p. 381.
- On the Magnetron Oscillation of new Type.—K. Okabe, p. 38.
- The Magnetron as a Negative Resonance [and the Formation of Ultra-High Frequencies].—Hollmann, p. 617.
- Note on the Relationships Existing Between Radio Waves Modulated in Frequency and in Amplitude.—C. H. Smith, p. 38.
- Ein einfacher experimenteller Nachweis der Trägerfrequenzschwankungen bei amplitudenmodulierten Sendern (A Simple Experimental Indication of Carrier Frequency Variation in Amplitude-Modulated Transmitters).—J. Fuch, p. 149.
- Eine vereinfachte Modulationsschaltung (A Simplified Modulating Circuit [H.F. Supply for Filaments of Modulators]).—F. Weichart and W. Langewiesche, p. 38.
- Über Modulation, Senderbandbreite und Demodulation (Modulation, Band Width and Demodulation).—W. Runge, p. 94.
- Modulation and Its Suppression.—V. V. Gunsolley, p. 381.
- Modulation by Iron-Cored Choke Coils with Ballast Circuit.—Lorenz, p. 210.
- Modulation Circuit with Modulator and Oscillator Filaments Earthed.—Lubzyski, p. 210.
- Phasenmodulation (Phase-Modulation).—W. Loest, p. 94.
- Die idealisierte statische Modulationskennlinie bei der Parallelröhren-Modulation (The Idealised Static Modulation Characteristic in the Parallel Valve [Heising] System of Modulation).—H. Rieche, p. 38.
- Grid-D.C. Modulation with Modulator Filaments and Grid Bias supplied by Radio Frequency Currents.—Telefunken, p. 149.
- Untersuchungen an amplituden- und frequenzmodulierten Sendern (Investigation of Transmitters with Amplitude and Frequency Modulation [Measurement of Degree of Modulation, Non-Linear Distortion, etc.]).—W. Runge, p. 149.
- An Analysis of High Modulation Transmission.—G. F. Laupkin, p. 149.
- Anwendung von Raumladegitterröhren zur Amplituden-Modulation (The Employment of Space-Charge-Grid Valves for Amplitude Modulation).—F. Below and H. E. Kallmann, p. 148.
- Improvement in Grid-D.C. Modulation.—Telefunken, p. 210.

- A Meter for Indicating per Cent. **Modulation**.—G. F. Lampkin, p. 498.
- Detaili modulatsii (Study of **Modulation**).—M. A. Bonch-Bruевич, p. 439.
- Amplitude- and Frequency-Modulated Transmitters: Measurement of **Modulation**, etc.—A. Heilmann; W. Runge, p. 439.
- Die statische Aufnahme von Modulationskurven an Sendern mit Heising-Modulation (The Static Determination of the **Modulation Curves** of Transmitters with Heising Circuit [Choke Control] Modulation).—H. O. Roosenstein, p. 613.
- A Single-valve **Multi-frequency Generator**.—A. T. Starr, p. 614.
- Neon Tube R.F. Transmitter Circuit**.—Hanhauser, p. 440.
- The **Triode Oscillation Generator** and Amplifier; Limitations on Sinoidal Performance.—Turner and Meacham, p. 34.
- Oscillazioni parassite ad altissima Frequenza negli Oscillatori a Tubi elettronici (**Parasitic Oscillations** of Very High Frequency in Valve Oscillators).—M. Boella, p. 614.
- Duplex Phone on 56 Mc.—A Portable "Five-Meter" Transmitter Using **Pentode Modulators**.—R. A. Hull, p. 612.
- Systèmes polyphasés à Auto-Excitation (Self-Exciting **Polyphase Valve Systems**).—A. Arenberg, p. 497.
- Schwingungen in Dreielektrodenröhren mit positivem Gitter (Oscillations in Three-Electrode Valves with **Positive Grid**).—M. J. O. Strutt, p. 613.
- Measurement of **Power and Efficiency** of Radio Transmitting Apparatus.—Pession and Gorio, p. 334.
- Push-Pull Arrangements** of Unusual Character [Carson Balanced Modulator in Carrier Current Telephony and Suppressed Carrier Transatlantic Telephony].—C. H. W. Nason; Carson, p. 614.
- A Method of Obtaining **Quartz-Controlled Oscillations** of some Hundred Watts, using a Screen-Grid Valve.—Y. Kusunose, p. 95.
- Untersuchungen über das Verhalten von quartz-gesteuerten Sendern (Investigations into the Behaviour of **Quartz-Controlled Transmitters**).—P. von Handel, p. 438.
- Avoidance of **Reaction** from Amplifier Stages on to Drive Circuit in Short Wave Transmitters.—Radio Corp.; Kolster-Brandes, p. 150.
- The Simplest **Short Wave Self-exciting Circuit**.—Y. Haraguchi, p. 150.
- Simple Adjustment of Portable **Short Wave Transmitter**.—Lorenz, p. 210.
- An Interesting **Side-band Problem**.—G. W. O. H., p. 93.
- Side-bands** in Radio—Are they Real or Imaginary?—R. P. Glover, p. 267.
- Demonstration of **Side-bands** by the use of a Quartz-controlled R.F. Amplifier.—Harnisch, p. 323.
- The Physical Reality of **Side-bands**.—Colebrook, p. 153.
- Physical Reality of **Side-bands**.—Moulin; Colebrook, p. 440.
- Carrier Waves and **Side-bands**.—C. L. Fortescue, p. 439.
- Carrier Waves and **Side-bands**.—R. H. Nisbet; Baxter, p. 613.
- Modulation and Side-bands**: Relation between Amplitude and Frequency Modulation.—N. F. S. Hecht, p. 613.
- The **Single Side-band System** Applied to Short Wavelengths.—A. H. Reeves, p. 554.
- Le Système de Communications radiotéléphoniques à Bande latérale unique appliqué aux Ondes courtes (The **Single Side-band System** of Radio telephony Applied to Short Waves.—Part I).—A. H. Reeves, p. 613.
- La Radiotéléphonie à Ondes courtes à Bande latérale unique (**Single Side-band Short Wave Radiotelephony**).—P. Lethuile, p. 613.
- Single Side-band Telephony** on Short Waves.—Le Matériel Téléphonique, Paris; A. H. Reeves, p. 381.
- Raumladungsschwingungen in Dioden (**Space-Charge Oscillations** in Diodes).—W. Gerber, p. 38.
- Economical Full-Load **Testing** of Transmitters.—Telefunken, p. 440.
- Theory of the Internal Action of **Thermionic Systems** at Moderately High Frequencies [with a Reference to the B.-K. Oscillations].—Benham, p. 212.
- Trehfaznye elektronnye generatory (The **Three-Phase Thermionic Valve Oscillator**).—A. Arenberg, p. 438.
- Un Circuito a due Valvole emittente Treni d'Onda discontinui (A **Two-Valve Circuit** Emitting a Succession of Wave Trains).—M. La Rosa and L. Sesta, p. 267.
- Un Circuito emittente Treni d'Onda discontinui (A Circuit Emitting a Succession of Wave Trains).—M. La Rosa and G. Petrucci, p. 439.
- Two-Metre Wave Transmitter** with Special Reference to its Antenna Feeder.—S. Uda, p. 612.
- Developments in **Ultra-High Frequency Oscillators**.—J. J. Lamb, p. 497.
- Untersuchungen über funkenenergte Schwingungen sehr hoher Frequenz (Experiments on Spark-Generated Oscillations of **Ultra-High Frequency**).—K. Haupt, p. 612.
- A Particular Case of [**Ultra-High Frequency** Electron Oscillations].—W. H. Moore, p. 612.
- The Production of **Ultra-Short Undamped Electromagnetic Waves**.—G. V. Potapenko, p. 613.
- Practical Experiments in **Ultra-Short Wave Communication**.—C. C. Whitehead, p. 94.
- Ultra-Short Wave Communication** [Screening the Glass Bulb, etc.]. Correspondence.—E. C. S. Megaw; C. C. Whitehead, p. 323.
- Portable **Ultra-Short Wave Directive Transmitter** using Mechanical Interrupter.—J. J. V. Armstrong, p. 381.
- Simplification of the **Pierret Ultra-Short Wave Generating Circuit**.—Guyot, p. 554.
- Four-Electrode Valve in Brake-Field Circuit, for Increased Power in **Ultra-Short Wave Generation**.—p. 150.
- Colloidal Spark Gap for **Ultra-Short Wave Generation**.—Hildebrand, p. 150.
- Einige Bemerkungen zur Problem der Erzeugung sehr kurzer elektromagnetischer Wellen (Remarks on the Problem of **Ultra Short Wave Generation** [Barkhausen-Kurz Method]).—J. Sahaneč, p. 613.
- Sender für ultrakurze Wellen (**Ultra-Short Wave Generator**).—W. Kroebel, p. 94.
- Push-Pull **Ultra-Short Wave Generator** with Symmetrical Double-Filamented Valve.—Hollmann, p. 150.
- Push-Pull **Ultra-Short Wave Generator** with Tuned Circuit Connecting the Filament Circuits.—Esau, p. 150.
- Stabilisation of **Ultra-Short Wave Generator** by a Polyphase Oscillator.—Arenberg, p. 498.
- Untersuchungen an einem Kurzwellen-Gegentaktender (Researches on a [**Ultra-Short Wave Push-Pull Transmitter**]).—F. Müller and W. Z. mbalin, p. 437.
- Lampovyi generator ultrakortkih (metrovyh) voln s obratnoi svyaziu (The **Ultra-Short Wave Thermionic Valve Oscillator**).—N. A. Petrov, p. 437.
- Über einige weitere Demonstrationsversuche mit dem 2.4 m. Röhrensender (Further Demonstrations with the 2.4 Metre Valve [**Ultra-Short Wave Transmitter**]).—L. Bergmann, p. 39.
- Sender für ultrakurze Wellen (An **Ultra-Short Wave Transmitter** [for 10-20 cm. Waves]).—W. Kroebel, p. 497.
- The Effect of Combined A.C. and D.C. Plate Supply on a [**Ultra-Short Wave Triode Oscillator**].—G. S. Field, p. 39.
- Two Generating Circuits for **Ultra-Short Waves**.—H. Pöhlmann, p. 554.
- Résultats expérimentaux de Télécommunications avec les Ondes ultra-courtes (Experimental Results in Distant Communication with **Ultra-Short Waves** [15-18 cms.]).—G. Beauvais, p. 39.
- The Generation of [**Ultra-Short Waves**].—W. W. Maslennikoff, p. 94.
- Huntnner Directional Transmitter for **Ultra-Short Waves**.—Telefunken and Luedenia, p. 150.
- The **Pierret Circuit** (for **Ultra-Short Waves**).—p. 210.
- Pierret's Circuits for **Ultra-Short Waves** (Transmission and Reception).—p. 323.
- Die Phasenverteilung in einem zusammengesetzten Röhrengenerator für ultrakurze Wellen (The Phase Relations in a Multi-Valve Generator for **Ultra-Short Waves**).—A. P. Stvolin [Stvolin], p. 209.
- Experimental Researches on **Ultra-Short Waves**.—A. Rostagni, p. 267.
- Experiments on Large Power **Ultra-Short Waves** [down to 2.98 metres].—T. Kuno, p. 612.
- Transmissions radiotélégraphiques ou radio-téléphonique sur Ondes très courtes (Radiotelegraphic or Radiotelephonic Transmissions on **Ultra-Short Waves** [of the order of 17 Centimetres]).—G. Ferrié, p. 381.
- Ultra-Short Waves**.—See also Barkhausen-Kurz, Positive Grid, Thermionic Systems, Two-Metre, and Ultra-High.
- Changing the **Wavelength** of a Crystal-Controlled Short Wave Transmitter.—Telefunken, p. 150.

RECEPTION.

- The Adjustment of Modern Receivers.—p. 615.
- An All-Wave Radio Receiver for **Aircraft**.—R. S. Kruse, p. 154.
- Les Parasites qui gênent la Réception des Signaux de T.S.F. en Avion sont-ils dus uniquement au Système d'Allumage? (Is the Interference with Reception in **Aircraft** due entirely to the Ignition System?).—A. Mahoux, p. 40.
- Die Funkabschirmung an Flugmotoren (Spark Screening of **Aircraft Engines**).—W. Dorn, p. 96.
- Aircraft Radio Receivers**.—S. E. Anderson, p. 268.
- Recent Developments in **America**.—A. Dinsdale, p. 268.
- The Okabe "Electronic Ampli-Detector" and Its Dependence on Filament Current.—Moore; Okabe, p. 616.
- "A Critical Review of Literature on **Amplifiers** for Radio Reception."—J. Zenneck, p. 96.
- Device for Elimination of Atmospheric and Interference.—Bruni, p. 96.
- Amplificateurs à Bande de Fréquences (**Band-Pass Amplifier Stages**).—L. Couillard, p. 382.
- The **Band-Pass Three**.—p. 154.
- Band-Pass or Tone Correction**?—F. M. Colebrook, p. 614.
- Die Empfangsstation auf Damper "Bremen" (The Receiving Station on Board the "Bremen").—E. Zeppler, p. 96.
- Developments in **Broadcast Radio Receiving Apparatus**.—A. J. Gill and A. G. McDonald, p. 151.
- Grundsätzliches zur Gütebeurteilung vom Rundfunk-Empfängern (Fundamental Considerations in Judging the Figure of Merit of a **Broadcasting Receiver**).—A. Clausing, p. 151.

- Measurement of the Qualities of a Broadcast Receiver.—A. Clausing, p. 555.
- Die messende Bestimmung der Empfangsgüte von Rundfunkempfängern (The Quantitative Determination of the Merit of Broadcast Receivers).—A. Clausing, p. 555.
- Statistics of Types of Broadcast Receivers used in Germany.—p. 384
- Moderni Orientamenti nella Tecnica Costruttiva dei Ricevitori per Radiodiffusione su Onde Medie (Modern Trends in the Design of Medium Wave Broadcast Receivers).—M. Boella, p. 40.
- The Life of Component Parts.—McM. Silver, p. 154.
- On the Self-Inductance of [Roll] Condensers at Very High Frequencies.—W. Rokicwicz, p. 40.
- Theory and Operation of Tuned Radiofrequency Coupling Systems.—Wheeler and MacDonald, p. 378.
- D.C. Band-Pass Five.—H. B. Dent, p. 499.
- D.C. Mains Three.—H. B. Dent, p. 499.
- D.C. Super-Selective Five.—W. T. Cocking, p. 615.
- Apparent Demodulation of an Interfering Transmission by a Stronger One.—F. M. Colebrook, p. 440.
- A Further Note on the Apparent Demodulation of a Weak Station by a Stronger One.—Colebrook; Beatty; Butterworth, p. 610.
- High Level Automatic or Self-Bias Detection.—J. R. Nelson, p. 498.
- A New Development in Power Grid Detection.—F. M. Colebrook, p. 440.
- Low Voltage Power Grid Detection.—W. T. Cocking, p. 210.
- Some properties of Grid Leak Power Detection.—E. E. Terman and M. K. Morgan, p. 153.
- Linear Detection of Heterodyne Signals.—F. E. Terman, p. 324.
- Small-Signal Aid to its Visualisation.—E. I. Chaffee, p. 555.
- Detection linéaire et Détection de Puissance (Linear Detection and Power Grid Detection).—B. D. H. Tellegen, p. 614.
- Un nouveau Montage de Détection par la Courbe plaque (A New Detection Circuit using Anode Bend).—L. G. Veysiére, p. 96.
- Bias Detector Overload.—J. R. Nelson, p. 324.
- A New Power Detector System.—P. G. Weiller, p. 154.
- Avoiding Detector Distortion.—F. M. Colebrook, p. 383.
- Radio Developments and Future Trends [in U.S.A.].—p. 151.
- Reduction of Distortion and Cross-Talk in Radio Receivers by means of Variable Mu Tetrodes.—Ballantine and Snow, p. 156.
- Diversity Telephone Receiving System of R.C.A. Communications, Inc.—H. O. Peterson, H. H. Beverage and J. B. Moore, p. 382.
- Diversity Receiving System of R.C.A. Communications, Inc., for Radiotelegraphy.—Beverage and Peterson, p. 385.
- Can one take a Receiver on a Journey Abroad without paying Duty?—p. 40.
- New Methods of Elimination of Parasitic Currents in Radio Receivers.—S. Manczarski, p. 96.
- Automatic Fading Compensation in Super-Heterodyne Receivers.—H. Enthofer, p. 40.
- Broadcast Receivers: A Modern Need [Automatic Fading Compensation].—G.W.O.H., p. 40.
- Fading Elimination by Interrupted Signals in Telegraphy.—Telefunken, p. 152.
- Wide Range Scales for Fading Records by Electrical Means.—Robinson, p. 262.
- Use of Automatic [Field Strength] Recording Equipment in Radio Transmission Research.—de Mars, Kenrick and Pickard, p. 614.
- Portable Apparatus for Measuring the Magnetic Field Strength in an Electromagnetic Wave.—L. G. Vedy and A. F. Wilkins, p. 615.
- Corrections to Field-Strength Measurements with Loop Antennae.—W. G. Baker and L. G. H. Huxley, p. 614.
- New Band-Pass Filter.—W. I. G. Page, p. 268.
- The Efficiency of the Mixed Filter.—W. T. Cocking, p. 323.
- Band-Pass Filters in Radio Receivers.—G. W. O. H., pp. 383 and 440.
- Frequency Changers.—W. T. Cocking, p. 383.
- Effect of Output Load upon Frequency Distortion in Resistance Amplifiers.—H. A. Thomas, p. 153.
- Receivers at the Eighth German Radio Exhibition.—p. 615.
- The German Super-Midget Receiver.—R. Raven-Hart, p. 499.
- Grid Bias without H.T. Batteries.—L. G. Veysiére, p. 154.
- Tracing Hum in Mains Sets.—W. T. Cocking, p. 268.
- Low-Frequency Induction: Noise-Frequency Induction.—Conwell and Warren: Wills and Blackwell, p. 385.
- Interaction in Amplifiers, with Special Reference to Common Impedance in Filament Circuits.—L. Bainbridge-Bell, p. 151.
- Interference from Electrical Machinery and Appliances, and the Shielding of the Aerial Down-Lead.—Rechnitzer: A.E.G., p. 499.
- "Elimination of Radio Interference."—Philips Lamps, Ltd., p. 384.
- Elimination des Parasites en T.S.F. par le Systeme Baudot-Verdan (Elimination of Interference in Wireless by the Baudot-Verdan System).—E. Montoriol, p. 152.
- Choke Coils Eliminate Radio Interference.—A. S. Warner, p. 153.
- Neues über Störungsschutz im Rundfunk (Recent Methods of Eliminating Interference [from Dynamos, etc.] with Broadcast Reception).—G. Büscher, p. 96.
- The Causes and Prevention of Interference with Broadcast Reception.—A. Larsen, p. 616.
- Störbekämpfung (The Elimination of Interference [due to Electrical Machines and Apparatus]).—p. 152.
- Beseitigungsmassnahmen bei Rundfunk-Empfangstörungen (Methods for the Elimination of Interference with Broadcast Reception).—W. Hasenberg, p. 96.
- Les Parasites industriels et la Réception radio-électrique (Man-made Interference and Radio Reception).—Leduc, p. 324.
- L'Élimination des Perturbations radioélectriques (The Elimination of Interference with Radio Reception).—M. Adam, p. 384.
- Interference to neighbouring Communication Lines due to Double Earthing Current [for Three-Phase Power Lines].—H. Geise and W. Plathner, p. 169.
- Die Schwachstrombeeinflussung durch plötzlich geschaltete Erdstromfelder (Interference with Communication Lines by the Sudden Switching of Earth Current Fields).—F. Ollendorff, p. 169.
- Interference with Broadcast Reception.—p. 228.
- Methods of Localising or Suppressing Radio Interference due to Induction, Surges, etc., in Canada.—H. O. Merriman, p. 341.
- Public Utilities Reduce Radio Interference.—H. O. Merriman, p. 457.
- Zur Frage der Beseitigung von Rundfunkstörungen durch Kondensatoren (The Use of Condensers in Stopping the Production of Interference with Broadcast Reception).—A. Denhardt, p. 516.
- Die Aufsuchung von Störern des Funkempfanges (The Tracing of Sources of Interference with Broadcast Reception).—F. Conrad and A. Schöne, p. 457.
- Kritischer Überblick über die Störerschutzbestimmungen (A Critical Survey of the Anti-Interference Regulations).—F. Trevidt, p. 286.
- Störerschutz "Radiopur" für den Rundfunk ("Radiopur" Interference Suppressor in connection with Broadcast Reception).—H. Baumeister, p. 228.
- Erschütterungsstörungen bei ortsbeweglichen Empfängern (Interference Troubles due to Vibration in [Short Wave] Mobile Receiving Systems).—W. Brintzinger, P. v. Handel and H. Vielmann, p. 554.
- Radio Program Distribution over Lighting Circuits [in Hotels, etc.].—T. D. MacCoun; Satterlee, p. 499.
- The Lightweight Portable.—H. F. Smith, p. 499.
- The Loftin-White Amplifier.—R. Wigand, p. 268.
- Twenty-four-hour Receiving Measurements of Low-frequency Radio Stations.—Bolinias, Bordeaux, Kahuku, Malabar and Saigon.—E. Yokoyama and I. Tanimura, p. 383.
- Microphonic Difficulties in the Superheterodyne Regeneration due to Vibration of Air Condenser Plates.—R. de Cola, p. 499.
- Influence of the Moon on Radio Reception.—See under "Propagation of Waves."
- Neutrodyne and Superheterodyne Receivers and their Derivatives: an Analysis of their Operation.—F. Vilbig, p. 96.
- Receiver Design for Minimum Fluctuation Noise.—N. P. Case, p. 498.
- Noise Generation Within Radio Receivers [Thermal Agitation, Shot Effect, Secondary Emission and Ionisation: Use of New Type 235 or 251 Exponential Valves to Eliminate the Pre-Selector System].—R. de Cola, p. 615.
- Adapting Old-Type Circuits for use with Modern Valves.—p. 555.
- French Receivers at the Paris Exhibition.—p. 441.
- Paris Show.—p. 152.
- [U.S.A.] Patent Review on Receiver Circuits and Tubes.—J. J. Rogan, p. 632.
- Application of Piezoelectric Crystals to Receivers.—R. R. Batcher, p. 615.
- A Radio Receiver for Police [Motor Car] Service.—V. M. Graham, p. 499.
- A 5 in. × 6 in. × 9 in. Portable Two-Valve Receiver Covering the Wave Band 16-500 Metres.—R. O. Brooke, p. 615.
- Pre-Selection A.C. Three.—H. F. Smith, p. 268.
- An Improved Pre-Selector Circuit for Radio Receivers.—E. A. Uehling, p. 95.
- The Trend of Progress.—p. 152.
- A Pseudo-Symmetrical (Push-Pull) Receiving Circuit Using One Four-Electrode Valve.—C. Krulisz, p. 384.
- Quality Reception.—John Harmon, p. 153.
- Radiating Receivers Again.—p. 383.
- Reichweite und Lautstärke bei verschiedenen Empfängertypen (Range and Volume with Various Types of Receivers).—G. Büscher, p. 152.
- Reaction and the Band-Pass Filter.—W. T. Cocking, p. 210.
- Receiving Sets of To-day.—p. 211.
- Recording by Electro-Osmosis.—Volmer, pp. 96 and 446.
- Grid Circuit Power Rectification.—J. R. Nelson, p. 324.
- High Level Plate Circuit Rectification.—J. R. Nelson, p. 324.
- The Physical Reality of Side-bands: A Note on the Rectification of a Modulated Continuous Wave.—F. M. Colebrook, pp. 153 and 440.
- A Review of Remote Control Development.—G. Lewis and A. A. Ghirardi, p. 268.
- Remote Tuning Control Systems.—A. Dinsdale, p. 499.
- Mechanical Remote Tuning Controls for Radio Receiving Sets.—J. C. Smack, p. 325.
- Screen-Grid Detectors in Push-Pull.—J. S. Celik, p. 40.
- The Screen-Grid Valve at its Best.—Page, p. 326.
- Is the S.G. Valve a Good Detector?—M. G. Scroggie, p. 615.
- Effective Screening.—Part II.—R. L. Smith-Rose, p. 154.
- Selective Reception in the Broadcast Frequencies [Single-Knob

- Control of Aerial Series Inductance and Condenser].—S. R. Winters; Jones and Yolles, p. 615.
- Band-Pass and Better Selectivity.—W. I. G. Page, p. 153.
- On the Definition of Selectivity.—David, p. 266.
- Selectivity and Damping in a Regenerative Radio Receiver.—Antschovitch, p. 208.
- Selectivity and Response.—Wright, p. 266.
- Zusatzgerät zur Erhöhung der Abstimmstärke und Verminderung von Störungen (Auxiliary Attachment [for Broadcast Receivers] for Increasing Selectivity and Decreasing Interference).—T. Eckert, p. 152.
- A Super-Rejector Circuit [the Eckert Selectivity Attachment].—C. W. O. H.; Eckert, p. 323.
- Die Vorausberechnung der Selektionskurven von Hochfrequenzverstärkern (The Calculation in Advance of the Selectivity Curves of Radio-frequency Amplifiers).—P. Hermannsppann, p. 614.
- Installation of Radio Receivers in the Home [Importance of Shielded Lead-in, etc.].—M. Asch, p. 499.
- Remarks on Short Wave Amplifier Design, and on Amplification Measurement of R.F. Amplifiers.—Imuna, p. 325.
- Short Wave Radio Telephone and Telegraph Receivers.—E. H. Ullrich and R. E. Gray, p. 40.
- Short Wave Receiver Type R.C.25 [for Commercial Stations, Beam or Non-Beam Type Aerial Systems].—J. A. Smale, p. 96.
- Physical Reality of Side Bands.—E. B. Moullin; Colebrook, p. 440.
- Ein hochselektiver Hochfrequenzverstärker, etc. (A Highly Selective [Quartz Controlled] High Frequency Amplifier and the Experimental Demonstration of the Side-Bands in Modulation).—A. Harnisch, p. 323.
- Carrier Waves and Side-Bands.—Nisbet, p. 613.
- A Rapid Method of Estimating the Signal-to-Noise Ratio of a High Gain Receiver.—F. B. Llewellyn, p. 325.
- Standard Specification for A.C. Mains Supply Receivers.—British Engineering Standards Association, p. 616.
- Eliminating Static.—A. B. Calkin, p. 325.
- The Stenode.—J. Robinson, p. 210.
- The "Stenode".—J. Robinson, p. 267.
- The Stenode Radiostat: Discussion after Lecture and Demonstration.—p. 440.
- The "Stenode".—J. Robinson; Moullin, p. 440.
- The Stenode Radiostat.—p. 323.
- The Stenode Radiostat: a Suggested Explanation.—P. David; S. O. Pearson, p. 40.
- Amplitude Modulation versus Frequency Modulation [and the Stenode Radiostat].—V. V. Gunsolley, p. 498.
- Side-Band Smoke Screen [and the Stenode Radiostat].—p. 383.
- The Stenode Receiver and the Side-Band Theory.—C. L. Fortescue, p. 615.
- The Performance of the Stenode.—E. L. Gardiner, p. 323.
- Experiments with a Quartz Crystal Receiver [Stenode Radiostat Circuit].—A. Palmgren, p. 383.
- Über die Möglichkeit, Sender zu trennen, deren Seitenbänder sich überlappen (The Possibility of Separating Two Stations whose Sidebands Overlap [with a comment on the Stenode Radiostat]).—W. Runge, p. 95.
- Modulated Continuous Waves and the Stenode Radiostat.—C. H. W. Nason, p. 211.
- Effects of Sun Spots and Terrestrial Magnetism on Reception.—See under "Propagation of Waves."
- A Single-Dial Short Wave Converter for working a Broadcast Receiver as a Short Wave Superheterodyne.—H. A. Chinn, p. 440.
- The Selectivity of the Superheterodyne.—Part I.—W. T. Cocking, p. 383.
- Adjusting the Superheterodyne for Maximum Sensitivity.—R. J. Knouf, p. 383.
- The Theory of the Superheterodyne.—A. L. M. Sowerby, p. 148.
- Band-Pass Superheterodyne.—A. L. M. Sowerby and H. B. Dent, p. 154.
- The Intermediate Frequency Amplifier of the Superheterodyne.—A. L. M. Sowerby, p. 209.
- A Superheterodyne Receiver for Short Waves.—R. W. Tanner, p. 210.
- Eine Neue Superhet-Rahmenschaltung mit absoluter Einknopfbedienung (A New Superheterodyne Frame Aerial Circuit with True Single-Knob Adjustment. Part I).—E. Hentzschel, p. 615.
- Der Superhet als Fernempfänger der Zukunft (The Superheterodyne as the Long Distance Receiver of the Future).—S. Bruller, p. 615.
- Short-Wave Superheterodynes.—F. H. Haynes, p. 615.
- Undesired Responses in Superheterodynes.—R. H. Langley, p. 616.
- Sur une Méthode de Réception des Ondes courtes entretenuës (A [Super-regenerative] Method of Receiving C.W. Telegraphy on Short Waves).—E. Petrasco; David; Mesny, p. 384.
- Über die Pendelrickkoppelung (Super-regeneration).—H. Kohn, p. 267.
- Super-Selective Five.—W. T. Cocking, p. 499.
- Combating the "Swamp" Effect of High Power Transmitters.—McMichael, Ltd., p. 384.
- Test Procedure for Detectors with Resistance Coupled Output.—Robinson, p. 393.
- Testing Wireless Receivers.—Smith-Rose, p. 510.
- Special Instruments for Radio Receiver Production Testing.—R. P. Glover, p. 268.
- A Testing Equipment for Broadcast Receivers.—Troeltsch, p. 393.
- Design Tests for Amplifiers and Complete Radio Receivers.—Sylvan Harris, p. 325.
- Essential Tests for Component Parts of Electrical Radio Receivers.—H. E. Kranz, p. 164.
- Tuning by Permeability Variation.—R. H. Langley; W. J. Polydoroff, p. 498.
- Type R.g. 29C Receiver (particularly suitable for Duplex Telephony Services).—Marconi Company, p. 96.
- "Five Meter" Receiver Progress: Describing a Successful Super-Regenerative Receiver for the Ultra-High Frequencies.—R. A. Hull, p. 498.
- Calibrating Ultra-Short Wave Receivers Employing Super-Regeneration.—C. Whitehead, p. 498.
- Fundamental Points for Ultra-Short Wave Receivers.—Liebau, p. 498.
- Ultra-Short Wave Receiving Circuit.—Esau, p. 150.
- Adaptors for Ultra-Short Wave Reception, Super-Regenerative and Otherwise.—Schroeter; Leithäuser, p. 498.
- Attachment for Ultra-Short Wave Reception.—pp. 325 and 384.
- Adaptor for Ultra-Short Waves.—p. 498.
- Galvanometer for the Direct Reception of [Ultra-] Short Waves.—D. C. Gall, p. 325.
- Reception of Ultra-Short Waves of the Order of 17 Centimetres.—Férré, p. 384.
- Volume Control.—C. Whitehead, p. 154.
- Adjustment of Reaction [Volume Control] by an Oscillating Valve.—Koonans, p. 210.
- Volume Control.—See also under "Acoustics."
- Automatic and Semi-Automatic Volume Controls for Aircraft Radio Receivers.—Hinman, p. 555.
- Neues über Selektivitätserhöhung mittels Sperrkreis (New Developments in the Use of Wave Traps for Increasing Selectivity).—R. Rechnitzer, p. 152.
- The Wireless World Four.—F. H. Haynes, p. 154.
- The Wireless World Four.—Battery Model.—F. H. Haynes, p. 211.
- Wireless World Super-Selective Six.—W. T. Cocking, p. 440.
- A Long Wave Receiver for Small Yachts.—H. F. Smith, p. 325.

AERIALS AND AERIAL SYSTEMS.

- Increasing the Effective Height of Trailing Aircraft Aerials.—Eisner, Sudeck, Schroer and Zinke, p. 557.
- Vergrößerung der effektiven Höhe von Flugzeugschleppantennen (Increasing the effective height of Trailing Aircraft Aerials).—F. Eisner, G. Sudeck, R. Schröer and O. Zinke, p. 441.
- Investigations on Aircraft Aerials.—U.S. Bureau of Standards, p. 155.
- Characteristics of Airplane Antennas for Radio Range-Beacon Reception.—H. Diamond and G. L. Davies, p. 441.
- Space Wave Angle Regulated by Switching in the Suitable Elements of an Aerial System.—Esau, p. 155.
- KDKA'S Aerial with Controllable Angle of Elevation.—Dinsdale, p. 398.
- The Artificial Characteristic of Non-Directive Point Radiators disposed over a Spherical Surface.—Fischer, p. 45.
- Neuere Messungen an Kurzwellen-Richtantennen (New Measurements on Short Wave Beam Aerials).—A. Gothe, p. 155.
- Les Antennes dirigées à Ondes courtes (Short Wave Beam Aerials [and the Calculation of their Properties]).—p. 555.
- Beam Arrays and Transmission Lines.—T. Walmsley, pp. 155 and 211.
- British P.O. Short Wave Aerial Arrays.—Lee, p. 41.
- Engineering Aspects of the Broadcast Antenna.—H. E. Hallborg, p. 269.
- New Broadcasting Aerial System for Large Ground Wave and Small Space Wave Radiation.—Lorenz Company, p. 499.
- Theoretical and Practical Aspects of Directional Transmitting Systems.—E. J. Sterba, p. 556.
- Versuche über die Abstimmung von Richtantennen bei kurzen Wellen (Experiments on the Tuning of Directional [Lecher Wire Type] Short Wave Aerials).—F. Kiebitz, p. 617.
- The Directive Sharpness of the Artificial Characteristic of Any Arrangement of Radiators in Space.—Fischer, p. 388.
- Note sur le Calcul des Antennes dirigées (Note on the Calculation of Directive Aerials).—J. Loeb, p. 617.
- Diversity Receiving System of R.C.A. Communications, Inc.—See under "Reception."
- The Effective Height of Closed [Loop] Aerials.—V. I. Bashenoff and N. A. Mjasoedoff, p. 500.
- Die wirksame Höhe kurzer Linearantennen (The Effective Height of Short Linear Aerials).—M. Dieckmann, p. 385.
- Om Sandareantenners Effektivitet med särskild hänsyn till Rundradions väglängder (The Efficiency of Transmitting Aerials, especially for Broadcasting Wavelengths).—E. T. Glas, p. 97.
- Über den Wirkungsgrad von Rundfunk-Sendeantennen (The [Ground Wave] Efficiency of Broadcasting Transmitting Aerials).—E. T. Glas, p. 211.
- On the Efficiency-Rating of Transmitting Aerials for Broadcasting Distribution.—E. T. Glas, p. 97.
- The Energy Magnification of Broadside Aerial Arrays used for Reception.—E. Green, p. 617.

- Koppel de quelques Erreurs affectant les Indications des Montages de T. S. F. (A Note Recalling Certain Errors Affecting the Indications of Wireless Circuits [Open and Closed Aerials, etc.]).—H. de Bellescize, p. 556.
- Transmission on Two Aerials at Right Angles to Avoid Fading.—Krüger and Plendl, p. 93.
- Fading Elimination by Constantly Varying the Angle of Radiation.—Heletunken, p. 155.
- On the Supply of Energy to a Short-Wave Aerial by a Two-Wire Feeder, and the Measurement of its Resistance.—V. V. Tatarinov, p. 269.
- Two-Metre Wave Transmitter with Special Reference to Its Antenna Feeder.—Uda, p. 612.
- Ein neue Methode zur Spannungsmessung an Paralleldrahtsystemen (A New Method of Potential Measurement in Parallel Wire [Lecher Wire: Feeder] Systems).—L. Rhode and F. Bahemann, p. 616.
- High Frequency Feeders: Some Investigations into Design and Measurement.—H. O. Roosenstein, p. 441.
- Über die Unsymmetrie von Hochfrequenzleitungen (The Asymmetry of H. F. Feeders).—H. O. Roosenstein, p. 616.
- Über neue Dämpfungsmessungen an Hochfrequenz-Energieleitungen (New Measurements on the Damping in H. F. Feeders).—K. Bahemann and H. O. Roosenstein: Gothe, p. 616.
- Measurements in the Field Radiated by a Linear Antenna Excited in the Space Between Two Parallel, Conducting Surfaces.—Bergmann and Doerfel, p. 316.
- Corrections to Field-Strength Measurements with Loop Antennae.—Baker and Huxley, p. 614.
- Calculation of Electric and Magnetic Field Strengths of any Oscillating Straight Conductors.—R. Bechmann, p. 325.
- Frame Aerial for Short or Ultra-Short Waves.—Lorenz, p. 212.
- Dual-Range Frame Aerial.—A. L. M. Sowerby and H. B. Dent, p. 212.
- Note sur les Déformations du Diagramme d'un Cadre émetteur (Note on the Deformations of the Diagram of a Transmitting Frame Aerial).—C. Bourgonnier, p. 385.
- Optimum Dimensions of Short-Wave Frame Aerials.—L. S. Palmer and L. L. K. Honeyball, p. 268.
- Certain Factors Affecting the Gain of Directive Antennas.—G. C. Southworth, pp. 41 and 211.
- Zur Berechnung des Leistungsgewinnes bei Verwendung von Richtantennen (The Calculation of the Gain Obtained by the Use of Beam Aerial Systems).—L. Högelberger, p. 555.
- A Graphical Method for Determining the Magnitude and Phase of the Electric Field in the Neighbourhood of an Antenna carrying a Known Distribution of Current.—J. S. McPetrie, pp. 211 and 500.
- The Grounded Condenser Antenna Radiation Formula.—W. H. Wise, p. 617.
- Rascheti antenni Hertz'a (The Design of Hertz type Antennae).—G. A. Uger, p. 154.
- Reduction of Power Losses by Insulated Sectional Towers at WHK.—p. 617.
- The Efficacy of Shielding the Down-Lead to prevent Interference.—Asch: Rechnitzer, p. 500.
- On the Calculation of Masts with Stays.—B. S. Loonin, p. 41.
- The Effects of Metal Obstructions on the Radiation Field of an Aerial.—Seiler, p. 269.
- The Study of Aerials by Small-Scale Models.—p. 441.
- Untersuchungen an Strahlverföhranlagen in Nauen (Investigation of the Nauen Beam Aerials).—W. Pfitzer, p. 41.
- Radiation Measurements of a Short-Wave Directive Antenna at the Nauen High Power Radio Station.—M. Bäumlcr, K. Krüger, H. Plendl and W. Pfitzer, p. 385.
- The Determination of Power in the Antenna at High Frequencies.—A. Hoyt Taylor and H. F. Hastings, p. 556.
- Horizontale-Strahlungskennlinie einer Kurzwellen-Richtantenne mit gespeistem Reflektor (The Horizontal Radiation Characteristic of a Short-Wave Beam Aerial System with Directly-Excited Reflector).—K. Krüger and H. Plendl, p. 385.
- Berechnung der Strahlungseigenschaften und Strahlungswiderstände von Antennensystemen (The Calculation of the Radiation Characteristics and Radiation Resistances of Aerial Systems).—R. Bechmann, pp. 96 and 155.
- The Radiation Distribution of Antennae in Vertical Planes.—R. M. Wilmotte, p. 40.
- General Formülcn for the Radiation Distribution of Antenna Systems.—R. M. Wilmotte, p. 41.
- Measurements in the Radiation Field of a Dipole Aerial.—Peters, p. 30.
- Zur Abraham'schen Darstellung des Strahlungsfeldes eines stabförmigen Leiters (On Abraham's Formulation of the Radiation Field of a Rod Conductor).—R. Bechmann, p. 617.
- Über das Strahlungsfeld der Dipolantenne (The Radiation Field of a Dipole Aerial).—R. Bechmann, p. 617.
- On the Calculation of the Radiation Resistance of an Antenna.—A. E. Suzant, p. 97.
- On the Calculation of Radiation Resistance of Antennas and Antenna Combinations.—R. Bechmann, p. 556.
- Résistance de Rayonnement d'une petite Antenne oscillant en Demi-Onde (Radiation Resistance of a Small Aerial Oscillating to a Half-Wave).—S. Sonada, p. 97.
- Distribution of Radiation Resistance in Open Wire Radio Transmission Lines.—T. Waimesley, p. 616.
- Mathematical Notes on Receiving Aerials.—Y. Kato, p. 97.
- Safety Measures for Outdoor Antennae.—A. Halsted, p. 212.
- Note on the Electromagnetic Greek-Pattern or Saw-Tooth Networks.—R. Mesny, p. 441.
- Short-Wave Directive Transmitting and Receiving Antennas.—E. H. Ulrich and N. K. Fairbank, p. 41.
- Currents Required to Remove Conductor "Sleet."—J. E. Clem, p. 155.
- Dipoles Buried in Snow on the Pic du Midi.—Garrigue, p. 500.
- The Saic "Sound Filter Sphere Antenna."—p. 385.
- Developments in Short-Wave Directive Antennas ["Tilted Wire" Principle].—E. Bruce, p. 555.
- Neuere Versuche mit Sendantennen (New Tests on Transmitting Aerials).—F. Kiebitz, p. 155.
- Aerial Systems for Ultra-Short (5 Metre) Waves and Their Effect on the Formation of Interference Patterns at a Distance.—Lamb, p. 500.
- Short Wave Radiation from Vertical Aerials.—W. Nakayama and K. Komatu, p. 556.
- Über die elektrischen Schwingungen in drahtförmigen Leitern Electrical Oscillation in Wire Conductors).—E. Hallén, p. 269.

VALVES AND THERMIONICS.

- Der Verlauf der Aktivierung von thoriertem Wolfram und thoriertem Molybdän (The Course of the Activating Process in Thoriated Tungsten and Thoriated Molybdenum).—A. Gehrtz, p. 213.
- The Alleged Production of Adsorbed Films on Tungsten by Active Nitrogen.—I. Langmuir, p. 387.
- Bemerkung zur Adsorptionstheorie von Sexl (Remark on Sexl's Adsorption Theory).—A. Ganguli, p. 42.
- Method of Alignment Applied to Anti-Logarithmic Triode Characteristics.—W. A. Barclay, p. 97.
- The Alignment Representation of Valve Data.—W. A. Barclay, p. 270.
- Aperiodische Verstärkung sowie Richtverstärkung unter Ausnutzung des vollen Verstärkungsfaktors von Elektronenröhren (Aperiodic Amplification and Rectification with full Utilisation of the Amplification Factor of Thermionic Valves).—H. Rudolph, p. 41.
- Versuche über die Eigenschaften der Atomsolichten (Experiments on the Properties of Atomic Layers).—P. Lukirsky, A. Sosina, S. Wekschinsky and T. Zarewa, p. 618.
- Special Tubes for Automobile [and Aircraft] Radio Sets.—R. M. Wise, p. 269.
- Some Thermionic Properties of Barium Films Adsorbed on Tungsten.—H. Nelson, p. 387.
- Blue Glass Valves More "Efficient" than White Glass Valves of Identical Design.—Areturus Company, p. 153.
- Beitrag zum Ausbrennvorgang der im Vakuum erglühen (Wolfram-) Drähte (Contribution to the Burn-Out Process of Tungsten Wires heated *in vacuo*).—L. Pránsnik, p. 501.
- The Characteristic Curve Fields of Resistance-coupled Amplifier Valves.—Feldtkeller, p. 35.
- A New Method of Measuring Vacuum Tube Characteristics.—J. R. Barnhart, p. 618.
- Die Abweichungen der Verstärkeröhrenkennlinien vom $e^{2.2}$ Gesetz (The Deviations of Amplifier Valve Characteristics from the $e^{2.2}$ Law).—H. Kniepkamp, p. 618.
- Der Einfluss chemischer und chemisch-physikalischer Vorgänge an der Oberfläche hochschmelzender Metalle, etc. (The Influence of Chemical and Chcmico-Physical Processes at the Surface of High Melting Point Metals on the Thermionic Properties.—Contribution to the Explanation of the Influence of Monatomic Layers on Thermionic Emission [Recapitulatory Account with bibliography]).—K. Becker, p. 618.
- Cold Cathode Valve with Emission due to X-Ray Action produced by H. F. Currents.—Soc. d'Études scient. et industr., p. 269.
- Cold Emission from Unconditioned Surfaces.—W. H. Bennett, p. 327.
- Vergleich zweier Verfahren zur Bestimmung von Kontaktpennungen zwischen Metallen (Comparison of Two Methods of Determination of Contact Voltages between Metals).—G. Mönch, p. 99.
- Analysis of Vacuum Tube Production Costs.—p. 501.
- The Influence of the Crystal-Orientation of the Cathode on that of an Electro-deposited Layer.—Wood, p. 285.
- Comparing Detector Valves.—W. T. Cocking, p. 326.
- A Saturated Diode as an Anode Resistance.—J. F. Herd: Rudolph, p. 326.
- Triode démontable de 150 kw (150 kw. Dismountable Triode).—F. Holweck and P. Chevalier, p. 558.
- Das Gitterdynatron (The "Grid" Dynatron Circuit).—Y. Ito, p. 98.
- Zur Theorie des Dynatrons (The Theory of the Dynatron).—Y. Ito, p. 386.
- The Philips Electrometer Valve in an Amplifier for Detection of a Charge of 10^{-18} Coulomb.—Leprince-Ringuet, p. 501.
- Transmission of Electrons through Potential Barriers.—N. H. Frank and L. A. Young, p. 618.

- Characteristic Velocity of **Electrons** Diffused from Metallic Surfaces.—G. Bernardini, p. 156.
- Die Aussteueröhre als Audion und Widerstandsverstärkeröhre (The **External-Grid Valve** as Audion and Resistance-Amplifier Valve).—G. Jobst, J. Richter and W. Wehnert, p. 98.
- Measurements, Tests and Receivers with **External-Grid Valves** [Teletunken "Rod" ("Arcotron") and "Valvo" Flat Valves].—von Ardenne: H. Kröncke, p. 42.
- Die Aussteueröhre (**External-Grid Valves** [Teletunken "Rod"]).—F. Noack, p. 42.
- Fermi-Dirac Statistics** Applied to the Problem of Space Charge in Thermionic Emission.—R. S. Bartlett, p. 387.
- Herabminderung des störenden Einflusses der Heizspannung an den Enden einer Glühkathode durch eine Gegenelektrode mit überlagertem Spannungsgefälle (Reduction of the Disturbing Influence of the **Filament Voltage** at the Ends of an Incandescent Filament by means of an Opposite Electrode with Superposed Voltage Drop).—G. Mönch, p. 42.
- The Variation of the Resistances and Interelectrode Capacities of Thermionic Valves with **Frequency**.—L. Hartshorn: W. E. Benham, p. 618.
- G.E.C. Valve** "Capable of Measuring 10^{-17} A."—B. J. Thompson, p. 98.
- German Valves** of 1931.—E. Schwandt, p. 501.
- Tables of **German Valves**.—p. 618.
- Some Comments on the use of "**Getters**."—G. D. O'Neill, p. 269.
- The Comparison of Certain Commercial **Getters**.—M. R. Andrews and J. S. Bacon, p. 558.
- Graphical Analysis** of Output Tube Performance.—C. E. Kilgour, p. 212.
- Graphical Representation** of the Three Constants of a Triode.—I. Miura, p. 557.
- Diminishing the **Grid Current** at Zero Grid Potential in Receiving Tubes.—S. A. Obolensky, p. 42.
- A Low **Grid-Current** Vacuum Tube.—G. F. Metcalf and B. J. Thompson, p. 98.
- The Application of a New Type of Triode Valve [with Low **Grid Current**] to the Determination of Hydrogen-ion Concentration with Glass Electrodes.—G. B. Harrison, p. 157.
- Hafnium** for Cathodes.—p. 558.
- High Audio Power** from Relatively Small Tubes.—Barton, p. 560.
- Reactions at the Surface of **Hot Metallic Filaments**. Part V.—Thermionic Emission and Catalytic Activity at the Surface of Hot Metallic Wires.—B. S. Srikantan, p. 501.
- Beobachtungen über den Einfluss der Belichtung auf die Arbeit von Elektronenröhren (Observations on the Effect of **Illumination** on the Behaviour of Valves).—L. Pungs and K. Schulze, p. 387.
- New **Indirectly-heated Valves** for D.C. Mains.—Teletunken Company, p. 558.
- Electron Tubes in **Industrial Service**.—W. R. G. Baker, A. S. Fitzgerald and C. F. Whitney, p. 386.
- Die thermionische Emission der Metalle in Joddämpfen (The Thermionic Emission of Metals in **Iodine Vapour**).—S. Kalandyk, p. 270.
- Au Sujet des Diagrammes dynamiques publiés par Kusunose (Concerning **Kusunose's Dynamic Diagrams**).—J. Marique, p. 42.
- The **Life** of Small Vacuum Tubes.—K. Kajiwara, p. 326.
- Life** of an Incandescent Conductor under Constant and Variable Conditions.—V. I. Volynkin, p. 326.
- Tube **Life** Measurements: The Wait-Hour Meter Method.—V. V. Gunsoley, p. 618.
- Logarithmic Valve Characteristics**.—F. Fasal, p. 157.
- Die Magnet Charakteristiken eines Drei-Elektrodenrohres (The Characteristics of a Triode in a **Magnetic Field**).—J. Völker, p. 326.
- Das Magnetron als Negative Widerstand (The **Magnetron** as a Negative Resistance).—H. E. Hollmann, p. 617.
- Magnetron**.—See also Ultra-Short Wave.
- The "**Unit**" Method of Valve **Manufacture** contrasted with the "Departmental" Method.—E. Kauer and R. Brindle, p. 558.
- Some Viewpoints of Tube **Manufacturing** Executives on the Vacuum Tube Industry. Also A Survey of the Vacuum Tube Industry.—p. 387.
- A Note on the **Mathematical Theory** of the Multielectrode Tube.—Caporale, p. 35.
- The **Measurement of Small Currents**: Grid Current Characteristics and the Suitability of Different Types of Valves.—Bh. S. V. Raghava Rao and H. E. Watson, p. 43.
- Untersuchungen über die glühelctrische Emission von Metallen in der Umgebung ihres Schmelzpunktes (Investigations of the Electrical Emission from Incandescent Metals in the Neighbourhood of their **Melting-Point**).—J. Ameiser, p. 442.
- Mercury Arcs**.—See "Thyratron."
- New **Metal-Sprayed Valves**.—p. 326.
- Study of Valve Models with Zeleny [Oscillating-Leaf] Electroscope.—Barton, p. 397.
- Vorlesungsversuch zur Demonstration der Wirkung einer monoatomaren Natriumschicht auf die Glühelctronenemission eines Wolframdrahtes (Lecture Experiment Demonstrating the Effect of a **Monatomic Sodium Layer** on the Thermionic Emission of Tungsten Wire).—R. Suhrmann and F. Breyer, p. 98.
- Über den "negativen" Anodenfall (On the "**Negative**" Anode Fall [in the Mercury Arc. Remarks on I. Langmuir's Publications]).—J. v. Issendorff: I. Langmuir, p. 271.
- New Structure Principle** in Tube Design.—W. L. Krahl [Arcurus Company].—p. 213.
- New Six-Volt D.C. Tubes**.—G. Grammer, p. 501.
- New Valves**.—p. 442.
- Conductivity of **Oxide Cathodes**.—N. H. Williams and W. S. Huxford, p. 327.
- Thermionic Emission of **Oxide-Coated Cathodes** Containing an Ni-Ba Alloy Core.—N. C. Beese, p. 98.
- High Efficiencies of Emission from **Oxide-Coated Filaments**.—B. J. Thompson, p. 98.
- Time Changes in **Oxide-Coated Filaments**.—E. F. Lowry and W. T. Millis, p. 387.
- The Origin of Thermionic Electrons from **Oxide-Coated Filaments**.—R. W. Sears and J. A. Becker, p. 558.
- Zum Querwiderstand der Oxidschicht von Glühkathoden (The Transverse Resistance of the **Oxide Layer** of Hot Filaments).—J. Kroczeck and E. Lübcke, p. 270.
- Elektronenemission en Geleidsingsvermogen bij Aardalkali-Oxyden (Electron Emission and Conductivity in **Oxides** of the Alkaline Earths).—W. Albricht, p. 618.
- Oxygen Films** on Tungsten. I.—A Study of Stability by Means of Electron Emission in Presence of Cesium Vapor.—I. Langmuir and D. S. Villars, p. 501.
- Output Valves in **Parallel**.—W. A. Barclay, p. 270.
- French Valves at the **Paris Exhibition**.—p. 442.
- An Estimation of **Patch Sizes** on a Thoriated Tungsten Filament.—L. B. Lintford, p. 387.
- Pentode** as Detector Amplifier.—E. Yeoman Robinson, p. 157.
- The **Pentode** and some Applications: in a Small 3-Valve Receiver of High Sensitivity: as a R.F. Power Amplifier and Frequency Doubler in Low Powered Transmitters.—p. 442.
- Design Problems of **Power Pentodes** for Radio Receivers.—B. V. K. French, p. 387.
- Two **Pentodes** as the Ideal Output Stage.—Forstmann, p. 442.
- Performance of Output **Pentodes**.—J. M. Glessner, p. 558.
- Blue Glow on Glass of **Pentodes**—A Sign of High Vacuum and Not of Gas.—p. 618.
- Pentode** versus **Triode**.—A. L. M. Sowerby, p. 213.
- "**Permanent**" Valves.—p. 387.
- Thermionic Emission in Caesium-Oxide **Photoceils** at Room Temperatures.—Kingsbury and Stilwell, p. 508.
- The **Photoelectric Effect** from a Barium Oxide-Coated Platinum Filament.—K. Newbury and F. Lemery, p. 442.
- Über Verstärkeröhren mit photoelektrischer Emission (Amplifier Valves with **Photoelectric Emission**).—M. v. Ardenne, p. 98.
- Photoelectric Properties** of Oxide Cathodes.—Huxford, p. 218.
- Positive Ion Emission** from Thin Platinum Films on Glass.—R. A. Nelson, p. 387.
- The Emission of **Positive Ions** from Metals.—H. B. Wahlm, p. 327.
- The Emission of **Positive Ions** from Thoriated Tungsten.—H. B. Wahlm, p. 327.
- Über die Leistungsverstärkung der Elektronenröhren (On the **Power Amplification** of Electron Tubes).—N. Verme, p. 98.
- Lead-in Conductors for **Quartz Glass** Bulbs.—Soc. anon. réunie de L. à incand. et d'Élec., p. 269.
- On the Nature of the **Repulsive Forces** which Keep the Electrons from Escaping out of a Metal.—C. Zwickler, p. 559.
- Some **Photoelectric** and Thermionic Properties of **Rhodium**.—E. H. Dixon, p. 213.
- Theoretical Interpretation of Experimental **Richardson Plots**.—W. H. Brattain and J. A. Becker, p. 559.
- New Screen Grid Valve**: 424 High Gain Audion.—De Forest Company, p. 156.
- Interesting Valve Development [Special **Screen-Grid Valve**].—W. L. G. Page, p. 213.
- The **Screen-Grid Valve** at Its Best.—W. I. G. Page, p. 326.
- Der Einfluss der Sekundäremission auf die Röhrenkennlinien (The Influence of **Secondary Emission** on Valve Characteristics).—H. Bittmann, p. 558.
- Eine exakte Methode zur Trennung von Primär und Sekundärströmen in Elektronenröhren (An Exact Method for the **Separation** of Primary and Secondary Currents in Valves).—H. A. Schwarzenbach, p. 270.
- Abnormal **Shot Effect** of Ions of Tungstons and Tungstic Oxide.—J. S. Donald, Jr., p. 42.
- Shot Effect** of the Emission from Oxide Cathodes.—H. N. Kozaowski and N. H. Williams, p. 97.
- Zur Theorie des Schroteffektes (On the Theory of the **Shot Effect**).—H. J. de Boer, p. 501.
- An Effect of **Space Charge** in a Gas at Low Pressures.—E. W. B. Gill, p. 155.
- Influence of **Space Charge** on Current Fluctuations.—E. W. Thatcher and N. H. Williams, p. 559.
- Space Charge** vs. **Image Force** in Thermionic Emission.—R. S. Bartlett and A. T. Waterman, p. 270.
- Gibt es eine Anodenzerstäubung? (Does Anode **Sputtering** Exist?)—M. Bareiss, p. 387.
- Tubes électroniques amplificateurs à grande Pente (**Steep-Slope** Amplifier Valves).—R. Boussard, p. 501.

Electrostatic Surface Fields near Thoriated Tungsten Filaments by a Photoelectric Method.—L. B. Linford, p. 42.

Gridless Triodes ["Telefunken" "Peg" Valves].—G. W. O. H., p. 156.

Repartition des Températures dans une Section droite d'un Filament plat incandescent (Distribution of Temperatures in a Cross Section of a Flat Incandescent Filament).—G. Ribaud, p. 442.

Testing Radio Valves: the A. C. Bridge Method.—C. S. Bull, p. 269.

A Standard Test Set for Vacuum Tubes.—M. H. A. Lindsay, p. 270.

Thermal Fluctuations of the Surface Potential of a Cathode as Affecting Electron Emission.—K. H. Kingdon, p. 213.

Thermionic Emission.—S. Dushman, p. 388.

Theory of the Internal Action of Thermionic Systems at Moderately High Frequencies.—Part II.—W. E. Benham, p. 212.

Di Alcuni Tubi Termionici a più di Tre Elettrodi (Some Thermionic Valves with more than Three Electrodes).—U. Ruelle, p. 98.

Zum Verhalten des Thoroxys in Wolframglühdrähten (The Behaviour of Thorium Oxide in Tungsten Filaments).—W. G. Burgers and J. A. M. van Liempert, p. 270.

A Note on the Time Required to Set up Conduction in an FG-17 Thyatron as Determined by a Study of a Linear Time Axis Circuit for an Oscillograph.—W. B. Nottingham, p. 500.

Characteristics of Small Grid-Controlled Hot-Cathode Mercury Arcs or Thyratrons.—W. B. Nottingham, p. 269.

Grid Current Required by Hot-Cathode, Grid Controlled Mercury Arcs ["Thyratrons"] before Discharge.—W. B. Nottingham, p. 386.

Some Characteristics of Thyratrons.—J. C. Warner, p. 618.

Versuche mit einer Verstärkeröhre nach dem Quersfeldprinzip (Experiments with an Amplifier Valve on the Transverse Field Principle [as in the C. R. Oscillograph]).—H. Alfven, p. 557.

The Valve Triangle.—G. W. O. H., p. 441.

Das Röhrendreieck (The Triangular Valve Diagram).—E. Meyer, p. 42.

Fundamental Triode Equations.—U. Ruelle, p. 441.

Transmitting Valve with Two Grids with their Openings Staggered.—Telefunken, p. 156.

100 kW. Valve Type C.A.T.10.—W. J. Picken, p. 156.

Ultra-Sensitive Vacuum Tube.—General Electric Company, p. 43.

Tubes for Generating 18-Centimetre [Ultra-Short] Waves.—I. T. & T. Company; I. J. Saxl, p. 500.

New Magnetron Valve for Ultra-Short Wave Generation.—J. Liston, p. 213.

[A New Method of] Measurement of Vacuum in Radio Tubes. A New Tube Constant—the Ionisation Factor.—M. D. Sarbey, p. 386.

Stato Attuale della Tecnica della Costruzione dei Tubi a Vuoto (Present State of the Technique of Valve Construction).—C. Matteini, p. 43.

Reduction of Distortion and Cross-Talk in Radio Receivers by Means of Variable-Mu Tetrodes.—S. Ballantine and H. A. Snow, p. 156.

Characteristics of Variable-Mu Tetrodes.—K. Henney, p. 325.

The Variable-Mu Tube and Distortion in Radio Receivers.—A. G. Campbell, p. 501.

The New Variable-Mu Vacuum Tubes.—A. G. Campbell, p. 386.

The Variable-Mu Valve.—R. O. Carter, p. 618.

Messungen von Voltspannungen zwischen reinen Metallen (Measurements of Volta Voltages [Potential Differences between Surfaces in a Dielectric and in Vacuo] between Pure Metals).—H. Kösters, p. 213.

DIRECTIONAL WIRELESS.

The Abbeville Radio Beacon for Aircraft.—p. 271.

The Marconi-Adcock Direction-Finding Aerial.—p. 619.

Short-Wave D.F. by the Adcock System.—E. Iso, p. 559.

Wireless Direction Finding as an Aid to Aerial Navigation.—p. 43.

Safety in Aerial Navigation through Radio Communication.—E. T. Allen, p. 43.

Flugsicherung durch Richtfunkbaken (Radiobeacon Aids to Aerial Navigation).—Rahskopf, p. 214.

Aeronautic Radio Developments (Simultaneous Beacon Signals and Telephony: Aircraft Aerials: Prevention of Collision by Ultra-Short Waves).—U.S. Bureau of Standards, p. 157.

Aeronautical Radio Communications.—E. Sibley, p. 99.

Sur un Procédé de Guidage des Avions (A Method of Guiding Aircraft).—M. Biot, p. 99.

Le Guidage et le Sondage aériens (Direction and Altitude-Finding for Aircraft [the General Situation in France]).—E. Fromy, p. 271.

Über Flugfunkpeilungen (Direction-Finding for Aircraft).—M. H. Gloeckner, p. 271.

Mechanical Eye for Aircraft in Fog.—W. F. Westerdop; G.E.C. p. 388.

Prevention of Collision between Aircraft.—Bureau of Standards, p. 502.

Aircraft D.F. Research: Night and Twilight Errors, Ultra-Short Waves, etc.—Wireless Division, German Aircraft Research Establishment, p. 559.

Airplane Flight Aided by Electricity (Beacons, Automatic Control, Altimeters, etc.).—C. F. Green, p. 560.

Airplanes Land Blind—Guided by Radio.—H. Diamond and F. W. Dunmore, p. 560.

Sonic Altimeter for Fog Flying.—G.E.C. of America, p. 328.

Directional Work on Atmospherics.—See under "Atmospherics."

The Collaboration between Wireless and Aviation.—Marty, p. 398.

Tracing Balloon Drift by Wireless.—p. 435.

Radio Tracking of Meteorological Balloons.—W. R. Blair and H. M. Lewis, p. 619.

Indicator for Visual Type Beacon.—Bureau of Standards, p. 502.

Signalling Arrangements for Interlocked Signal Beacons.—Lorenz, p. 158.

Slow Cathode Ray as a Compass or Inclination Indicator for Aircraft.—E. Brüche, p. 271.

Cathode-Ray Compass for Aircraft.—A. Salmony; E. Brüche, p. 271.

Der Elektronenstrahlkompass (The Cathode Ray Compass).—W. Bernbach, p. 388.

Die Entwicklung des Fernkompasses und seine Bedeutung für die automatische Steuerung (The Development of the Distant-Indicating Compass, and Its Importance for Automatic Control).—W. Möller; Askania Works, p. 388.

Aircraft Compass Acceleration Errors and Their Compensation.—J. D. Tear and E. J. Lawton, p. 388.

À Propos des Radiophares tournants conjugués (Concerning Co-ordinated Rotating Beacons).—P. Franck; C. Bourgonnier, p. 157.

The Practical Correction of a Wireless Direction-Finder for Deviations due to the Metalwork of a Ship.—C. E. Horton, pp. 328 and 502.

Un nouveau Radiogoniomètre à Lecture directe (A New Direct-reading Direction Finder).—J. Marique; Brüllard and Goldschmidt, p. 618.

Un nouveau Radio-Compass (A New [Direct-Reading] Radio Compass).—H. Busignies, p. 43.

Direct Reading Radio Compass for Aircraft.—Gerhard Fisher and G. Kruesi, p. 502.

Wireless Equipment of the Dornier Do X.—W. Völkel, p. 44.

A Note Recalling Certain Errors Affecting the Indications of Wireless Circuits [Open and Closed Aerials, etc.].—de Bellescize, p. 556.

European Aviation Radio.—Gross; Hull, p. 388.

Distance Determination by Foghorn and Wireless Telephony: Extension to Preventing Collisions at Sea.—p. 43.

German Research Establishment for Aircraft, 1930.—Fassbender, p. 54.

Lichtstrahlzeiger zur Kartierung von Winkelwerten (Light-Ray Pointers for Charting Angles [for Direction-Finding, etc.]).—Askania Works; K. Möller, p. 559.

Deformations in the Loop Aerial Diagram.—Bourgonnier, p. 388.

The Effective Height of Closed [Loop] Aerials.—Bastenoif and Mjasodoff, p. 500.

Les Procédés Loth pour le Guidage des Avions par Ondes Hertziennes (The Loth Systems for Guiding Aeroplanes by Wireless).—A. Verdurand; Blancard, p. 501.

Wireless Direction Finding Systems for Marine Navigation [Comparison of].—p. 388.

Night Errors on Long Waves.—I. Tanimura, p. 559.

Orthodromic Charts for Fixing the Position by Radiogoniometric Bearings: The Askania patented Telecompass and Aircraft Compasses: Echo Sounding.—p. 44.

The Photoelectric Cell in Fog Flying.—W. F. Westerdop, p. 560.

Photoelectric Receiver and Neon Beacon for Fog Landing.—General Electric Company, p. 502.

Polarisation of High-Frequency Waves and Their Direction Finding.—Namba, Iso and Ueno, p. 491.

A Note on Polarisation Error in Direction Finding [Long Waves].—Namba, p. 502.

Radio Direction Finding at Post Office Coast Stations.—G. H. Farnes and F. Hollinghurst, p. 100.

The Equi-Signal Zone Radio Beacon and Air Navigation.—R. L. Smith-Rose, p. 43.

The "Devionometer" [Radio Beacon Reed Indicator Attachment].—Bureau of Standards, p. 43.

A Radio Beacon and Receiving System for Blind Landing of Aircraft.—H. Diamond and F. W. Dunmore, pp. 99 and 328.

Radio Beacons.—A. Blondel, p. 328.

Sur la Détermination du Point par la Radiogoniométrie (The Determination of a Point by Radiogoniometry).—Ch. Bertin, p. 619.

A Tuned-Reed Indicator for the 4 and 12 Course Aircraft Radio Range: Correction.—F. W. Dunmore, p. 43.

A Course Indicator of Pointer Type ["Reed Converter"] for the Visual Radio Range Beacon System.—F. W. Dunmore, pp. 559 and 619.

Theory of Design and Calibration of Vibrating-Reed Indicators for Radio Range Beacons.—G. L. Davies, p. 559.

The Development of a Visual Type of Radio Range Transmitter having a Universal Application to the Airways.—W. E. Jackson and S. L. Bailey, p. 158.

An Automatic Recorder of Signals from a Rotating Beacon Transmitter.—R. L. Smith-Rose and H. A. Thomas, p. 327.

Un Radiogoniomètre enregistreur. Son Application aux Parasites atmosphériques (A Recording Radiogoniometer. Its Application to Atmospherics).—R. Bureau, p. 213.

Some Observations on the Orfordness Rotating Beacon.—R. L. Smith-Rose, p. 327.

- Rotating Wireless Beacon Transmitter**—Marconi Co., p. 619.
A Simultaneous Radiotelephone and Visual Range Beacon for the Airways—F. G. Kear and G. H. Wintermute, p. 619.
Constant Speed Control on Rotating Beacon—Hecht and Alexander, p. 100.
Direction Finder for Extremely [Ultra-] Short Waves below One Metre—S. Uda, p. 99.
Automatic Volume Control for Aircraft Radio Receivers [primarily in connection with the Visual Type Radio Range Beacon]—W. S. Hinman, p. 559.
New Combination Radio Equipment for Yachts and Cruisers—Pioneer Instrument Co., p. 323.
- ACOUSTICS AND AUDIO-FREQUENCIES.**
- Measurement of Absorbing Power of Materials by the Stationary Wave Method**—A. H. Davis and E. J. Evans, p. 100.
Sound Absorption Determined by Transmission Measurements—F. R. Watson, p. 216.
The Absorption of Audible Vibrations in the Air—V. O. Knudsen and L. P. Delsasso, p. 563.
Sound Absorption Coefficients of Thermatex, Acoustolith Tile, and Armstrong Cork Tile—Bureau of Standards, p. 45.
Absorption of Sound at Oblique Incidence—E. T. Paris, p. 100.
Absorption of Sound at Oblique Incidence—E. T. Paris: P. R. Heyl, p. 45.
Absorption des Ondes ultra sonores par l'Eau (Absorption of Supersonic Waves [of the order of 8 Megacycles Sec.] by Water)—P. Biqard, p. 562.
A.C. Measuring Instruments as Discriminators against Harmonics—Wolff, p. 394.
All A.C. Radio-Gramophone for the Moving Coil Loud Speaker—F. H. Haynes, p. 389.
Fortschritte der Akustik unter besonderer Berücksichtigung der Arbeiten der angewandten Akustik (Recent Developments in Acoustics, particularly Applied Acoustics)—F. Trendelenburg, pp. 505, 562 and 620.
On the Production of Acoustic Waves by means of an Air-jet of a Velocity exceeding that of Sound—J. Hartmann, p. 329.
Sonic Altimeter for Fog Flying—G. E. C. of America, p. 328.
The Amplification of a Low-frequency Transformer-coupled Stage as a Function of Frequency and Amplitude—Watrin, p. 321.
Über die Bemessung verzerrungsfreier Niederfrequenzverstärker mit Transformatorrenkopplung (The Design Calculations of a Distortionless Low-frequency Amplifier with Transformer Coupling)—A. Forstmann, p. 442.
Das Amplitudensieb, eine Anordnung zur Amplitudenstatistik unregelmässiger Vorgänge (The Amplitude Filter, an Appliance for obtaining Amplitude Statistics of Irregular Processes)—H. G. Baerwald, pp. 44 and 503.
A New Analyzer of Speech and Music—H. K. Dunn, p. 272.
An Apertureless Optical System—R. C. Burt, p. 562.
Recent Developments in Architectural Acoustics—P. E. Sabine, p. 329.
Über die künstliche Charakteristik der Kugelgruppe (The Artificial Characteristic of Non-directive Point Radiators disposed over a Spherical Surface)—F. A. Fischer, p. 45.
Über die Peilschärfe der künstlichen Charakteristik einer beliebigen Anordnung von Strahlern im Raume (The Directive Sharpness of the Artificial Characteristic of any Arrangement of Radiators in Space)—F. A. Fischer, p. 388.
The Design of Attenuation Networks—W. F. Lanterman, p. 272.
Zur Theorie des Hörens. Über das Richtungshören bei einer Zeitdifferenz oder Lautstärkenungleichheit der beiderseitigen Schalleinwirkungen (Contribution to the Theory of Audition. On Directional Audition in the Case of a Difference in Time or Inequality in Intensity of the Sounds from the Two Sides)—G. v. Békésy, p. 45.
Bactericidal Effects of High Frequency Audible Sound Waves—Williams and Gaines, p. 458.
Effects of Phase and Time Shifts on Binaural Sensation of Direction—A. W. Nye and A. K. Steunenberg, p. 272.
Experiments on Binaural Sensations—S. R. Humby, p. 45.
Experiments on Binaural Sensations—J. H. Shaxby and F. H. Gage, p. 45.
Sur la Traduction des Intensités Lumineuses en Intensités sonores (The Translation of Luminous Intensities into Sound Intensities [for the Blind])—G. Fournier: Auger, p. 504.
Audition by Bone Conduction—C. E. Dean, p. 621.
A Two-Dimensional Boundary Value Problem for the Transmission of Alternating Currents through a Semi-Infinite Heterogeneous Conducting Medium [Mathematical Theory Applicable to Telephone Lines]—H. P. Evans, p. 101.
A Precision Audio Frequency Bridge—P. H. Dike, p. 159.
Broadcasting without a Microphone—Barton Chapple, p. 272.
Measurements on Audio-frequency Interference in Submarine Cables—Burton: Meyers, p. 45.
A Canonical Transformation and the Vibrations of a Loaded String—R. B. Lindsay, p. 620.
Über die Ablenkung der Kathodenstrahlen in einem von schwachen Strömen erzeugter Magnetfeld (The Deflection of a Cathode Ray in a Magnetic Field produced by Small Currents)—M. Slopkovitzer, p. 271.
Electrical 'Cello—R. Raven-Hart, p. 445.
L'Isolément phonique et l'Acoustique des Salles de Cinéma sonore (The Sound Installation and Acoustics of Sound Cinema Halls)—I. Katel, p. 217.
Automatic Color Organ—E. B. Patterson, p. 621.
Absolute Calibration of Condenser Transmitters—L. J. Sivian, p. 216.
Wave Motion and the Equation of Continuity—R. B. Lindsay, p. 563.
Some Measurements of the Longitudinal Elastic Frequencies of Cylinders, using a Magnetostriction Oscillator—D. S. Muzey, Jr., p. 272.
Sur L'Amortissement des Ondes sonores dans un Milieu gazeux homogène (The Damping of Sound Waves in a Homogeneous Gaseous Medium)—Y. Rocard, p. 329.
Über das Dämpfungsproblem der mathematischen Physik, mit einer Anwendung auf die Akustik grosser Räume (The Damping Problem of Mathematical Physics, and an application to the Acoustics of Large Rooms)—M. J. O. Strutt, p. 100.
Making a Deaf Aid—p. 330.
Acoustic Delay Circuits—W. P. Mason, p. 505.
Theorie des Lautstärkenabgleiches und der günstigsten Empfängeranpassung bei Verzögerungsketten (The Theory of Volume Equalisation and Optimum Matching of Receivers on a Delay Network)—F. A. Fischer, p. 505.
Linear Detection in an Audio-frequency Generator using the Heterodyne Principle—Terman, p. 329.
Eine Methode zur Untersuchung der Schwingungen von Membranen, im besonderen von Lautsprechermembranen (A Method of Investigating the Vibrations of Diaphragms, particularly Loud Speaker Diaphragms)—B. Voigt: V. Eichelhardt, p. 214.
Die akustische Unterschiedsempfindlichkeit und das Dezibel (The Acoustic Difference-Sensitivity and the Decibel)—F. Aigner, p. 620.
A Concave Ultrasonic Diffraction Grating—G. E. Thompson, p. 505.
The Perception of the Direction of Sound—M. Ishimoto and K. Kurihara, p. 443.
The Directional Characteristics of Single and Multiple Cone Diaphragms—I. Wolff and L. Malter, p. 560.
On the Propagation of Signals in Mixed Dispersive Systems [Pupin Cable and Acoustic High Pass Filter]—Baerwald, p. 562.
An Analysis of Distortion in Resistance Amplification—E. B. Moulin, p. 271.
Effect of Output Load upon Frequency Distortion in Resistance Amplifiers—H. A. Thomas, p. 153.
A New Method of Testing for Distortion in Audio-Frequency Amplifiers—H. J. Reich, p. 330.
Percentage Harmonic Distortion [and the Optimum Ratio of Load to Valve Resistance]—W. Greenwood: Scroggie: G.W.O.H., p. 619.
Die verzerrungsfreie Leistungsübertragung auf einen Lautsprecher durch den Ausgangstransformator (The Distortionless Transfer of Power to a Loud Speaker through the Output Transformer)—H. Wigge, p. 214.
An Experimental Study of Kundt's Tube Dust Figures—E. Hutchisson and F. B. Morgan, p. 505.
A Dual-Frequency Audio Source [Dynatron Oscillator] for General Laboratory Use—G. F. Lumpkin, p. 159.
The Last Component [The Action of the Ear]—R. T. Beatty, p. 329.
Edge Tones [from a Jet of Fluid]—E. G. Richardson, p. 505.
Some Effects of Intense Audio-frequency Sound—N. Gaines, p. 216.
The End-Corrections of an Open Organ Flue-Pipe, and the Acoustical Conductance of Orifices—A. E. Bate, p. 100.
Engineering Acoustics—p. 562.
Über das Fechnersche Gesetz und seine Bedeutung für die Theorie der akustischen Beobachtungsfehler und die Theorie des Hörens (On Fechner's Law and its Bearing on the Theory of Acoustic Errors of Observation and the Theory of Hearing)—G. v. Békésy, p. 101.
On the Sound Field due to a Conical Horn with a Source at its Vertex—K. Sató, p. 100.
A Simple Theory of Acoustical Filters—E. J. Irons, p. 329.
Study of Acoustic Filters—The General Theory (I)—K. Kobayashi, p. 620.
Über Formfaktormessungen (On the Measurement of Form Factor)—H. König, p. 44.
Free Field Current—F. H. Haynes, p. 502.
Chart of Sound Frequencies—p. 504.
A New Principle of Sound Frequency Analysis—T. Theodorsen, p. 563.
Frequency Characteristics of Standard Reference Type Condenser Transmitters and Moving Coil Receivers—W. West, p. 330.
Messung der Frequenzcharakteristik mit Hilfe der Lichtgeneratoren (Frequency Characteristic Measurement using the Optical Siren Note Generator)—W. Schäfer and G. Lubyszynski, pp. 442 and 563.
Measuring Frequency Characteristics with the Photo-Audio Generator—W. Schäfer and G. Lubyszynski, p. 563.
A Direct-Reading Thermionic Frequency Meter for 20 to 10,000 cycles per second—Guarnaschelli and Vecchiacchi, p. 392.

- An Optical Coincidence Gauge [applicable to the Adjustment of Sound-on-Film Reproducing Mechanism, etc.]—I. C. Gardner and F. A. Case, p. 328.
- Recording Contour Gauge [Optical, for Testing Telephone Diaphragms].—E. C. Erickson, p. 561.
- Optical Methods for Reducing the Effects of Photographic Plate Grain.—F. E. Wright, p. 562.
- Points in the Design of the Gramophone Motor.—p. 389.
- Über den Frequenzbereich des Nadelgeräusches bei Schallplatten (The Frequency Range of Needle Scratch in Gramophone Records).—G. Buckmann and E. Meyer, p. 444.
- Die Vorteile der Wiedergabe von Schallplatten über den Lautsprecher (The Advantages of Gramophone Reproduction by Loud Speaker).—M. v. Ardenne, p. 102.
- Developments in Automatic Record Changers for Gramophones.—F. S. Irby, p. 389.
- Long-playing Needles for Gramophones.—p. 444.
- Graphical Analysis of Output Tube Performance.—Kilgour, p. 212.
- Origines des Termes gyroscopiques dans les Equations des Appareils electromécaniques (Origins of the Gyroscopic Terms in the Equations of Electromagnetic Instruments).—Ph. le Corbeiller, p. 443.
- The "Hallformanten" Theory of Tone Quality.—F. Trautwein, p. 101.
- A Simple Method of Harmonic Analysis for Use in Radio Engineering Practice.—Roder, p. 629.
- Percentage Harmonic Distortion.—M. G. Scroggie: G. W. O. H., p. 504.
- Versuche zu Hörtheoretischem im Anschluss an Nachbilder und elektrische Nervenphänomene (Experiments on a Theory of Hearing in connection with Images and Electrical Nerve Phenomena).—E. Kupper, p. 443.
- High Audio Power from Relatively Small Tubes.—L. E. Barton, p. 560.
- Demonstrations of Hoovenaire Giant Sound Amplifiers.—p. 216.
- Essais relatifs à l'insonorité de certains Matériaux de Construction (Tests on the Sound Insulating Properties of Certain Building Materials).—C. Cellerier (Conservatoire des Arts et Métiers), p. 273.
- Grundlegende Messungen zur Schallisolation von Einfach-Trennwänden (Fundamental Measurements on the Sound Insulating Properties of Single Partitions).—E. Meyer, p. 562.
- The Measurement of the Coefficients of Sound Insulation of Building Materials.—R. Moens, p. 505.
- Supersonic Interferometers.—E. Klein and W. D. Herschberger, pp. 216 and 329.
- Problems in Acoustic Interferometry with Gases.—J. C. Hubbard, p. 216.
- A New Use for "Talkies" (Cathode-Ray Oscilloscope and Microphone for Language Teaching).—Westinghouse Electric Co., p. 504.
- The Blum Rhythmograph and Rhythroscope for the Making of Sound Films in Different Languages.—A. Gradenwitz, p. 273.
- The Obtaining of Large Undistorted Outputs for a Minimum of Plate Potential.—A. Forstmann, p. 442.
- A Giant Loud Speaker.—p. 328.
- AEG "Cantola" Loud Speaker.—p. 45.
- The Oscilloplane, a Vogt Electrostatic Loud Speaker.—p. 389.
- The "Concatenated Cone" Loud Speaker.—A. V. Bedford, p. 561.
- An Efficient Loud Speaker at the Higher Audible Frequencies.—L. G. Bostwick, p. 214.
- A Loud Speaker Good for Twelve Thousand Cycles.—L. G. Bostwick, p. 502.
- "Statola" Electrostatic Loud Speaker, Bias provided by Signal Currents.—W. Burstyn, p. 45.
- The Moving Coil Loud Speaker [Difference of Coil Constants when Stationary and in Motion].—H. M. Clarke, p. 443.
- Condenser Loud-Speaker with Flexible Electrodes.—P. E. Edelman, p. 272.
- A New Loud Speaker.—H. J. Fanger, p. 444.
- Loud Speaker Deflection Measurements.—R. P. Glover and T. A. Hunter, p. 159.
- The Theory of the Electrostatic Loud Speaker: of the Horn-Type Loud Speaker.—C. R. Hanna, p. 560.
- Operating a Loud Speaker without High Tension Circuit.—S. R. Khastgir and P. U. Ratnatunga, p. 159.
- Modern Views on the Moving Coil Loud Speaker.—N. W. McLachlan, p. 214.
- New Giant Loud Speaker.—H. Neumann, p. 158.
- Notes on Loud Speaker Response Measurements, and Some Typical Response Curves.—B. Olney, p. 560.
- The Differentially-Working Condenser Loud Speaker (Vogt).—E. Schwandt, p. 45.
- Loud Speaker using Magnetostriction.—Thomson-Houston, p. 101.
- Some Measurements of a Loud Speaker in Vacuo.—P. K. Turner, pp. 215, 273 and 502.
- On the Amplitude of Driven Loud Speaker Cones.—M. J. O. Strutt, p. 388.
- On the Amplitude of Driven Loud Speaker Cones.—Strutt: McLachlan: Warren, p. 502.
- A Precision Stiffness Meter [applicable to Telephone and Loud Speaker Diaphragms].—D. A. Oliver, p. 44.
- Stroboscopic Observation of Loud Speaker Diaphragms.—M. von Ardenne, p. 159.
- Subjective Interpretation of Loudspeaker Frequency Response Curves in Terms of Loudness.—D. A. Oliver, p. 620.
- Loud Speaker Impedance.—W. A. Barclay, p. 214.
- Loud Speaker Listening Tests.—R. P. Glover, p. 389.
- A New Moving Coil Loud Speaker Movement.—Levy, p. 443.
- Loud Speaker Sound Pressure Measurements.—E. W. Kellogg, p. 560.
- Loud Speaker Tests and Performance Factors.—D. A. Oliver, p. 101.
- Note sur les Bobinages de Haut-Parleurs (Note on Loud Speaker Windings).—M. Caplet, p. 215.
- The Theory and Performance of Certain Types of Modern Acoustic Apparatus for Reproducing Speech and Music [Loud Speakers].—N. W. McLachlan and G. A. V. Sowler, p. 158.
- The Upper Register in Moving Coil Loud Speakers.—N. W. McLachlan, p. 561.
- The Lower Register in Moving Coil Loud Speakers.—N. W. McLachlan, p. 389.
- Über Hochleistungsblatthaller (High Power [Riegger] "Blatthaller" Loud Speakers).—H. Neumann and F. Trendelenburg, p. 389.
- Modern Tests on Loud Speakers.—K. W. Jarvis, p. 273.
- Absolute Geluidsmetingen aan Luidsprekers en Microfoons (Absolute Intensity Measurements on Loud-Speakers and Microphones).—J. L. Snoek and C. Zwikker, p. 44.
- Low-frequency Amplification by a Push-Pull Circuit Using One Four-Electrode Valve.—Kruhsiz, p. 390.
- Low Note Response of Musical Instruments and Loud Speakers.—J. M. Schmierer, p. 388.
- Mesures des Intensités sonores (The Measurement of Sound Intensities: the Acoustic Comparator).—F. Canac, p. 216.
- Mesure des Intensités sonores par la Méthode des Scintillations (Sound Intensity Measurements by the Method of "Acoustic Twinkling").—F. Canac, p. 329.
- Recherche de la Force électromotrice fictive d'un Transmetteur microphonique (Investigation of the Equivalent Electromotive Force of a [Carbon] Microphone Transmitter).—P. Massaut, p. 561.
- Ein neues elektrodynamisches Bandmikrophon (A New Electrodynamic Band Microphone).—C. A. Hartmann: Siemens and Halske, p. 561.
- Gold Contact Surfaces on Microphone Diaphragms by Cathode Sputtering.—Fruth, p. 562.
- Some Microphone Measurements and Some Suggestions with regard to Microphone Arrangements.—Siffer Lemoine, p. 44.
- Über Kohlemikrophone (Carbon Microphones). [I.—Production of a Sound Field Constant in Amplitude over the Audible Scale, for Testing Microphones. II.—The Non-linear Distortion of Telephone Transmitters.]—M. Grutzmacher and P. Just, p. 389.
- The Determination of the Acoustical Characteristics of Singly-Resonant Hot-Wire Microphones.—E. T. Paris, p. 215.
- Condenser and Carbon Microphones—Their Construction and Use.—W. C. Jones, p. 215.
- Microphonic Action in Telephone Transmitters.—F. S. Goucher, p. 215.
- Microphotometric Analysis of Movietone Sound Records.—L. V. King: J. T. Tykociner, p. 45.
- Bedeutung der Mitnahme in der Akustik (Importance of the "Mitnahme" Effect [Pulling into Tune] in Acoustics).—J. Zenneck, p. 45.
- La Technique acoustique moderne et ses Applications (Modern Acoustical Technique and its Applications).—Ph. Le Corbeiller, p. 160.
- The Vierling Method of Improving the Tone and Volume of Music from Various Types of Instrument: Direct Conversion of the Mechanical Vibrations into Electrical Variations.—O. Vierling, p. 621.
- The Electrical Synthesis of Musical and Speech Sounds.—F. Trautwein, p. 101.
- The Hellertion [Radio Musical Instrument controlled rather like a Violin].—P. Lertes, p. 330.
- Recent European Developments in Electronic Musical Instruments.—R. Raven-Hart: Trautwein, p. 503.
- "Keyboard" Device for Controlling the Oscillator Frequency in Electrical Musical Instruments.—Lertes and Helberger, p. 621.
- Unification de tous les Formats d'Instrument à Cordes (Unification of All Types of String Musical Instruments).—P. Bizon and Tarlé, p. 620.
- Les Instruments de Musique radio-électriques: les Appareils Theremin et Martenot (Radio-electric Musical Instruments: the Theremin and Martenot Equipments).—J. Dumas, p. 216.
- Absolute Amplitudes and Spectra of Certain Musical Instruments and Orchestras.—L. J. Sivan, H. K. Dunn and S. D. White, p. 444.
- An Objective Method of Evaluating Musical Performance.—C. L. Seashore and J. Tiffin, p. 101.
- Neon Musical Oscillator.—R. Raven-Hart, p. 216.
- Neon Tube Oscillator Circuits.—J. G. Hanhauser, p. 445.
- Suppression of Noise.—p. 504.
- Ground Noise in Sound Pictures: a Study of Noise due to Disc Recording.—H. G. Tasker, p. 101.
- Ground Noise in Sound-on-Film Pictures.—H. G. Tasker, p. 160.

- The Effect of **Noise** on the Articulation of a Telephone Circuit.—J. Collard, p. 101.
- Gerauschverhütung an luftbewegenden Maschinen (**Noise** [Analysis and] Prevention in Air-disturbing Machinery).—R. G. Berthold, p. 504.
- Measurement of Machinery **Noise**.—H. B. Marvin, p. 563.
- A New Meter for **Noise Analysis**.—Castner, Dietze, Stanton and Tucker, p. 563.
- Geräusch und Lärm (**Noise** and **Hubbub**).—K. W. Wagner, p. 505.
- Noise Measurements**.—J. C. Steinberg, p. 272.
- Results of **Noise Surveys**. Part I. Noise out of Doors. Part II. Noise in Buildings.—R. H. Galt; R. S. Tucker, p. 100.
- Nomograms** for the Complex Roots of Characteristics (especially Quadratic or Cubic) Equations of Vibration Problems: The C. Runge Diagram for Forced Vibrations.—Heck and Walther; von Sanden, p. 445.
- Influence de la Distorsion non linéaire (Fonction de l'Amplitude) due au Fer, etc. (The Influence of **Non-Linear Distortion** due to Iron on the Quality and Intelligibility of Telephone Transmission).—G. V. Bekésy, p. 443.
- Méthode d'Observation d'Ondes sonores non stationnaires (A Method of Observing **Non-stationary Sound Waves**).—E. P. Tawil, p. 100.
- L'Orgue électronique (The **Electronic Organ**).—E. Coupleux and A. Givélet, pp. 45 and 101.
- New All-Electric Pipeless **Organ**.—p. 621.
- A Laboratory [Audio-frequency] **Oscillator** for Receiver Testing.—C. J. Franks, p. 503.
- Über die Bemessung verzerrungsfreier Grossleistungs-Endstufen (The Design Calculations of Distortionless Large Power Output Stages).—A. Forstmann, p. 619.
- Effects of **Phase Distortion** on Telephone Quality: Phase Distortion in Telephone Apparatus: Measurement of Phase Distortion.—J. C. Steinberg; C. E. Lane; H. Nyquist and S. Brand, p. 44.
- A Direct Reading Audio-frequency **Phase Meter** (using a C-R Oscillograph).—W. R. MacLean and L. J. Sivian, p. 503.
- Phenomena** in a Sounding Tube.—E. N. da C. Andrade, p. 273.
- Phenomena** in a Sounding Tube.—H. S. Patterson and W. Cawood, p. 390.
- The R.C.A. **Photophone** System of Sound Recording and Reproduction for Sound Motion Pictures.—A. N. Goldsmith and M. C. Batsel, p. 45.
- Talking Films: The R.C.A. **Photophone** System.—W. H. O. Sweeney, p. 216.
- Phototube Circuit Design** for Sound-Pictures.—C. A. Wyeth, p. 503.
- The Spielman Photoelectric **Piano**.—E. Weiss, p. 101.
- Zur Theorie elektromagnetischer Tonabnehmer (The Theory of the Electromagnetic **Pick-Up**).—A. Forstmann, p. 101.
- Correcting **Pick-Up** Characteristics.—H. E. Watson, p. 272.
- An Electric **Pick-Up** giving increased Fidelity, Reduced Cost, and Semi-automatic Needle Change.—MacClatchie, p. 389.
- Tone and Volume Control of Gramophone **Pick-Ups**.—John Harmon, p. 323.
- Piezoelectric Conversion** of Modulated Radiofrequencies into Sound.—Grützmaier, p. 443.
- Abhängigkeit der Tonhöhenempfindung von der Lautstärke, etc. (The Dependence of Observed **Pitch** on Loudness, and its Relation to the Helmholtz Theory of Hearing).—G. Zurmühl, p. 272.
- The Variation of Magnification with **Pitch** in Resistance-Capacity Coupled Amplifiers.—W. A. Barclay, p. 504.
- The Method of Operation and Working Conditions of the **Push-Pull Connection** in L.F. Amplifiers.—Forstmann, p. 611.
- Push-Pull Problems**.—Cocking, p. 611.
- Inexpensive **Quality**.—p. 329.
- Versuch über die Ausbreitung des Schalls an einem schwingenden Quarz (Experiment on the Propagation of Sound in an Oscillating **Quartz Crystal**).—E. Grossmann, p. 329.
- Über die Akustische Strahlung von Membranen (On the Acoustic **Radiation** from Membranes [Application to Loud Speaker Theory]).—H. Stenzel, p. 214.
- Rayleighsche Scheibe als ballistisches Gerät (The **Rayleigh Disc**, as a Ballistic Instrument).—L. Freimann and I. Russakoff, p. 216.
- Home Recording** to the Fore.—A. C. Lescarboura, p. 323.
- Sur une Méthode d'Inscription mécanique applicable à l'Enregistrement et à la Reproduction des Sons (A Method of Mechanical Inscription applicable to the **Recording and Reproducing of Sound**).—E. Huguenard, p. 390.
- Measurements on the Acoustic Efficiency of Specially Designed **Sound Reflectors**.—A. D. Fokker and M. J. O. Strutt, p. 505.
- Die Theorie der Resonanzmembran (The Theory of the **Resonance Diaphragm**).—G. Franke, p. 272.
- La Durée de Réverbération dans les Salles "Sourdes" (**Reverberation Time** in Studios with Highly Absorptive Walls).—C. F. Eyring, p. 45.
- Bemerkungen zur Theorie der günstigsten Nachhalldauer von Räumen (Remarks on the Theory of the Optimum **Reverberation Time** for Rooms).—G. v. Bekésy, p. 504.
- The Method of Formation of **Sand Figures** on a Vibrating Plate.—E. N. da C. Andrade and D. H. Smith, p. 505.
- Scanning Losses** in Reproduction.—N. R. Stryker, p. 160.
- The **Science of Voice**.—D. Stanley, p. 329.
- Design and Testing of Motion Picture **Screens** for Sound Picture Work.—H. F. Hopkins, p. 101.
- Acoustic and Light Characteristics of **Sound Screens**.—B. Kreuzer, p. 160.
- Frequency Characteristics of **Optical Slits**.—J. P. Livadary, p. 273.
- Effects of **Optical Slits** in Variable Area Sound Recording.—J. P. Livadary, p. 390.
- Der Wiedergabespart als Fehlerquelle bei Lichttonfilmen (The **Slit** as a Source of Error in the Reproduction of Sound-on-Film Records).—H. Frieser and W. Pistor, p. 216.
- The Effect of a Direct Current on the Frequency of a **Sonometer Wire**.—R. Schaffert, p. 390.
- Sound-Film Apparatus** for Expeditions.—A. E. G. and Siemens & Halske, p. 444.
- Sound Film Developments**.—T. Thorne Baker, p. 503.
- Le Film Parlant (**Sound Films**).—P. Bonneau, p. 323.
- Les Nouveautés du Cinéma sonore (New Developments in **Sound Films**).—Lipoug, p. 390.
- A Type of Acoustic Distortion in the Taking of **Sound Films**.—R. L. Hanson, p. 503.
- Les Récent Progrès de la Cinématographie Sonore (Recent Improvements in **Sound Films**).—A. Soulier, p. 562.
- The Two German **Sound-Film Systems**—"Tobis" and "Klangfilm."—J. Mayer, p. 562.
- Elektro-optische Grundlagen der Lichtsteuerung mittels der Kerzelle für die Zwecke des Tonfilms (The Electro-Optical Foundations of Light Control by the Kerr Cell for **Sound-on-Film** Purposes).—F. Hellgans, p. 444.
- Design Problems of **Sound-on-Film** for Home Movies.—A. J. Koenig, p. 562.
- Die photographischen Erfordernisse des Tonfilms (The Photographic Requirements of **Sound-on-Film Films**).—J. Eggert and R. Schmidt; A. Küster, p. 444.
- Papers on the Callier Effect as a Distorting Factor in **Sound-on-Film Recording**.—Frieser and Pistor; Küster and Schmidt, p. 444.
- Glow Lamp **Sound-on-Film Recording**.—V. T. Brannan, p. 503.
- The Illumination of **Sound-on-Film Records**.—L. Dunoyer, p. 562.
- Sound-on-Film Records** with Opacity Varying with the Distance from Axis or Film.—Branui, p. 444.
- Sound-Picture Advances**—Technical Improvements in 1931—New Uses.—p. 160.
- Testing of **Sound-Picture Channels**.—G. F. Hutchins, p. 273.
- A Modern Laboratory for the Study of **Sound-Picture Problems**.—T. E. Shea, p. 444.
- Progress in **Sound-Picture Recording**.—C. Dreher, p. 323.
- Unification in **Sound Pictures**.—Winckel; Mihaly, p. 390.
- Sound Pictures**: Fundamental Principles and Factors which Affect Quality.—F. L. Hunt, p. 503.
- Unbalanced Absorption in Acoustic Treatment for **Sound-Picture Theatres**.—V. A. Schlenker, p. 562.
- Sound Recording** on Film incorporating Colloidal Magnetic Particles.—Seeber, p. 503.
- A New **Sound Reproducing System** for Theatres.—G. Puller, p. 323.
- Papers and Letters on Acoustic (Echo) **Soundings**: Systems: Slope Corrections: Ultrasonic Mirage.—Florisson; Marti; Langevin, p. 445.
- Zur Statistik der Intensitätsverteilung im Spektrum natürlicher Klangbilder (On the Statistics of the Intensity Distribution in the **Spectrum** of Speech, Musical Instruments, Orchestra and Opera).—H. Lueder, p. 272.
- Some Physical Properties of **Speech and Music**.—Harvey Fletcher, pp. 329 and 620.
- The Establishments of an Acoustic [Frequency] **Standard**: the Use of a Photoelectric Cell in obtaining a Scale of Acoustic Frequencies.—J. N. Egorov, p. 272.
- Der Fernsprech Hauptteilkreis (The **Telephonic Standard Reference Circuit**).—W. Wolmann and E. Döring, p. 160.
- Sprachübertragung und Eichkreise (Speech Transmission and **Standard Reference Circuits** [The Start and the Ster]).—J. Boysen, p. 160.
- British **Standard Specification** for Mains Supply Apparatus for Radio and Acoustic Reproduction for Use on A.C. Mains.—British Engineering Standards Association, p. 620.
- Radio and **Sound-Picture Statistics** for 1930.—p. 323.
- The Formation of **Striae** in a Kundt's Tube.—R. V. Cook, pp. 216 and 505.
- Saitenschwingungen mit endlicher Amplitude (**String Vibrations** of Finite Amplitude).—K. Schlesinger, p. 159.
- Strukturbestimmung durch akustische **Eigenschwingungen** (**Structure Determination** by Characteristic Acoustic Vibrations).—A. Meissner, p. 100.
- The Design and Construction of Broadcast **Studios**.—O. B. Hanson and R. M. Morris, p. 216.
- Die akustischen Eigenschaften der neuen Berliner Senderäume (The Acoustic Properties of the New Berlin **Studios**).—von Braunmühl, p. 273.
- The Acoustics of **Studios**, with special reference to the Studios of "Broadcasting House," Berlin.—W. Schäfer, p. 273.
- Supersonic Satellites**.—W. H. Flemeier, p. 563.
- The Trend in the Design of **Telephone Transmitters and Receivers**.—W. H. Martin and W. F. Davidson, p. 102.

The Telephone Instrument Efficiency Tester.—A. Hudson p. 330.
 An Apparatus for Testing Telephones.—V. I. Kovalenkov and O. A. Kvar, p. 330.
 The Mercury Arc [Thyratron] as a Source of Intermittent Light.—H. E. Edgerton, p. 562.
 The Design of Tone Control Circuits.—K. W. Jarvis, p. 159.
 Output Transformer Design.—Part II.—R. C. Hitchcock and W. O. Osbon, p. 159.
 The "Parafeed" Transformer, an Interesting Development in Transformer Design.—p. 504.
 A New Development in L.F. Transformer Design [The "Parafeed" Transformer].—R.L., Ltd., p. 560.
 Making the Most of the L.F. Transformer.—W. A. Barclay, p. 504.
 Die Berechnung des Verstärkertransformators (The Calculation of [L.F.] Amplifier Transformers).—F. Lang, p. 102.
 Improvements in Audio-frequency Transformers.—de Gialuly, p. 443.
 The Distortionless Amplification of Electrical Transients.—C. W. Oatley, pp. 442 and 504.
 The Transmission Characteristics of Open-Wire Telephone Lines.—E. I. Green, p. 102.
 Rating the Transmission Performance of Telephone Circuits.—W. H. Martin, p. 215.
 A Note-frequency Oscillator Stabilised by a Tuning Fork.—Mabboux, p. 445.
 Diffractive Reflection and Scattering of Ultrasonic Waves. Their Influence on Torsion-Pendulum Measurements of Sound Intensity.—R. W. Boyle and J. F. Lehmann, p. 158.
 Einige Versuche mit Ultraschall (Some Experiments with Ultrasonic Waves).—H. Straubel, p. 505.
 The Velocity of Propagation of Longitudinal Waves in Liquids at Audio-frequencies.—L. G. Pooler, p. 100.
 Velocity of Sound in Tubes: Ultra-Sonic Method.—R. W. Boyle and D. Froman, p. 100.
 The Tube Effect in Sound-Velocity Measurements.—P. S. H. Henry, p. 390.
 Vitesse de Propagation des Ondes aériennes ultra-sonores (Velocity of Propagation of Ultrasonic Waves in Air).—P. Tchong Kao, p. 505.
 Sur la Vitesse de Propagation des Sons Musicaux (The Velocity of Propagation of Musical Sounds).—R. de la Boulaye and G. Balme: Vautier, p. 620.
 Notes on the Effect of Distance from the Source on the Velocity of Sound at Ultrasonic Frequencies.—C. D. Reil, p. 505.
 Über die Schallgeschwindigkeit in Kohlensäure (On the Velocity of Sound in Carbon Dioxide).—H. O. Kueser, p. 273.
 Messung der Schallgeschwindigkeiten von Stoffen im festen und geschmolzenen Zustand (Measurement of the Velocity of Sound in Materials in the Solid and in the Melted State).—M. Reich and O. Sternstadt, pp. 272 and 443.
 The Velocity of Sound in Metal Rods by a Resonance Method.—L. C. Shugart, p. 563.
 Note sur la Vitesse du Son dans le Papier (Note on the Velocity of Sound in Paper).—M. Caplet, p. 215.
 On the Velocity of Sound in Soft and Brittle Substances.—E. J. Irons, p. 100.
 Velocity of Sound in Tubes: Ultrasonic Method.—G. S. Field, p. 505.
 The Velocity of Sound-Waves in a Tube.—G. G. Sherratt and J. H. Awbery, p. 390.
 Eine neue Methode zur Erzeugung sehr kurzer akustischer Wellen (A New Method of Generating Very Short Acoustic Waves).—H. Mulwert, p. 100.
 Lame vibrante excitée par le Milieu ambiant (A Vibrating Blade Excited by the Medium Surrounding It).—Z. Carrière, p. 563.
 Measurement of the Accession to Inertia of a Vibrating Diaphragm [Application to Loud-Speaker Action].—N. W. McLachlan, p. 502.
 On the Vibration of U Bars.—G. H. Kenegan, p. 445.
 The Natural Frequencies of the Elastic Transverse Vibrations of Loaded Strings, Rods, Membranes and Plates.—K. Klotter, p. 444.
 The Vibrations of Membranes and Plates.—R. C. Colwell, p. 620.
 The Vibrations of a Plate with a Fixed Centre.—R. C. Colwell, p. 583.
 Les deux Fonctions fondamentales du Vibromètre, et son Application à l'Electro-Acoustique (The Two Fundamental Functions of the Vibrometer, and its Application to Electro-Acoustics).—K. Kobayasi, p. 329.
 Electromagnetic Violin for Use with Loud Speaker.—Dimitriu, p. 101.
 Sichtbarmachung kurzer Schallwellen (making Short Sound Waves Visible).—H. Kroncke, p. 100.
 Enunciation in Long-distance Telephony: Vocabularies Employed.—p. 159.
 A Distortionless Volume Control.—p. 503.
 Lautstärkerregulierung durch Regeldrosseln (Volume Control by Variable Choke Coils).—K. Hoffmann, p. 620.
 Volume Control.—See also under "Reception."
 The Dependence of Vowels on Absolute Pitch.—V. Engelhardt and E. Gebrecke, p. 329.
 "Wireless World" all A.C. Quality Amplifiers.—F. H. Haynes, p. 329.

Détermination du Point de Fonctionnement de la dernière Lampe "basse Fréquence" (Determination of the Working Point of the Final L.F. Valve [using a Graduated "Distortion Rule"]).—F. Bedeau and J. de Mare, p. 619.

PHOTOTELEGRAPHY AND TELEVISION.

Über die Lichtabsorption in einfachen Ionengittern und den elektrischen Nachweis des latenten Bildes (On the Absorption of Light in Simple Ionic Lattices and the Electrical Demonstration of the Latent Image).—R. Hilsch and R. W. Fohl, p. 392.
 Über die Wirkung adsorbierter Gasschichten auf den Photoeffekt der Salze (On the Effect of Adsorbed Gas Layers on the Photoelectric Effect of Salts).—J. Klaphecke, p. 219.
 Photoelectric Behaviour of Aluminium and Aluminium-Mercury Alloys: Fatigue and the Absorption of Oxygen.—H. Gerding, p. 446.
 Über die Verstärkung von Photozellenströmen (The Amplification of Photoelectric Cell Currents).—H. Simon, p. 391.
 An Arrangement for Amplifying Weak Photoelectric Currents [using an Electrometer Triode and an Ionisation-Chamber as Adjustable Leak].—Lejay, p. 286.
 The Amplification of Small Currents.—See also under "Subsidiary Apparatus."
 Picture Analysis and Television.—J. H. Owen Harries, p. 160.
 The Angular Distribution of Photoelectrons Ejected by Polarized Ultraviolet Light in Potassium Vapour.—E. O. Lawrence and M. A. Chaffee, pp. 446 and 565.
 The Baird Television Arc.—p. 276.
 A New Modulation Tube [Mercury Vapour Arc Tube giving very large Output of Modulated Light].—H. F. Dalpayrat, p. 623.
 Atmospheric and Television.—T. Bray, p. 623.
 Photoelectric Effect from a Barium Oxide Coated Platinum Filament.—Newbury and Lemery, p. 442.
 A Book-Print Reader for the Blind ["Printing Visagraph"].—R. E. Naumberg, p. 566.
 The Dependence of the Breakdown Voltage of Liquid Dielectrics on Pressure.—Edler, p. 47.
 Bildfunkkabel (Cable for Picture Telegraphy).—R. Feist and H. Weinnoldt, p. 161.
 German Cables for Picture Telegraphy [Berlin—Nauen].—p. 47.
 Improvement of Thin Film Caesium Photoelectric Tubes.—S. Asao and M. Suzuki, p. 390.
 Effects of Gases on Photoionization of Caesium by Line Absorption.—F. L. Mohler and C. Boeckner, p. 46.
 Die Beeinflussung der lichtelektrischen Eigenschaften des Cäsium durch Adsorption an Salzschiechten (The Effect of Adsorption at Salt Layers on the Photoelectric Properties of Caesium).—J. H. de Boer and M. C. Teves, p. 103.
 Photoelectric Emission from Thin Films of Caesium.—L. R. Koller, p. 219.
 Thermionic Emission in Caesium-Oxide Photoelectrodes at Room Temperatures.—E. F. Kingsbury and G. R. Stilwell, p. 508.
 The Wave-Length Sensitivity Curve of a Caesium Oxide Photocell: A New Light-Sensitive Instrument for the Ultra-Violet.—T. F. Young and W. C. Pierce, p. 621.
 Photo-ionisation of Caesium Vapor by Absorption between the Series Lines.—C. Boeckner and F. L. Mohler, p. 104.
 Picture Transmitter with Cathode Ray traversing Picture focused on Photoelectric Surface at Negative Potential.—T. W. Case, p. 331.
 Television by Cathode Ray [Farnsworth System].—A. Dinsdale, p. 331.
 Fernsehen mit Kathodenstrahlen (Cathode Ray Television [particularly the Farnsworth System]).—H. Günther: P. T. Farnsworth, p. 506.
 Über neue Fernsendsender und Fernsehempfänger mit Kathodenstrahlröhren (New Television Transmitters and Receivers using Cathode Ray Tubes).—M. von Ardenne, p. 330.
 Cathode Rays in Television.—H. R. Wright, p. 390.
 The Effect of the Presence of Colloidal Substances on the Breakdown Voltage of Insulating Liquids.—P. Böning, p. 333.
 Copper/Copper-Oxide/Lead Nitrate Photovoltaic Cell for Industrial Purposes.—C. G. Fink and D. K. Alpern, pp. 161 and 621.
 Über den Entstehungsort der Photoelektronen in Kupfer-Kupferoxydul-Photozelle (On the Source of the Photoelectrons in the Copper-Cuprous Oxide Photoelectric Cell).—W. Schottky, pp. 46 and 103.
 Über eine an Kupfer-Kupferoxydulzellen beobachtete Temperaturabhängigkeit des Sperschichtphotoeffektes (On a Temperature-Variation of the Boundary Layer Photoelectric Effect observed in Copper-Cuprous Oxide Cells).—H. Teichmann, p. 103.
 The Use of the Copper-Oxide Photoelectric Cell for the Translation of Light into Sound for the Blind.—Fournier: Auger, p. 508.
 Recent Researches in the Copper-Oxide Rectifier and Photoelectric Cell.—Bates, p. 397.
 Variation dans le Spectre de la Sensibilité des Cellules au Protoxyde de Cuivre (Variation with Wavelength of the Sensibility of Cuprous Oxide Photoelectric Cells).—P. Auger and C. Lapicque, p. 621.
 Über einige Eigenschaften des Kupferoxyduls (On Some Properties of Cuprous Oxide [Dependence on Temperature of Optical

- Absorption. Preliminary Communication].—B. Gudden and G. Mönch, p. 446.
- Über eine photoelektromotorische Kraft in Kupferoxydulkristallen (On a Photo-Electromotive Force in Cuprous Oxide Crystals).—H. Dember, p. 565.
- Der Kristall-Detektor als Photozelle (The Crystal Detector as Photoelectric Cell).—M. Grützner, p. 103.
- The "Grüna" Photoelectric Cell or Cell "P" [Grützner Crystal Detector Photoelectric Cell].—p. 391.
- The Influence of the Crystal-Orientation of the Cathode on that of an Electro-deposited Layer.—Wood, p. 285.
- Cycles et Trainage dans les Cellules Photoélectriques à Atmosphère gazeuse (Cycles and Lag-Effects in Gas-Filled Photoelectric Cells).—G. A. Boutry, p. 446.
- Sur les Directions d'Émission des Photo-Électrons (The Direction of Emission of Photoelectrons).—P. Auger and T. Meyer, p. 276.
- Richtungsverteilung der von polarisiertem Licht im Kaliumdampf ausgelösten Elektronen (Directional Distribution of the Electrons Emitted from Potassium Vapour under the Action of Polarised Light).—A. Kraus, p. 508.
- Negative Photoeffecten bij Gasontladingen (Negative Photoelectric Effects in Discharges in Gases).—F. M. Penning, p. 565.
- The Stresses in Rotating Discs.—A. F. Cornock, p. 564.
- Electroless Discharge Tube for Television.—Harris and Jenkins, p. 623.
- Nebenerscheinungen bei der Elektrolyse von Natrium durch Glas (Secondary Effects in the Electrolysis of Sodium through Glass).—J. H. de Boer and W. de Groot, p. 508.
- Eine elektrolytische Darstellungsmethode von Alkalimetallen in Entladungsröhren (An Electrolyte Method of Depositing Alkali Metals in Discharge Tubes).—Magdalena Forró and E. Patai, p. 391.
- Transmission of Electrons through Potential Barriers.—N. H. Frank and L. A. Young, p. 622.
- Über den Aufbau der emittierenden Oberfläche beim selektiven lichtelektrischen Effekt (On the Constitution of the Emission Surface in the Selective Photoelectric Effect).—R. Suhrmann, p. 333.
- High Speed Facsimile Phototelegraphy System.—I. T. and T. Laboratories, p. 332.
- Facsimile Transmission in the United Kingdom.—A. T. J. Beard, p. 332.
- The Photoelectric Absorption of Gamma Rays.—L. H. Grav, p. 219.
- Verwendung des Spitzenzählers bei Messungen äusserer lichtelektrischer Wirkung (Application of the [Geiger] Point Counter to Measurements of the External Photoelectric Effect).—H. Bauer, p. 622.
- The Mechanism of the Light Emission in the Glow Discharge in the Inert Gases.—M. J. Druyvesteyn, p. 623.
- Die Glimmlampe als Fernseh-Lichtrelais (The Glow-Discharge Lamp as Light Relay in Television).—F. Kirschstein, p. 276.
- Glow-Discharge Lamps for Television.—H. W. Weinhart, p. 276.
- Special Glow-Discharge Lamps for Television.—Michelsen, p. 333.
- Certain Photoelectric Properties of Gold.—L. W. Morris, p. 447.
- Photoelectric Properties of Thin Unbacked Gold Films.—R. P. Winch, p. 622.
- Concerning the Grid Leak of a Grid-Photoelectric Cell.—T. Asada and K. Hagita, p. 391.
- Effect of a High-Frequency Field on the Photoelectric Emission of a Cell.—Barthelmy, p. 564.
- Photoelektrische Eigenschaften der unter der Wirkung von Wasserstoffatomen geänderten Kaliumoberfläche (Photoelectric Properties of a Potassium Surface Acted on by Hydrogen Atoms).—S. Rijanoff, p. 622.
- Über die Beeinflussung der Kathodenstrahlreflexion an Aluminium und Platin durch Belichtung, etc. (On the Influence of Illumination on the Reflection of Cathode Rays from Aluminium and Platinum and the Reality of the Existence of additional Positive and Negative Currents).—W. Kohl, p. 46.
- Untersuchungen zur Frage der Trägheit gasgefüllter Photozellen (Investigations on the Inertia of Gas-Filled Photoelectrons).—F. Schröter and G. Lubszynski, p. 102.
- The Effect of Adsorbed K⁺ Ions on the Photoelectric Threshold of Iron.—A. K. Brewer, p. 622.
- The Electro-Optical Foundations of Light Control by the Kerr Cell.—Heblgans, p. 444.
- Paper on Kerr Cells (Measurement of Time Intervals, etc. With bibliography).—Beams, p. 161.
- The Electro-Optical Kerr Effect in Gases.—E. C. Stevenson and J. W. Beams, p. 623.
- Sull'Esistenza di un Retardation dell' Effetto Kerr in Alcuni Liquidi (On the Existence of a Retardation of the Kerr Effect in Certain Liquids).—I. Ranzi, p. 46.
- The Conduction of Light and X-Rays through Tubes.—Jentsch and Nahrung, p. 507.
- Über einen empfindlichen Lichtzähler (On a Sensitive Light Meter).—B. Rajewsky, p. 276.
- Inertia-less Light Sources for Television Receivers.—F. Winkel, p. 47.
- New Light Sources: New Synchronising Methods.—Heinrich-Hertz Institute, p. 160.
- Betrachtungen über die Grenzen der Vergrößerung von Fernsehbildern (Considerations on the Limits of Magnification of Television Images).—H. Prinzler, p. 564.
- The Optical Properties of a Liquid in a Magnetic Field and Traversed by a Polarised Beam in Any Direction.—Cotton, p. 399.
- Über die Temperaturabhängigkeit der elektrischen Doppelbrechung in organischen Flüssigkeiten (The Variation with Temperature of the Electrical Double Refraction in Organic Liquids).—A. Kürten, p. 508.
- On the Meaning of the Conduction of Current in Dielectric Liquids under Strong Fields.—A. Nikuradse, p. 340.
- Liquid Dielectrics.—See also "General Physical Articles" (Dielectrics, Magnetic, and Breakdown), also "Measurements and Standards."
- The Longitudinal Distribution of Photo-electrons.—L. Simons, p. 161.
- The Manufacture of Photoelectric Cells.—G. Déjardin, p. 219.
- Marconi Portable Picture Apparatus.—p. 506.
- The Photoelectric Behaviour of Solid and Liquid Mercury.—D. Koller, p. 46.
- Some Photoelectric Properties of Mercury Films.—D. Roller, W. H. Jordan and C. S. Woodward, p. 623.
- The Making of Mirrors by the Deposition of Metal on Glass.—Bureau of Standards, p. 566.
- Das Weillersche Spiegelrad: Nipkowscheibe oder Spiegelrad (The Weiller Mirror-Wheel: Nipkow Disc or Mirror-Wheel?).—R. Moller: F. Kirschstein, p. 564.
- A Multi-Channel Television Apparatus.—H. E. Ives, p. 217.
- On the Possibility of Separating Neon into its Isotopic Components by Rectification.—W. H. Keeson and H. van Dijk, p. 566.
- Taylor Neon Lamp in Sanabria System of Television.—p. 508.
- Neon Lamps and their Photoelectric Sensitivity.—Carrara, p. 161.
- Reducing the Striking Voltage of Neon Lamps.—D. Walters, p. 276.
- Conversion of Light Changes into Current Changes by a Neon Tube.—Penning, p. 565.
- Neon Tube Light and Factors Governing its Life.—R. R. Machlatt, p. 276.
- Neon Tubes: Photoelectric Effect, Extinguishing Voltage, etc.—Ryall, p. 508.
- The Relations between Number of Elements, Size of Picture and Brightness.—Fr. Wiedemann, p. 331.
- Zur Erzielung grösserer Bildpunktzahlen beim Fernsehen (Increasing the Number of Picture Elements in Television).—E. Kinne, p. 446.
- Applied Optics, Papers on.—Straubel, Joachim, Göler and Pirani, Picht, Jentsch and Nahrung, and others, p. 333.
- Oscillations in Photoelectric Cells.—R. Ruedy, p. 102.
- Recording and the Production of Images by Electro-Osmosis.—M. Volmer, p. 446.
- Photoelectric Properties of Oxide Cathodes.—W. S. Huxford, p. 218.
- Effect of Electric Fields on the Emission of Photoelectrons from Oxide Cathodes.—W. S. Huxford, p. 622.
- Über den äusseren lichtelektrischen Effekt an Phosphoren und seine Abhängigkeit vom Erregungszustand (On the External Photoelectric Effect in Phosphorus in Various States and its Mode of Dependence on the Excitation Condition).—Hildegart Göthel, p. 333.
- The Photo Cell.—H. R. Ruff, p. 507.
- Photo Cell Theory and Practice.—V. K. Zworykin, p. 507.
- Zur Frage der Abhängigkeit von Photostrom und Lichtstärke bei gasgefüllten Alkalizellen (On the Question of the Relation between Photoelectric Current and Intensity of Illumination in Gas-Filled Alkali Photo Cells).—G. Kortum, p. 446.
- Photoelectric and Metastable Atom Emission of Electrons from Surfaces.—C. Kenty, p. 622.
- Neuere Formen lichtelektrischer Zellen (New Forms of Photoelectric Cell).—F. Schröter, p. 391.
- Photoelectric Cell with Secondary Emission.—Tonion, p. 161.
- Photoelectric Cell Combining the Advantages of High-Vacuum and Gas-filled Cells: the Use of Secondary Emission.—Comp. Thomson-Houston, p. 621.
- The Case Thaloïde Photoelectric Cell.—P. A. Tchoudakov, p. 218.
- Nava-Photozellen (The "Nava" Photoelectric Cell of the Tungram Co.).—G. Lohmann, p. 104.
- A Three-Electrode Photoelectric Cell with Great Sensitivity.—T. Asada, p. 102.
- Modifications de la Surface caractéristique d'une Cellule photoélectrique à Atmosphère gazeuse lorsqu'on change la Résistance en Série (Changes in the Characteristic Surface of a Gas-filled Photoelectric Cell for Change of the Series Resistance).—G. A. Boutry, p. 275.
- La Surface caractéristique $i = f(F, V)$ d'une Cellule photoélectrique à Atmosphère gazeuse (The Characteristic Surface $i = f(F, V)$ of a Gas-filled Photoelectric Cell).—G. A. Boutry, p. 275.
- Über das Entladungspotential einer Photozelle (The Discharge Potential of a Photoelectric Cell).—B. Stoll, p. 276.
- Über eine neue Art von Photozellen. 2. Mitteilung (On a New Type of Photoelectric Cell. 2nd Communication).—B. Lange, p. 104.

- New Developments in the Lange Photoelectric Cell.—B. Lange, p. 275.
- The Lange Photoelectric Cell: Output Increased Fifty and More Times by Use of Silver Selenide: Cost of Plant per Kilowatt: Grandall-Geiger Patent.—p. 445.
- New Lange Photoelectric Cell Applications.—B. Lange, p. 445.
- Über die spektrale Empfindlichkeit von Sperrschicht-Photzellen (On the Spectral Sensitivity of Attenuating-Layer Photoelectric Cells).—B. Lange, p. 445.
- Photzellen in Wissenschaft und Technik (Photoelectric Cells in Science and Technics).—B. Lange, p. 218.
- Über Sperrschichtphotzellen (I. Mitteilung) (On Suppressor Layer Photoelectric Cells (Part I)).—O. v. Auwers and H. Kerschbaum, p. 103.
- Cellules photoélectriques aux Métaux alcalins sur Support de Magnésium (Photoelectric Cells employing Alkali Metals on a Base of Magnesium).—G. Déjardin, p. 218.
- Latest Forms of Photoelectric Cells.—F. Schröter, p. 507.
- Inertia in Gas-filled Photoelectric Cells.—F. Schröter and G. Lubzyski, p. 622.
- Ionisation in Gas-filled Photoelectric Cells: (i) The Inert Gases in Caesium on Silver Photoelectric Cells, and (ii) Time lag in Gas-filled Photoelectric Cells.—W. F. Tedham, p. 622.
- Richter and Geffken Screen-Grid Photoelectric Cells.—H. Wolfson, p. 275.
- New Developments in Photoelectric Cells.—F. Schröter, p. 275.
- Les derniers Progrès réalisés dans la Construction des Cellules photoélectriques (Latest Progress in the Construction of Photoelectric Cells).—C. Roy-Pochon, p. 46.
- Photoelectric Cells.—A. Ferguson, p. 46.
- Infra-red Sensitivity of Caesium Oxide Photoelectric Cells.—J. W. Ballard, p. 103.
- Infrarotenpfindliche Zellen (Infra-Red Sensitive Photoelectric Cells).—F. Michelsen, p. 104.
- The Adaptation of Glass-enclosed Photoelectric Cells to Very Short Wavelengths.—J. and J. F. Thovet, p. 104.
- Photoelectric Cells for Ultra-Violet Light.—H. C. Rentschler, p. 161.
- Photoelectric Cells and their Applications: a Discussion at a Joint Meeting of the Physical and Optical Societies.—p. 332.
- Lichtelektrische Zellen und ihre Anwendungen (Photoelectric Cells and Their Use).—H. Simon and W. Kluge, p. 507.
- Zur Theorie des Photoeffektes an Metallen (On the Theory of the Photoelectric Effect at Metallic Surfaces).—I. G. Tamm and S. Schubin, p. 392.
- Some Remarks on the Theory of the Photoelectric Effect.—J. Irenkel, p. 622.
- Photoelectric Effect and the J-Phenomenon.—T. H. Osgood, p. 103.
- Zum Photoeffekt an Metallen (On the Photoelectric Effect in Metals).—H. Frölich, p. 104.
- The Photoelectric Emission of Thin Films.—N. R. Campbell, p. 508.
- Recent Developments in Photoelectricity.—C. E. Mendenhall, p. 219.
- Beiträge zur Kenntnis der Photoelektrizität (Contributions to the Knowledge of Photoelectricity).—J. Werner, p. 274.
- La Fotoelectricità nei suoi recenti Sviluppi teorici ed applicativi (Recent Developments, Theoretical and Applied, of Photoelectricity).—G. Todesco, p. 623.
- The Analysis of Photoelectric Sensitivity Curves for Clean Metals at Various Temperatures.—R. H. Fowler, p. 622.
- On the Supersensitive Photoelectric Tube ["Grid-photoelectric Tube"].—T. Asada and K. Hagita, p. 332.
- Bemerkung über lichtelektrische Zellen und die Bildung von Photoelektronen (Remark on Photoelectric Cells and the Formation of Photoelectrons).—S. E. Sheppard and W. Vanselow, p. 446.
- Formation of Photographic Images on Cathodes of Alkali Metal Photoelectric Cells.—A. R. Olpin and G. R. Stilwell, p. 332.
- Über ein neues, lichtelektrisches Photometer (On a New Photoelectric Photometer).—H. Teichmann, p. 102.
- Public Service of Phototelegraphy in Japan [N.E. System].—S. Inada: Niwa and Kobayashi, p. 564.
- Phototube Circuit Design for Sound-Pictures.—C. A. Wyeth, p. 508.
- Stand der Fernübertragung (The Present Position of Picture Telegraphy).—H. Stahl, p. 160.
- Bildfunk zwischen Berlin und Nanking (Picture Telegraphy between Berlin and Nanking).—H. Lux, p. 623.
- Über den Zusammenhang zwischen dem Einfluss von Stickstoff-Sauerstoff-Verbindungen, etc. (On the Connection between the Influence of Nitrogen-Oxygen Compounds and that of their Components on the Photoelectric Sensitivity of Potassium).—R. Fleischer and H. Teichmann, p. 274.
- Über lichtelektrische Wirkung und Elektronenbeugung, an hydrierten Kaliumoberflächen (On the Photoelectric Effect and Electron Diffraction at Hydrated Potassium Surfaces).—W. Kluge and L. Kupp, p. 275.
- Die lichtelektrische Elektronenemission an dünnen Kalium- und Caesiumschichten (The Emission of Photoelectrons from Thin Potassium and Caesium Layers).—R. Fleischer, p. 333.
- Photoelectric Properties of Atomic Layers of Potassium on a Silver Surface.—J. J. Brady, p. 275.
- Quality of Television Images.—D. K. Gannett, p. 331.
- Zur Quantenmechanik photoelektrischer Prozesse (The Quantum Mechanics of Photoelectric Processes).—M. Stobbe, p. 219.
- Lead-In Conductors for Quartz Glass Bulbs.—p. 269.
- A Photoelectric Method of Measuring the Power of Surfaces to Reflect at Different Parts of the Spectrum.—J. B. Sillierblatt, p. 566.
- Relativistic Theory of the Photoelectric Effect. Part I.—Theory of the K-absorption of X-Rays. Part II.—Photoelectric Absorption of Ultragamma Radiation.—H. Hall: H. Hall and J. R. Oppenheimer, p. 622.
- Theorie des Rückgang-Effektes des Grenzpotentials bei Zustrahlung geringerer Frequenz des einfallenden Lichtes (Theory of the Retrogression Effect of the Limiting Potential in Irradiation by Incident Light of Decreasing Frequency).—E. Marx and A. E. H. Meyer, p. 274.
- Some Photoelectric and Thermionic Properties of Rhodium.—E. H. Dixon, p. 219.
- Über das photoelektrische Verhalten von Salzen (On the Photoelectric Behaviour of Salts).—H. Erbel, p. 161.
- Über das photoelektrische Verhalten von Salzen, insbesondere über die Wirkung, etc. (On the Photoelectric Behaviour of Salts, in Particular the Effect of Light of Long Wavelength on Salts Irradiated with Light of Short Wavelength).—J. Klaphecke, p. 274.
- Die Bildabtastung beim Fernsehen (Scanning in Television: a Survey).—F. W. Winckel, p. 102.
- Scanning at a Speed Inversely Proportional to the Brightness of the Part Scanned.—R. Thun, p. 274.
- Radial System of Scanning.—Cie Thomson-Houston, p. 507.
- Die Spiegelschraube, ein neuer Bildzylinder (The Mirror-Helix, a New Scanning Device).—F. von Okollesanvi, p. 332.
- Metallic Mirrors for Scanning Devices.—W. Friedel, p. 331.
- Improved Scanning Methods for Television and Teletext.—Barthélemy and Le Duc, p. 390.
- Electrical Scanning System for Television.—P. T. Farnsworth, p. 331.
- Le Secret des Transmissions télégraphiques et radiotélégraphiques (Secrecy in [Facsimile] Telegraphic and Radio-telegraphic Communications).—E. Belin, p. 505.
- Correlating the Selective Photoelectric Effect with the Selective Transmission of Electrons through a Cathode Surface.—A. R. Olpin, p. 333.
- Eine trägheitsschwache Selenzelle (A Selenium Cell with Small Lag [Thyring Cell]).—F. Noack, p. 218.
- The Home Construction and Testing of Selenium Cells.—H. Günther, p. 566.
- Über eine neue Selen-Sperrschicht-Photozelle (On a New Attenuating-Layer Selenium Photocell).—L. Bergmann, p. 445.
- Über eine Methode zur Trennung des Sperrschichtphotoeffektes und des inneren Photoeffektes an Zellen aus kristallinen Halbleitern—Vordruck Mitteilung (On a Method of Separation of the Photoelectric Effect at the Boundary Surface and the Internal Photoelectric Effect in Cells Composed of Crystalline Semiconductors—Preliminary Communication).—H. Kerschbaum, p. 46.
- Radio Pictures for Ships: Possibility of the Future—Technical and Commercial Difficulties.—p. 47.
- The Photoelectric Properties of Silver.—R. P. Winch, p. 447.
- Über die negative Wirkung bei innerem Photoeffekt an Bronsilber (The Negative Action in the Internal Photoelectric Effect on Silver Bromide).—E. A. Kiriloff, p. 508.
- Double Modulation of High-Frequency Generators: A Theoretical Suggestion for Transmitting Simultaneous Sound and Vision with One Carrier Wave.—H. Peters and H. Biskamp, p. 507.
- Standards of Performance for Commercial Television Receivers.—C. H. W. Nason, p. 623.
- Inaudible Television—Application of the Stenode Radiostat to Reduce Interference.—E. L. Gardiner, p. 274.
- Über die photoelektrische Sensibilisierung von Kalium mittels Schwefel, Selen und Tellur (On Photoelectric Sensitizing of Potassium by means of Sulphur, Selenium and Tellurium).—W. Kluge, p. 274.
- Electrostatic Surface Fields near Thoriated Tungsten Filaments by a Photoelectric Method.—L. B. Linford, p. 103.
- The Effect of Systematic Surface Treatment on the Photoelectric Emission from Metals.—R. F. Hanstock, p. 103.
- The Synchronisation of Television Receivers, with Special Reference to the Use of Cathode-ray Tubes.—E. Hudec, p. 331.
- Zur Netzsynchronisierung von Fernseh-Empfängern (The Synchronisation of Television Receivers by Mains' Frequency).—G. Schubert, p. 564.
- Synchronisation System for Television, etc.—Barthélemy and a Company, p. 446.
- Synchronisierung des Fernsehempfängers (Synchronising the Television Receiver).—G. Leithäuser and K. Soltau, p. 446.
- Die Abbildung beim Fernsehen (Image Synthesis in Television [Suggested Cyclical Line-Shift Method]).—E. Hudec, p. 506.
- The Baird Portable Television Transmitter.—S. A. Moseley, p. 621.
- Television Reception Abroad [Rönic Reception of London Experimental Transmissions].—R. Bocchi, p. 621.
- A German Opinion of [Baird] Screen Television.—Horst Hewel, p. 47.

- Système de Télévision comportant, en particulier, un Dispositif de Synchronisation et de Mise en Phase automatique (A Television System, including in particular Automatic Synchronisation and Phasing).—R. Barthélémy, p. 102.
- L'Emission en Télévision (Television Transmission).—R. Barthélémy, p. 217.
- La Réception en Télévision (Television Reception).—R. Barthélémy, p. 563.
- A New System of Television.—J. Brun, p. 160.
- Ein neues Fernsehensystem (A New Television System).—A. B. Codelli, p. 180.
- A New Television System.—p. 217.
- Television Transmitter.—I. H. Bridgewater, p. 160.
- New Methods in Television.—H. E. Ives, p. 102.
- Television in Colour from Motion Picture Film.—H. E. Ives, p. 218.
- The Sanabria System of Television.—Sanabria: Taylor, p. 506.
- Ein neues Fernsehverfahren der Telehor A.G. (A New Television System of the Telehor Company).—F. Noack, p. 273.
- Technical Problems in Connection with Television.—I. E. E. Wireless Section Discussion, p. 506.
- Developments in Television.—W. G. W. Mitchell, p. 446.
- Der heutige Stand des Fernsehens (To-day's Position of Television).—F. Schröter and H. Lux, p. 273.
- Interesting Problems in Television.—F. Noack, p. 47.
- Television Needs New Ideas—and less Ballyhoo.—A. Dinsdale, p. 47.
- Television Reception: Crossed Wire Grid in Neon.—D. E. Dyas, p. 623.
- Television.—See also Two-Way and Ultra-Short Wave.
- Ein einfacher Versuch zur Demonstration der Temperaturabhängigkeit des Sperrschichtphotoeffekts (A Simple Experiment Demonstrating the Dependence on Temperature of the Attenuating Layer Photoelectric Effect).—H. Teichmann, p. 274.
- Über die Temperaturabhängigkeit des Sperrschichtphotoeffekts (On the Variation with Temperature of the Attenuating Layer Photoelectric Effect).—H. Teichmann, p. 333.
- The Effect of the Temperature Dependence of the Work Function on A and b in Richardson's Equation.—J. A. Becker and W. H. Brattain, p. 333.
- A Method of Studying the Effect of Temperature on Photoelectric Currents.—D. Ramadanoff, p. 160.
- Current from a Barium Photoelectric Cell and its Increase at High Temperatures.—D. Ramadanoff, p. 332.
- Photoelectric Properties of Composite Surfaces at Various Temperatures and Potentials.—D. Ramadanoff, pp. 332 and 392.
- Sur les Propriétés photoélectriques des Couches minces de Métaux alcalins (The Photoelectric Properties of Thin Films of Alkali Metals).—Djardjin, Schwieger and Varin, p. 565.
- Photo Cells and Thyratrons.—J. L. Davies, p. 507.
- Experiments on Time Lag in Gas-Filled Photoelectric Cells.—E. L. E. Wheatcroft, p. 507.
- Vacuum Tube Applications and Relay Circuits in Trans-oceanic Photo-Radio.—R. H. Ranger, p. 160.
- A Tungsten Surface with a Dual Work Function.—A. H. Warner, p. 275.
- Image Television System for Two-Way Television.—H. E. Ives, F. Gray and M. W. Baldwin, p. 47.
- Synchronization System for Two-Way Television.—H. M. Stoller, p. 47.
- Sound Transmission System for Two-Way Television.—D. G. Blattner and L. G. Bostwick, p. 47.
- Some Optical Features in Two-Way Television.—H. E. Ives, pp. 218 and 446.
- Progress in Two-Way Television.—H. E. Ives, p. 331.
- Photoelectric Absorption of Ultra-Gamma Radiation.—H. Hall and J. R. Oppenheimer, p. 623.
- Television on Ultra-Short Waves: Minimum Decrement Allowable in Reception.—F. Schröter, p. 507.
- Geht mit Ultrakurzwellen? (Will Ultra-Short Waves Solve the Problem?)—M. von Ardenne, p. 331.
- Ultrakurzwellen-Fernsehen (Ultra-Short Wave Television).—F. Schröter, p. 621.
- Photoelectric Work Function and its Dependence on the Applied Field.—Huxford, p. 218.
- Über den Sperrschicht-Photoeffekt der Röntgenstrahlung—Vorläufige Mitteilung (On the Attenuating Layer Photoelectric Effect of X-Radiation—Preliminary Communication).—B. Lange and P. Selényi, p. 508.
- Photoelectric Properties of Zinc Single Crystals.—J. H. Dillon, p. 622.

MEASUREMENTS AND STANDARDS.

- Test Truck for Aircraft Radio.—W. K. Gauchey, p. 278.
- Precision Measurements of Alternating Currents up to 2,000 Ampères [using a Nickel-Iron Cored Transformer].—A. H. M. Arnold, p. 567.
- The Development of a Precision Ammeter for Very High Frequencies: Discussion.—E. B. Moullin: W. F. Dunton, p. 47.
- Ein neuer Strommesser für Hochfrequenz (A New Ammeter for High [and Ultra-High] Frequencies).—K. Schlesinger, p. 47.
- A Method of Comparing Ammeters at Very High Frequencies.—C. L. Fortescue and L. A. Moxon, p. 334.
- The Amplitude Filter for obtaining Amplitude Statistics of Irregular Processes.—Baerwald, p. 44.
- Über Hochfrequenzmessungen nach der Barretermethode (On High Frequency Measurements by the Barreter Method).—M. Wien, p. 48.
- Über eine Anwendung der Barretermethode auf elektrolytische Messungen (On an Application of the Barreter Method to Electrolytic Measurements).—O. Neese, p. 625.
- Bibliography on Radio Wave Phenomena and Measurement of Radio Field Intensity.—Bureau of Standards, p. 493.
- Eine Messbrücke für sehr kleine Kapazitäten (A Capacity Bridge for Very Small Capacities).—G. Zickner, p. 106.
- On the Use of the Schering High Voltage Bridge for the Measurement of Large Capacities.—G. Zickner and G. Pfestorf, p. 394.
- The Sensitivity of an A.C. Bridge: The Sensitivity of the Schering Bridge.—H. Schering: J. L. Miller, p. 623.
- A Bridge for the Measurement of the Conductance of Electrolytes [to a Higher Degree of Accuracy than Hitherto Attainable].—P. H. Dike, p. 567.
- A New Type of Bridge Balance Indicator.—F. T. McNamara, p. 448.
- Eine Messeinrichtung zur Untersuchung von Rundfunkempfängern (A Testing Equipment for Broadcast Receivers).—F. Troeltsch, p. 393.
- The Quantitative Determination of the Merit of Broadcast Receivers.—Clausing, p. 555.
- Eine einfache Anordnung zum Messung kleiner Kapazitäten (A Simple Apparatus for the Measurement of Small Capacities).—K. Schlesinger, p. 106.
- Measurement of Very Small Capacities by the Use of a Wulf Condenser and a Sensitive Electrometer.—Clay, p. 277.
- On the Application of the Ultra-Short Wave Method [with Lecher Wire System] to the Measurement of Small Capacities and Dielectric Constants.—D. V. Gogate and D. S. Kothari, p. 277.
- Un Mezzo semplice per Misurare Capacità a Mezzo di Valvole termioniche (A Simple Valve Method of Measuring Capacity [by Intermittent Trains of Undamped Waves]).—L. Sesta: La Rosa and Petrucci, p. 567.
- A Capacity Inductance and Impedance Conversion Chart.—H. W. Anderson, p. 509.
- Kapazitätsberechnung für einen Draht in quadratischen Zylinder (Calculation of the Capacity of a Wire in a Cylinder of Square Cross-Section).—H. Jeniss, p. 49.
- A New Method of Measuring the Capacity of Small Condensers.—H. M. Barlow, p. 220.
- A Simple Capacity Test Set.—W. H. F. Griffiths, p. 220.
- Accurate Measurement of Small Electric Charges [and Capacities] by a Null Method.—L. S. Taylor, p. 447.
- A High Precision Chronograph.—J. E. Sears and G. A. Tomlinson, p. 220.
- Operating Frequency of Regenerative Oscillatory Systems: Application to Change in Rate of a Pendulum Clock.—Benioff, p. 570.
- The Short Clocks at Greenwich in 1930.—J. Jackson and W. Boyver, p. 511.
- The Magnetic Field of a Circular Cylindrical Coil [Mathematical Calculation].—H. B. Dwight, p. 336.
- Sul Comportamento delle Bobine in Circuiti ad alta Frequenza (The Behaviour of [Single- and Multi-layered] Coils in High-Frequency Circuits [up to 4 Megacycles per Sec.]).—G. Sacerdote, p. 623.
- Il Condensatore elettrico formato da un Filo rettilineo fra due Piani paralleli (The Electrical Condenser formed of a Straight Wire between Two Parallel Plates [Theoretical Investigation]).—A. Masotti, p. 509.
- A Variable-Capacitance Cylindrical Condenser for Precision Measurements, and a Wavemeter for Short Wavelengths.—E. B. Moullin, p. 277 and 336.
- Thermowattmetrische Verlustmessungen an grossen Kapazitäten (Loss Measurements on Large Condensers by the Thermowattmeter).—G. Zickner and G. Pfestorf, p. 107.
- Präzisions-Messkondensatoren und Messbrücken (Precision Test Condensers and Bridges).—p. 107.
- The Use of the Copper-Oxide Rectifier for Instrument Purposes.—Sahagen, p. 279.
- The Crystal Clock.—p. 220.
- Comparison of the Oscillation Characteristics of Crystal Mountings with and without Air Gap, for Short Wave Use.—S. Matsumura and K. Hatakeyama, p. 104.
- 7-Megacycle Crystals.—H. Hollister, p. 49.
- Dämpfungsmessungen an Induktivitäten bei Hochfrequenz (The Measurement of the Damping of Inductance Coils at [Ultra] High Frequencies).—F. Benz, p. 48.
- Die Messung des Dämpfungswiderstandes von Hochfrequenzschwingungskreisen mit Hilfe der Dynatronschaltung (The Measurement of the Damping Resistance of High Frequency Oscillatory Circuits by the Use of the Dynatron Circuit).—H. Frühauf, p. 509.
- Why the Decibel?—M. G. Scroggie, p. 571.
- Eine Methode zur Dekrementsbestimmung durch Kapazitäten (A Method of Decrement [also Field-Strength Sensitivity, etc.] Measurement by the Use of Capacities [Capacitive Potentiometer]).—K. Schlesinger, p. 447.

- Test Procedure for **Detectors** with Resistance Coupled Output.—G. D. Robinson, p. 393.
- Constant diélectrique et Constitution chimique: Méthode de Mesure (**Dielectric Constant and Chemical Constitution**): Method of Measurement [by Improved Nernst A.C. Bridge].—A. Chrétien, p. 447.
- Hochfrequenz-Messeinrichtung zur Bestimmung der Dielektrizitätskonstanten (High Frequency Measuring Equipment for the Determination of **Dielectric Constants**).—K. Schlesinger, p. 447.
- Application of the **Dynatron** to the Measurement of **Dielectric Losses**.—H. Inuma, p. 334.
- Resonant Impedance and Effective Series Resistance of High-Frequency Parallel Resonant Circuits [Measured by "Dynatron Oscillator" Method, applicable to Ultra-high Frequencies].—Inuma, p. 321.
- Appareil pour la Mesure de la Résistance des Prises de Terre (Apparatus for the Measurement of the Resistance of **Earths**).—Bisorgne; Mocuquard, p. 163.
- Rationalisation of the **Electromagnetic Equations**.—A. Blondel, p. 221.
- Appareils de Mesures électriques s'adaptant aux Electro-aimants (Electrical Measuring Instruments adapted to **Electro-magnets**).—L. Queyron, p. 105.
- A Capillary **Electrometer** of Improved Design.—A. S. Gilson, p. 453.
- Ein neues Hochspannungselektrometer. 2. Mitteilung (A New High-Voltage **Electrometer**. 2nd Communication).—T. Wulf, p. 108.
- Ein vereinfachtes Duantenelektrometer und seine Benutzung zu Wechselspannungsmessungen (A Simplified "Duant" **Electrometer** [with Semi-Circular Fixed Vanes] and its Use in A.C. Measurements).—K. Engel and W. S. Pforte, p. 221.
- Über die Grenzen der Empfindlichkeit des Vakuum-Duantenelektrometers (On the Limits of Sensitivity of the Vacuum Duant **Electrometer** [with Semi-circular Fixed Vanes]).—W. Eggers, p. 221.
- Grassot **Electrometer** and Its Use in Photoelectric Measurements.—Bartelke, p. 221.
- Ein Pendelelektrometer für hohe Spannungen (A Pendulum Improved Gold Leaf **Electrometer** for High Voltages).—W. Rogowski, p. 567.
- The Capacity of the Quadrant **Electrometer**.—G. Nadjakoff, p. 624.
- Über die Ausmessung magnetischer Felder mittels Elektronenstrahlen (The Survey of Magnetic Fields by means of **Electron Beams**).—E. Brüche, p. 221.
- Measurement of Ionization Current by Means of the Zeleny **Electroscope**.—R. Barton, p. 221.
- Über eine neue Feldstärke-Messeinrichtung (A New Field Strength Measuring Equipment).—M. v. Ardenne, p. 106.
- Some Notes on **Field-Strength** Measurement.—Green, p. 205.
- Papers on **Field Strength Measurements and Apparatus**.—de Mars, Kenick and Pickard; Baker and Huxley; Vedy and Wilkins, p. 614.
- Field Strength Measuring Apparatus**.—See also High Frequency, and under "Subsidiary Apparatus" (Signal Generators, Oscillators, Attenuation).
- A **Fluxmeter** with Counterbalanced Restoring Torque.—F. W. Haworth, p. 221.
- Force Between Unequal Reactance Coils Having Parallel Axes.—H. B. Dwight and R. W. Purcell, p. 336.
- A Device for the Precise Measurement of High Frequencies.—F. A. Polkinghorn and A. A. Roetken; Farrington and Potts, p. 510.
- Über die Messung sehr kleiner Frequenzen und ihre Anwendung für Fernmessung (The Measurement of Very Low Frequencies of the order of 10 Cycles per Sec.) and Its Application to Telemetering.—E. Hudec, p. 511.
- Accurate Method of Measuring Transmitted Wave Frequencies at 5,000 and 20,000 Kilocycles per Second.—E. L. Hall, pp. 49 and 219.
- Banco di Demoltiplicazione Statica per la Misura di Frequenza sin a 10^8 Cili/Sec. (Demultiplication Equipment for the Measurement of **Frequencies** up to 10^8 Cycles/Sec.).—F. Vecchiacchi, p. 49.
- Chain of Static Demultipliers for the Measurement of **Frequencies** from 10^2 to 10^8 Cycles per Second.—F. Vecchiacchi, p. 394.
- A Precise and Rapid Method of Measuring **Frequencies** from Five to Two Hundred Cycles per Second [Condenser Discharge Principle].—N. P. Case, p. 49.
- Over het nauwkeurig Meten van Frequenties (The Accurate Measurement of **Frequencies**).—R. Moens and P. Mortier, p. 624.
- An International Comparison of **Frequency** by means of a Luminous Quartz Resonator.—S. Jimbo, p. 105.
- Misure assolute di Frequenza alla Ricezione (Absolute Measurement of **Frequency** on Signals Received from a Distance).—U. Ruelle, p. 393.
- Sur un Générateur à Lampe, de Fréquence très stable (A Valve Generator of Very Constant **Frequency**—Space-Charge Grid Connection).—P. David, p. 448.
- A Valve Generator Circuit of Very Constant **Frequency**.—David, p. 570.
- Determination of **Frequency and Damping** of Resonating Circuits [including Aerials].—Tykocinski-Tykociner, p. 394.
- Frequency Checking**: The Department of Commerce Monitoring Station at Hingham, Mass.—I. L. Weston and R. J. Renton, p. 277.
- Some Methods of Measuring the **Frequency of Short Waves**.—H. Mögel, p. 277.
- Comparison of Distant **Frequency Measurements** in London, New York and Berlin.—Mögel, p. 625.
- Capillary Waves Produced by Alternating Currents in Dielectric Liquids, and Their Application to **Frequency Measurement**.—M. Katalinić, p. 570.
- Frequency Measurements of High Accuracy**.—J. J. Vormer and C. van Geel, p. 447.
- International Frequency Measurements. New Absolute **Frequency-Measuring Equipment**.—A. Scheibe and P. Preisler, p. 624.
- A Thermionic Type **Frequency Meter** for Use up to 15 Kilocycles.—F. T. McNamara, p. 624.
- Le Fréquence-mètre Étalon Absolu du Laboratoire National de Radioélectricité (The Absolute Standard **Frequency Meter** of the French National Laboratory of Radioelectricity).—B. Decaux, p. 105.
- Un Fréquence-mètre à Quartz piézoélectrique avec Modulation synchrone (A Quartz-Controlled **Frequency Meter** with Synchronous Modulation).—B. Decaux, p. 509.
- Direct-Reading [Thermionic] **Frequency Meter**.—F. Guarnaschelli and F. Vecchiacchi, pp. 392 and 624.
- Ein einfacher Frequenzmesser hoher Genauigkeit (A Simple **Frequency Meter** of High Accuracy).—H. Piesch, p. 161.
- Zeigerfrequenzmesser (A Pointer **Frequency Meter**).—E. Mittelmann and M. Wald, p. 392.
- Messung geringer Frequenzabweichungen mit direkter Anzeige (The Measurement of Slight **Frequency Variations** by a Direct Reading Instrument).—E. Mittelmann and Rose Mittelmann, p. 392.
- The Dynatron **Frequency Meter**.—G. Grammer, p. 336.
- New **Frequency Meters** using Dynatron Oscillators.—G. Grammer; O. P. Sushuevan, p. 49.
- Frequency Stabilisation** of Radio Transmitters.—Kusunose and Ishikawa, p. 496.
- Perfectionnements aux Stabilisateurs de Fréquence (Improvements in **Frequency Stabilising Arrangements** [including the Mounting of Quartz Plates]).—C. Florisson, p. 394.
- Interpolation Methods for Use with Harmonic **Frequency Standards**.—J. K. Clapp, p. 105.
- Ein Wechselstromgalvanometer (A **Galvanometer** for A.C.).—H. Mukherjee, p. 107.
- A Mains-driven Thermionic A.C. **Galvanometer** for use as Bridge Indicator.—L. Tulauskas, p. 221.
- Simplified Method of Measuring Broadcast **Harmonics**.—E. C. Miller, p. 161.
- Alternating-Current Measuring Instruments as Discriminators Against **Harmonics**.—Irving Wolff, p. 394.
- Hochfrequenz-Messgeräte (High-Frequency Measuring Apparatus).—A. Jannain; Siemens and Halske, p. 566.
- On Formulae for the **Impedance** of Oscillatory Circuits.—A. I. Drodjinn, p. 336.
- Berechnung der Impedanz zylindrischer Leiter von beliebiger Querschnittform (Calculation of the **Impedance** of Cylindrical Conductors of Any Shape of Cross Section).—M. J. O. Strutt, p. 509.
- Simplified **Inductance Calculation**.—L. H. Russell and G. B. Abraham, p. 450.
- Graphische Rechentafeln (Nomogramme) für die Berechnung der Selbstinduktion einer Spule (Nomograms for Calculating the **Inductance** of a Coil).—A. Fischer, p. 450.
- The Effect of Small Variations in Pitch upon the **Inductance** of a Standard Solenoid.—Chester Snow, p. 450.
- Über die Berechnung von Zylinderspulen (Calculation of the **Inductance** of Cylindrical Coils).—A. Müller, p. 450.
- A Graphical Calculation of the **Inductance** of Multi-Layer Coils with any Time Constant.—N. N. Soloviev, p. 221.
- Approximate Formulae for the **Inductance** of Solenoids and Astatic Coils.—W. G. Hayman, p. 570.
- Laboratory Method of Measuring **Inductances** with Ballistic Galvanometer.—B. L. Robertson and C. A. Nickle, p. 277.
- Beschlüsse der Internationalen Elektrotechnischen Kommission (IEC) über Grössen und Einheiten (Resolutions of the **International Electrotechnical Commission** [I.E.C.] on Magnitudes and Units).—p. 336.
- Messung von zeitlich veränderlichen Spannungsvorgängen mit Hilfe des Kerreffekts (Measurement of Temporally Variable Voltage Phenomena Using the **Kerr Effect**).—K. Hoffmann, p. 48.
- Methods of Making **Lecher-Wire Measurements**.—G. S. Field, p. 162.
- Die Messung des Wechselstromwiderstandes flüssiger Dielektrika (The Measurement of the A.C. Resistance of **Liquid Dielectrics**).—D. H. Black, p. 220.
- Calorimetric Investigation of the Dielectric Loss of **Liquid Dielectrics** for Short Waves.—Vogler, p. 451.
- Radiotelegraphic Determination of **Longitude**.—M. Hasimoto, p. 448.

- Formulae for Calculation of **Magnetic Field** Due to Circular Filament or Solenoid, by Zonal Harmonics.—R. F. H. Chao, p. 570.
- The Direct-reading Crystal "Gaussmeter" for **Magnetic Field Measurement**.—Dupouy, p. 450.
- Gerät zur Messung kleiner magnetischer Wechselfelder (Apparatus for Measuring Small Alternating **Magnetic Fields**).—G. Lubszynski, p. 279.
- The Practical **Magnetic Units**: On a System of Mechanical, Electrical and Magnetic Units.—A. Blondel; E. Brylinski, p. 107.
- The Equivalent Circuit of the **Magnetostriction Oscillator**.—S. Butterworth and F. D. Smith, p. 276.
- Measurements on **Magnetostriction Vibrators**.—J. M. Ide, p. 570.
- Magnetostrictive Oscillator**.—Elektrosias, Leningrad, p. 220.
- Further Experiments on **Magnetostrictive Oscillators** at Radio-Frequencies.—J. H. Vincent, p. 276.
- The **Mayometer** as a Self-Registering Instrument.—J. Dürrwang, p. 448.
- Electrical Measuring Instruments** Other than Integrating Metres.—C. V. Drysdale, p. 221.
- A Thermionic **Meqger** with Linear Scale.—O. Stuhlman, p. 450.
- A New Theorem Concerning Temperature-Compensated **Millivoltmeters** Used with Shunts for the Measurement of Current.—H. B. Brooks, p. 567.
- Modulation Measurements**, including Non-Linear Distortion.—W. Runge; M. Grütznacher, p. 161.
- Appareils de Mesures électriques à Cadre mobile dans un Champ uniforme (Electrical Measuring Instruments with **Moving Coil** in a Uniform Field).—G. Dupouy, p. 335.
- The **Mutual Inductance** of Short Coaxial and Concentric Solenoids.—H. B. Dwight and P. W. Slayles, pp. 107 and 162.
- Mutual Inductance and Repulsion** of Two Adjacent Disc Coils.—H. B. Dwight and T. Y. Lu, p. 279.
- A Laboratory [Audio-Frequency] **Oscillator** for Receiver Testing.—Franks, p. 503.
- The Development of a Standard High-Frequency **Oscillator** of Wide Range.—L. G. A. Sims and M. I. Elwany, p. 277.
- Über den Einfluss des erdmagnetischen Feldes auf die Schwingungszeiten von Nickelstahlpendeln (The Effect of the Earth's Magnetic Field on the Periodic Time of **Nickel Steel Pendulums**).—M. Rössiger, p. 277.
- Fasometri a Triodi (Triode **Phasemeters**).—F. Vecchiacchi, p. 107.
- Improvements in **Piezo Crystals** in Gas-Filled Containers.—Telefunken, p. 219.
- Piezolectric Circuit**.—Radiofrequenz, Eberhardt, p. 162.
- Summary of **Piezo-Electric Crystal Conference** Held by U.S. Navy Department, 3rd-14th December, 1929.—p. 162.
- Piezoelektrische Versuche nach dem Prinzip der Methode von Giebe und Scheibe (**Piezo-Electric Experiments** on the Principle of the Method of Giebe and Scheibe).—A. Hettich, p. 104.
- The Frequency Stability of **Piezo-Electric Monitors**.—J. K. Clapp, p. 219.
- The Effect of **Piezo-Electric Oscillation** on the Intensity of X-Ray Reflections from Quartz.—G. W. Fox and P. H. Carr, p. 570.
- An Analysis of a **Piezo-Electric Oscillator Circuit**.—L. P. Wheeler, p. 335.
- Piezoelektrische Oscillatoren (**Piezo-Electric Oscillators**).—H. Straubel, p. 569.
- Sur les Vibrations du Quartz Piezoélectrique suivant l'axe optique (The Vibrations of **Piezo-Electric Quartz** along the Optical Axis).—P. Tcheng Kao, p. 49.
- Note on the **Piezo-Electric Quartz Oscillating Crystal** Regarded from the Principle of Similitude.—I. Koga, p. 509.
- Piezo-Electric Quartz Oscillator** with Single Frequency.—I. Koga, p. 449.
- Characteristics of **Piezo-Electric Quartz Oscillators**.—I. Koga, p. 104.
- Piezoelektrische Quarzoszillatoren (**Piezo-Electric Quartz Oscillators**).—H. Straubel, p. 335.
- The Resonance Curves of **Piezo-Electric Resonators**.—G. Angrisano, p. 394.
- The Measurement of the Decrement of **Piezo-Electric Resonators**.—K. S. Van Dyke, p. 162.
- Piezo-Electric Terminology**.—W. G. Cady, p. 162.
- Sul Funzionamento del Piezooscillatore in Relazione con la Curva di Risonanza del Quarzo (The Behaviour of a **Piezo-Oscillator** in relation to the Resonance Curve of the Quartz).—M. Boella, p. 105.
- Influenza del Decremento del Quarzo sulla Frequenza di Oscillazione dei Piezo-oscillatori (Influence of the Quartz Decrement on the Frequency of a **Piezo-Oscillator**).—M. Boella, p. 394.
- Performance of **Piezo-Oscillators**, and the Influence of the Decrement of Quartz on the Frequency of Oscillation (leading to an Improved Arrangement with Very Stable Frequency).—M. Boella, p. 569.
- Piezooscillatore con grande Stabilità di Frequenza (A **Piezo-Oscillator** with Great Frequency Stability).—F. Vecchiacchi, p. 569.
- Investigation of **Piezo-Quartz Oscillator**.—S. N. Kakurin, p. 219.
- Photometric Measurement of Small Alternating Potentials.—Haak, p. 335.
- Precision Measurements with a Modified Larsen A.C. **Potentiometer**.—p. 105.
- Ein kapazitiver Spannungsteiler mit Lastausgleich und seine Anwendungen (A Capacitive **Potentiometer** with Automatic Load Compensation).—K. Schlesinger, p. 106.
- Measurement of **Power and Efficiency** of Radio Transmitting Apparatus.—G. Pession and T. Gorio, p. 334.
- Low **Power-Factor** Measurements at High Voltages.—E. H. Rayner, W. G. Standing, R. Davis and G. W. Bowdler, p. 106.
- Le Quartz (**Quartz**).—Ch. Mangin, p. 570.
- Structure of **Quartz** Investigated by Acoustic Methods.—Meissner, p. 105.
- Sur l'Orientation des Cristaux et spécialement du Quartz à l'Aide des Figures de Corrosion (The Orientation of Crystals, particularly **Quartz**, with the Aid of Corrosion Figures).—C. Gaudetroy, p. 395.
- Comparison of the Magnetic Rotations of Crystalline and Melted **Quartz**.—A. Cotton, p. 449.
- Researches on the After-Effect in **Quartz**.—Saegusa and Shimizu, p. 570.
- Quartz-Controlled Oscillations** of some Hundred Watts Power, by use of a Screen-grid Valve.—Kusunose, p. 95.
- Investigations into the Behaviour of **Quartz-Controlled Transmitters**.—von Handel, p. 438.
- Über den Einfluss der Umgebung auf die Frequenz eines Schwingquarzes (On the Influence of Surroundings on the Frequency of an Oscillating **Quartz Crystal**).—E. Grossman and M. Wien, p. 449.
- Measurements of Temperature Coefficient and Pressure Coefficient of **Quartz Crystal Oscillators**.—S. Leroy Brown and S. Harris, p. 394.
- Dégagement d'Électricité dans les Cristaux de Quartz par Flexion (The Setting Free of Electricity in **Quartz Crystals** by Flexion).—E. P. Tawil, p. 219.
- Characteristics of Gap-less **Quartz Holders**.—S. Matsumura and K. Hatakeyama, p. 335.
- Bemerkungen zu meiner Arbeit "Die Schwingungen der Quarzlamelle" (Remarks on My Paper "The Oscillations of a **Quartz Lamina**").—A. Lissutin, p. 509.
- Schwingungsform und Temperaturkoeffizient von Quarzoszillatoren (Vibration Modes and Temperature Coefficients of **Quartz Oscillators**).—H. Straubel, p. 568.
- The Excitation of (Even) Overtones of Shear Vibrations in Y-cut **Quartz-Plates**.—J. R. Harrison, p. 49.
- The Design and Manufacture of **Quartz Plates**.—S. Matsumura and K. Takahashi, p. 162.
- Method of Obtaining a **Quartz-Stabilised Frequency** of a Required Exact Value.—Moens and Cosyns, p. 447.
- Quartz**.—See also Crystal, Piezo.
- Application du Redresseur Oxyémétal à la Mesure des Tensions de Crête (Application of the Dry Plate **Rectifier** to the Measurement of Peak Voltages).—M. Robert, p. 567.
- Zur Theorie der Tonfrequenzmessgeräte mit Trockengleichrichtern (The Theory of Audio-frequency Measuring Instruments incorporating Dry-Plate **Rectifiers**).—R. Feldtkeller and H. Kerschbaum, p. 163.
- Über den Frequenzgang von Wechselstrommessinstrumenten mit Trockengleichrichtern (The Frequency-dependence of A.C. Instruments embodying Dry-plate **Rectifiers**).—E. Hornmann, p. 335.
- Zur Messung des Widerstandes von Drähten bei Hochfrequenz (On High-Frequency Measurement of Wire **Resistance**).—K. Kreielsheimer, p. 623.
- Measurement of **Resistance and Impedances** at High Frequencies [Transmission Line Method and Lumped Circuit Method].—J. W. Labus, p. 333.
- A New Method of Measurement of **Resistance and Reactance** at Radio Frequencies.—F. M. Colebrook and R. M. Wilmette, pp. 277 and 334.
- Sulla Misura della Resistenza ad Alta Frequenza (The Measurement of **Resistance at High Frequencies**).—P. Iardi, p. 49.
- The High-Frequency **Resistance of Coils**: Novel Methods of Measurement.—A. L. Green, p. 334.
- A Study of the High-Frequency **Resistance of Single Layer Coils**.—A. J. Palermo and F. W. Grover, pp. 162 and 570.
- A New Design of Precision **Resistance Standard**.—J. L. Thomas, p. 50.
- Measuring and Recording Insulation **Resistances** up to 12×10^{13} Ohms [Valve Sockets, etc.] and Photoelectric Currents, by the Strauss "Mekapion" [using the Leakage of Grid Charge].—I. J. Saxl; S. Strauss, p. 624.
- The Calculation of **Resistances to Ground and of Capacitance**.—H. B. Dwight, p. 571.
- Champs tournants, circulaire et elliptique (Circular and Elliptic **Rotating Fields** [Graphical Construction]).—J. B. Poney, p. 571.
- A Method of Accurate Measurement of **Short Waves**.—G. Leithauser, p. 162.
- Standard **Signal Generators**.—Franks and Ferris: David; Brueske; Bird, p. 510.
- Schleifdraht-Messeinrichtungen mit erhöhter Einstellgenauigkeit (Slide Wire Measuring Apparatus with Increased Accuracy of Adjustment).—O. Zwierina, p. 394.
- Rapid Method of Measuring **Soil Resistivity**.—E. R. Shepard, p. 450.

- Transmissions of Wireless Waves of **Standard Frequencies** from the N.P.L. [Additional Frequency (168.6 Metres Wavelength) for Amateur Transmitters].—p. 624.
- Standard Frequency Service** Has World-Wide Coverage.—p. 511.
- Standard Frequency Station W1XP**—The Key Station of the A.R.R.L. Standard Frequency System.—H. A. Chinn, p. 336.
- The Maintenance [to within one or two parts in a million] of a **Standard of Electromotive Force**: Notes on Standard Weston Cells.—A. N. Shaw and H. E. Reilley, p. 107.
- Design of **Standards of Inductance**, and the Proposed Use of [Small-Size] Model Reactors in the Design of Air-Core and Iron-Core Reactors.—H. B. Brooks, p. 623.
- Standards of Measurement**. Their History and Development.—R. J. Graybrook, p. 511.
- Eine zusammenfassende Untersuchung über stehende elektrische Drahtwellen (A Recapitulatory Investigation of Standing Electric Waves on Wires).—R. Kinz, p. 221.
- String Vibrations of Finite Amplitude**.—Schlesinger, p. 159.
- Einfluss der Oberflächenbeschaffenheit von Drähten auf die Selbstinduktion bei hohen Frequenzen (The Influence of the Surface State of Wires on the Inductance at High Frequencies [Wavelengths 20 to 300 Metres]).—H. Illgen, p. 48.
- New **Suspension**, particularly for Portable Instruments.—A. J. Lush, p. 335.
- Temperature Control for Frequency Standards**.—J. K. Clapp, p. 162.
- Testing Wireless Receivers**.—See Broadcast, and under "Reception." The Measurement of Small Electromotive Forces from **Thermopiles**.—J. Guhl, p. 221.
- A Special **Thermostat** for Crystal Oscillators and its Employment in Common Wave Broadcasting.—J. Jacobs, p. 50.
- Time from the Mains**.—p. 448.
- B.E.C. **Time Signal and the Moon**.—F. Addev, p. 336.
- Les Retards à l'Enregistrement des Signaux horaires radiotélégraphiques (Lag in Recording Radiotelegraphic Time Signals).—R. Jouaust, p. 445.
- Über die Korrekturen der Zeitsignale (Corrections to Time Signals).—E. Andersen, p. 448.
- Étude des Signaux horaires Internationaux (An Investigation of the International Time Signals).—P. Lejay, p. 511.
- Beitrag zur Schaltung einer Zeitnormale äusserster Konstanz (Contribution to the Creation of a Time Standard of Extreme Constancy).—O. Meisser and H. Martin, p. 335.
- Notes on **Transmission Measurements**: the Marconi Transmission Measuring Set.—O. S. Puckie, p. 50.
- Line Transmission Units**.—A. W. Ladner, O. S. Puckie and C. E. Rickard, p. 449.
- Tuning Coils and Winding Data**.—A. L. M. Sowerby, p. 221.
- Sur un Oscillateur Electrique a basse Fréquence stabilisé par un Diapason (A Low Frequency Electrical Oscillator Stabilised by a Tuning Fork).—G. Mabhoux, p. 448.
- Sur la Comparaison à Distance de la Fréquence des Diapasons (The Comparison at a Distance of the Frequency of Tuning Forks).—R. Jouaust and B. Decaux, p. 219.
- Comparaison entre les Systèmes pratiques d'Unités électromagnétiques (A Comparison of the Practical Systems of Electromagnetic Units.—First Part).—A. Blondel, p. 450.
- Units** used to express the Wave Lengths of Electromagnetic Waves.—H. D. Hubbard, p. 336.
- Über die Masseneinheiten der Strahlung (On the Units of Radiation).—F. Kiebitz, p. 511.
- Variable-Mu Tetrodes** in Logarithmic Recording.—S. Ballantine, p. 161.
- A **Vibrating Blade** Excited by the Medium Surrounding It.—Carrière, p. 563.
- A Method for Measuring the Amplitude and Frequency of **Vibration** of Bodies which may be heated to Incandescence.—W. E. Meserve, p. 219.
- Method of Obtaining a **Visible Spectrum** of Waves of Radio Frequency.—McLennan and Burton, p. 54.
- A.C. **Voltage Measurement** by Effect on Valve Filament.—H. Keller, p. 448.
- Eine Spannungsmessmethode für Frequenzen bis zu 1.5×10^6 Hertz (A Method of Voltage Measurement for Frequencies up to 150 Megacycles/Sec.).—L. Rohde, p. 393.
- Apparatus for the Measurement of High Constant or Rippled **Voltages**.—L. S. Taylor, p. 106.
- The Measurement of High **Voltages**, with Special Reference to the Measurement of Peak Voltages.—R. Davis, G. W. Bowdler and W. G. Standing, p. 106.
- Ein neues elektro-optisches Messverfahren für Spannungen und Ströme sehr hoher Frequenz (A New Electro-optical Method of Measurement for Voltages and Currents of Ultra-High Frequency).—L. Fungs and H. Vogler, p. 507.
- A Method for Measuring High **Voltages** or Low **Capacitances** (Vibrating Contacts Device).—J. A. Van den Akker, p. 448.
- A **Compensated Vacuum Tube Voltmeter** with Balanced Bridge Output.—W. G. Hayman, p. 106.
- A **Multi-Range Vacuum Tube Voltmeter**.—L. Tulauskas, p. 106.
- Sensitive **Valve Voltmeter**.—H. L. Kirke and T. C. Macnamara, p. 220.
- Ein empfindliches zweistufiges Röhrenvoltmeter für Netzanschluss (A Sensitive Two-stage Thermionic Voltmeter for Mains Supply).—K. Schlesinger, p. 221.
- Röhren-Voltmeter für Netzanschluss (Mains-Driven Valve Voltmeter).—H. E. Kallmann, p. 277.
- A **Thermionic Voltmeter** of High Sensitivity: Discussion.—Benecke: Schulze and Zickner, p. 393.
- Röhrenspannungsmesser für stromlose EMK-Messung (Valve Voltmeter for the Currentless Measurement of E.M.F.).—Tödt and Thrun: E. Bluhm, p. 449.
- An **Electrostatic Voltmeter** for D.C. Voltages up to 80 kv.—O. Zdralek, p. 567.
- The Construction and Operation of a Simple Neon-Tube High Tension Crest Voltmeter.—L. E. Ryall, p. 506.
- A (Plio-) Dynatron Vacuum-Tube Voltmeter.—F. de Cola, p. 567.
- Ein Oberwellen-Voltmeter (A Voltmeter for Harmonics).—R. Oetker, p. 334.
- Oshibka pri izmerenii napriajenii electro-vacuumnymi voltmetrami s zakrytymi vhodnymi tespimami (Errors associated with Valve Voltmeters employing Closed Input Circuits).—S. I. Panilov, p. 449.
- Improved **Valve Voltmeters** for D.C.—Berl, Wahtig: Wulff, Kordatzky, p. 221.
- A New (Shunted) Type of **Wattmeter**.—D. C. Gall, p. 448.
- An **Electron Tube Wattmeter and Voltmeter** and a Phase Shifting Bridge.—H. M. Turner and F. T. McNamara, p. 105.
- A Precision Method of Measuring Short [and Ultra-Short] **Wavelengths**.—W. Fehr and G. Leithäuser, p. 624.
- Quartz Controlled **Wavemeter** for Short and Ultra-Short Waves.—J. Groszkowski, p. 394.
- Sur un Ondemètre absolu pour la Mesure des très petites Longueurs d'Ondes (An Absolute [Cathode Ray] Wavemeter for the Measurement of Ultra-Short Waves).—F. Dacos, p. 447.
- Measuring the Accuracy of **Wavemeters** in Common Use.—H. Mimura, p. 107.
- Multiple-grid **Valve Wave-Meters** for Short Waves.—Wolf, p. 394.
- Degré de Précision, Exactitude, Constance des Ondemètres (Degree of Precision, Accuracy, and Constancy of Wavemeters).—C.C.I.R., p. 624.

SUBSIDIARY APPARATUS AND MATERIALS.

- Sur la Théorie de l'Accumulateur au Plomb (On the Theory of the Lead Accumulator).—Tarrin, p. 281.
- High Output Non-Sulphating Lead **Accumulators**.—Ch. Féry and Reynaud-Bonin, p. 453.
- On the Theory of the Lead **Accumulator**.—L. Jumau: Denina and Frates, p. 109.
- Les Accumulateurs électriques d'après les Brevets récents (Electric Accumulators according to Recent Patents).—L. Jumau, p. 109.
- Das mikroporöse Gummidaphragma für Akkumulatoren (The Microporous Rubber [Separator] Diaphragm for Accumulators).—H. Beckmann, p. 109.
- Rubber Separators: the Use of Latex in Making **Accumulator Separators** ("Mipor" Separators).—H. Beckmann, p. 281.
- Temperature Rating of Engine-driven **Aircraft Radio Generators**.—C. B. Mirick and H. Wilie, p. 573.
- Power Equipment for **Aircraft Radio Transmitters**.—J. D. Miner, p. 223.
- Researches on the Valve Effect in **Aluminium Voltmeters**.—M. Ginat, p. 224.
- The **Amplification** of Small Direct Currents.—L. A. DuBridge, p. 322.
- Sur l'Emploi des Tubes électroniques pour l'Amplification de très faibles Courants (The Use of Thermionic Valves for the Amplification of Very Small Currents).—J. F. Thovort, p. 626.
- The **Amplification** of Very Small Currents.—See also under "Phototelegraphy."
- A Review of High Frequency **Attenuation Devices**.—R. P. Glover, p. 222.
- Druckregler für Quecksilberdampf-Grossgleichrichter (Automatic **Pressure Regulator** for Large Mercury Vapour Rectifiers).—Kotschubev, p. 280.
- A **Ballistic Recorder** for Small Electric Currents.—E. B. Moss, p. 396.
- Improved Iron-Hydrogen **Barretter** Combination.—La Radio-technique, p. 108.
- The **Cadmium Battery Tester**.—p. 109.
- Application of the Wynn-Williams **Bridge Valve Amplifier** to Microphotometry and Absorption Problems.—H. G. Heil, p. 281.
- Cathode Ray** deflected by a Magnetic Field due to Small Currents (of the order of 1 Milliampère).—Slopkovitzer, p. 282.
- Further Advances in the Technique of the Braun Tube [Cathode Ray Oscillograph].—M. von Ardenne, p. 282.
- Small Type von Ardenne C.-R. Tube for Visual Observation in Daylight.—von Ardenne, p. 108.
- Neue Braunsche Röhren mit Wechselstromheizung (A New C.-R. Tube with A.C. Heating of Cathode).—H. Reibedanz: von Ardenne, p. 107.
- Linear Correction for **Cathode Ray Oscillograph**.—F. Bedell and J. Kuhn, p. 51.

- Refinements in Linear Time-Scale for **Cathode Ray Oscillograph**.—F. Bedell, p. 336.
- Gummidichtung mit Prüfeinrichtung für den Kathodenoszillographen (Rubber Seals with Testing Arrangement for use with the **C.-R. Oscillograph**).—K. Beverle, p. 51.
- Gland Seal with Provision for Checking, for **C.-R. Oscillographs**.—K. Beverle, p. 163.
- Ein Beitrag zur Entwicklung des Kathodenoszillographen mit kalter Kathode (Contribution to the Development of the **Cathode Ray Oscillograph** with Cold Cathode).—K. Beverle, p. 396.
- Gross-Kathodenstrahl-Ozillograph für 200 kv. Ablenkspannung (Large **C.-R. Oscillograph** for 200 Kilovolt Deflection Potential).—L. Binder, p. 452.
- External Recording with the **C.-R. Oscillograph** at Lower Accelerating Voltages.—H. Boekels, p. 452.
- Strahlungsperrungen beim Kathodenoszillographen (Locking the Electron Stream in the **Cathode Ray Oscillograph**).—H. Boekels, p. 625.
- Ein Kathodenstrahloszillograph zur Aufnahme periodischer Vorgänge (A **Cathode Ray Oscillograph** for Recording Periodic Phenomena).—M. Brenzinger, p. 51.
- Kathodenoszillographische Aussenaufnahmen mit Linse und Kamera bei extrem rasch verlaufenden Vorgängen (External Photography of Extremely Rapid Phenomena with the **Cathode Ray Oscillograph**, Lens, and Camera).—K. Buss and A. Pennick, p. 625.
- L'Oscillografo a Raggi catodici e l'Asse dei Tempi (The **C. R. Oscillograph** and Its [Argon Discharge Tube] Time Base).—C. Calosi, p. 108.
- Glas- oder Metallentladungsröhre? (Glass or Metal Discharge Tubes? for **C.-R. Oscillographs**: the Use of An Auxiliary Electrode).—H. Dicks, p. 571.
- Papers on the **Cathode Ray Oscillograph** and the Surge Generator.—F. D. Fielder, F. R. Benedict, p. 452.
- Über die Zeitablenkung bei Braunschen Röhren (The Time Base in **Cathode Ray Oscillographs**).—G. Hauffe, p. 452.
- Vereinfachtes Kipprelais für synchrone Zeitablenkung einer Braunschen Röhre mit Glühkathode (A Simplified "Relaxation Oscillation" Relay for Synchronous Time-Base for a Hot-Cathode **C.-R. Oscillograph**).—J. Kammerloher, p. 282.
- Cathode Ray Oscillograph** with Lenard Window.—M. Knoll, p. 51.
- Leuchtschirm-Kontaktphotographie beim Kathodenstrahloszillographen (Fluorescent Screen Contact Photography with the **C.-R. Oscillograph**).—M. Knoll, p. 51.
- Nutzeffekt des Kathodenstrahloszillographen (The Efficiency of the **C.-R. Oscillograph**).—M. Knoll, p. 163.
- Aussenphotographie beim Kathodenstrahloszillographen durch grosse Bildfenster (External **C.-R. Photography** using a large Window).—M. Knoll and B. v. Borries, p. 51.
- Die Verwendung des Kathodenstrahloszillographen zur Aufnahme raschest verlaufender Vorgänge (The Use of the **C.-R. Oscillograph** for Recording Very Rapid Processes).—W. Krug, p. 336.
- Über Schaltanordnungen bei Kathodenstrahl-Ozillographen zur Aufnahme von periodisch, etc. (Survey of Circuit Arrangements for **C.-R. Oscillographs** for Recording Periodic and Aperiodic Processes in a Rectangular Co-ordinate System).—W. Krug, p. 396.
- On the Method of Magnetic Use of the **Cathode Ray Oscillograph** [Magnetic Time-Base for Single Controlled Phenomena].—Narasaki, Miyamoto and Ochi, p. 625.
- Thyratron für Time-Base of **C.-R. Oscillograph**: Time Required to Set Up Conduction.—Nottingham, p. 512.
- Über einen empfindlichen Zeitkipper für den Kathodenoszillographen (On a Sensitive Time Switch for the **Cathode Ray Oscillograph**).—H. Peek, p. 571.
- Die Leistungsgrenze des Kathodenoszillographen (The Output Limit of the **Cathode-Ray Oscillograph**).—W. Rogowski, E. Flegler and K. Buss, p. 163.
- Ein abgeschmolzenes Braunschens Rohr hoher Leistung (A Sealed Braun **[Cathode-Ray] Tube** of High Efficiency).—W. Rogowski and K. Szezhó, p. 511.
- Das Braunschens Rohr als Lichtquelle (The **C.-R. Tube** as Source of Light).—W. Rogowski and E. Rühlmann, p. 336.
- Untersuchung über den Elektronenstrom beim Kaltkathodenoszillographen (Investigations into the Electron Beam in the Cold-Cathode **C.-R. Oscillograph**).—E. Rühlmann, p. 671.
- A Linear Time Axis for a **Cathode-Ray Oscillograph**.—A. L. Samuel, p. 571.
- Cold Cathode **C.-R. Oscillograph** of the Russian Electrotechnical Institute.—I. Stekolnikov, p. 222.
- Enregistrements d'Ondes mobiles, à haute Tension et à Front raide, par l'Ozillographe à Rayons cathodiques, type Dufour, à un seul Degré de Vide (The Recording of High Tension, Steep-Fronted Surges by the Dufour Type **C.-R. Oscillograph** with Only One Stage of Vacuum).—S. Teszner: Gondet, p. 511.
- Der Kathodenoszillograph als Präzisionsmessgerät (The **Cathode-Ray Oscillograph** as a Precision Measuring Instrument).—H. Viehmann, p. 51.
- A New **Cathode-Ray Oscilloscope**.—W. O. Osbon, p. 452.
- The Production of Slow **Cathode Rays** for Long-Delay Echo Experiments.—Brüche, p. 282.
- Die magnetische Sammelspule für schnelle Elektronenstrahlen (Magnetic Concentrating Coils for Fast **Cathode Rays**).—E. Ruska and M. Knoll, p. 625.
- Experiments on the Catching-up of Atoms in a Magneto-cathodic or **Cathodic Beam**.—Henriot, Goche and D.-Hénault, p. 341.
- A Self-Regulating Iron-Cored **Choke**.—Optique et Precision de Levallois, p. 452.
- Budich-Ausgangs-Niederfrequenzdrossel (The Budich Low-Frequency Output **Choke**).—p. 572.
- Practical Radio Frequency **Choke Coils**.—A. Binneweg, Jr., p. 223.
- The Testing of **Chokes** for Mains-operated Receivers.—F. Dolnal, p. 109.
- A Portable Spark **Chronograph** for Use on either Direct or Alternating Current.—C. N. Hickman, p. 282.
- An Ultra-Rapid **Cinematograph** Recording 2,000 to 3,000 Images per Second.—E. Huguenard and A. Magnan, p. 452.
- "Conoid" Radio-Frequency Coils.—p. 572.
- The Effect of the Presence of Colloidal Substances on the Breakdown Voltage of Insulating Liquids.—P. Böning, p. 338.
- A D.C. Motor using a Triode as **Commutator**.—K. Barthélémy, p. 108.
- A New Type of Variable **Condenser** (the "Arit-Nostrator").—p. 222.
- A Variable **Condenser** with No Zero Capacity.—Zickner, p. 109.
- By-pass **Condenser** Production Test Equipment.—F. W. Stellwagon, p. 233.
- Der Differenzkondensator (The Differential **Condenser** [and Its Uses]).—J. Schad, p. 626.
- Intermediate Frequency Tuning **Condenser** Requirements.—H. E. Rhodes, p. 626.
- A Variable Cylindrical **Condenser** for Precision Measurements.—Moullin, p. 277.
- Über Verluste von Kondensatoren bei sehr schnellen elektrischen Schwingungen (On **Condenser Losses** in High Frequency Electrical Oscillations [10^6 – 10^8 c.p.s.]).—E. Darmstaedter, p. 223.
- The Testing of **Condenser Paper**.—F. L. Roman, p. 164.
- Zur Frage der Abrundung ebener Kondensatoren in normaler Luft (On the Question of Rounding-off [the Edges of] Flat Plate Air **Condensers**).—W. Schilling, p. 109.
- Fixed **Condensers** (Electrolytic and "Electro-Chemical") at the Paris Exhibition, p. 454.
- Electrolytic **Condensers** for Radio Use.—F. W. Godsey, Jr., p. 626.
- Electrolytic **Condensers**—Characteristics and Methods of Measurement.—W. L. Dunn, p. 223.
- The Losses in Variable Air **Condensers**.—W. H. F. Griffiths, p. 337.
- Hochspannungskondensatoren aus Porzellan (Porcelain High-Voltage **Condensers**).—p. 283.
- High Voltage Porcelain **Condensers** [for Carrier Telegraphy, etc.].—W. Regerbis, p. 165.
- Some Applications of **Condensers** with Variable Capacity (Rochelle Salt).—V. P. Vologdin, p. 221.
- On the Self-Inductance of [Roll] **Condensers** at Very High Frequencies.—Rotkiewicz, p. 40.
- On the Electrical Resistance of Contacts between Solid Conductors.—J. Frenkel, p. 222.
- Photographic Method of Securing Copies of Diagrams, etc., Without the Use of a Camera.—E. J. Haverstick, p. 453.
- L'Amplificateur à Lampes et la Détection des Rayons corpusculaires isolés (The Valve Amplifier and the Detection of Isolated **Corpuscular Rays**).—L. Leprince-Ringuet, p. 513.
- Das Zustandekommen und die Beeinflussung der fallenden Charakteristik des Schwingkristalls (The Origin and Control of the Falling Characteristic of the Oscillating Crystal).—F. Seidl, p. 628.
- A Simple Method of Producing Low Frequency Currents of Sinusoidal Shape and their Measurement.—J. G. Bedford and H. Josephs, p. 107.
- Über lineare Stromregelung (Linear Current Regulation).—G. Hauffe, p. 628.
- Magnetic Curve Tracer.—F. E. Haworth, p. 281.
- Demonstration of an Instrument for Combining Two Curves into One.—J. L. Haughton: R. Payne, p. 224.
- The Analytical Treatment of Empirical Curves.—W. Holzer, p. 399.
- Macchina elettrostatica a Cilindri (The Cylindrical Electrostatic [Influence] Machine).—F. Luscia, p. 629.
- Über Detektoren (On **Detectors**).—G. Siemens and W. Demberg, p. 279.
- Copper-Oxide **Detectors**.—V. N. Lepeshinskaja, p. 112.
- Eine Schwebungsmethode zur Bestimmung der Dielektrizitätskonstanten leitender Flüssigkeiten (A Beat Method for Determination of the Dielectric Constant of Conducting Fluids).—W. Graffunder and R. Weber, p. 109.
- Variations with Temperature and Frequency of Dielectric Loss in a Viscous, Mineral Insulating Oil.—H. H. Race, p. 337.
- Dielektrische Verlieren (Dielectric Losses).—Th. J. Weijers, p. 108.
- Dielektrische Verluste in Ölen (Dielectric Losses in Oils).—A. Gemant, p. 109.
- Dielectric Phenomena at High Voltages.—B. L. Goodlet, F. S. Edwards and F. R. Perry, pp. 513 and 626.
- Dielectric Properties and Chemical Constitution.—S. O. Morgan, p. 573.
- The Thermal Resistivity of Solid Dielectrics.—Report of British E.R.A., p. 164.

- Detection and Comparative Measurement of Ionisation in Dielectrics by means of Oscillations.—J. T. Tykociner and E. B. Paine, p. 573.
- The Potential of the Walls in the Cathode Dark Space, and the Failure of Discharge Tubes.—Beck and Emeküs: Sloane, p. 224.
- The Use of Discharge Tubes in Electric Circuits.—R. Ruedy, p. 164.
- Discharge Tubes and Their Technical Applications.—N. L. Harris and H. G. Jenkins, p. 453.
- Gaseous Discharge Tubes.—N. L. Harris and H. G. Jenkins: G.E.C., p. 627.
- Dispositif de Télécommande par Ondes électro-magnétiques très courtes (Distant Control Device [Fog Signal] working on Ultra-Short Waves).—P. Besson, p. 50.
- The Testing of Dry Cells.—R. W. W. Sanderson, p. 109.
- On the Self Discharge of Dry Cells.—A. Makino, p. 454.
- American Standard Specifications for Dry Cells and Batteries.—Bureau of Standards, p. 333.
- The New Standard Echo Suppressor.—W. F. Marriage, P. R. Thomas, and K. G. Hodgson, p. 453.
- The Theory of Electrolytic Valve Action.—E. Newbery, p. 164.
- Graphical Calculation of Electro-Magnet Windings.—S. Leviev and M. G. Isimbaltist, p. 109.
- How to Determine Wire Sizes for Electro-Magnets.—H. B. Brooks, p. 109.
- An Electron Gun with Increased Efficiency and Better Focusing.—J. E. Taylor, p. 626.
- A New Method of Recording Electrons [Cathode Rays].—P. H. Carr, p. 163.
- Some New Experiments with the Zeleny [Oscillating-Leaf] Electroscope.—R. Barton, p. 397.
- The Electrostatic Field of Two Types of Condenser.—W. Göhre, p. 454.
- The Break-down Potential for Enamelled Wire.—W. Retzow, p. 629.
- Ferromagnetische Materialien bei schwachen Wechselfeldern (Ferromagnetic Materials in Weak Alternating Fields).—R. Goldschmidt, p. 163.
- Sur l'Aimantation des Poudres ferromagnétiques dans des Champs faibles (The Magnetisation of Ferromagnetic Powders in Weak Fields).—Delsarte, Chevalier, p. 627.
- Aimantation d'une Substance ferromagnétique sous l'Influence d'un Champ alternatif (Magnetisation of a Ferromagnetic Substance under the Influence of an Alternating Field).—St. Procopiu, p. 163.
- Zur Frage des Wirkungsgrades und der Nutzleistung von Frequenztransformatoren (On the Efficiency and Useful Output of Frequency Changers).—F. Sanner, p. 395.
- Eine neue Form eines Wechselstromgalvanometers (A New Form of Alternating Current Galvanometer).—H. Mukherjee and S. S. Mukherjee, p. 281.
- Méthode pour la Compensation automatique des Variations de Résistance, etc. (A Method for the Automatic Compensation of Resistance Changes in Electrical Circuits due to Variations in the Temperature of the Surrounding Air.—Application to the Compensation of a Galvanometer).—A. Arnulf, p. 512.
- Repair of Non-Conductive Galvanometer Strings (Defective Gilded Quartz Fibres, without Removal).—p. 223.
- A Single-valve Multi-frequency Generator.—Starr, p. 614.
- The Insulation of High Voltage Generators.—Brown Boveri Company, p. 454.
- L'Amélioration de l'Isolément des Machines à haute Tension (Improving the Insulation of H.T. Generators).—Brown-Boveri Company, p. 108.
- Voltage Irregularities in D.C. Generators.—J. T. Fetsch, p. 108.
- Über den zeitlichen Verlauf von Strom und Spannung beim Einsatz der Glühentladung (On the Variation with Time of Current and Potential in the Onset of the Glow Discharge [in a Philips' Neon Lamp]).—F. Tank and L. Ackermann, p. 281.
- Die Glühlampe als Relais (The Glow-Discharge Lamp as Relay).—H. Laub, p. 50.
- Valve Methods of Governing Machines: Various Patents.—p. 628.
- Der Einfluss der Schwerkraft auf Fliehkraftregler mit elektrischer Kontaktgebung (The Influence of Gravitation on the Centrifugal Governor with Electrical Contacts).—W. Dornig, p. 628.
- Effect of Grain Size on the Magnetic Properties of Low Hysteresis Electrical Sheets.—V. S. Messkin and E. I. Pelz, p. 164.
- Variable High Resistance Grid Leaks.—W. E. Boyd, p. 338.
- Triode Harmonic Amplifier.—Fukuta, p. 322.
- The Maier Ott Harmonic Analyser.—J. Revsal, p. 629.
- A Simple Method of Harmonic Analysis for Use in Radio Engineering Practice.—H. Roder, p. 629.
- Computing Cards for Harmonic Analysis.—P. Jerebcs, p. 572.
- A Direct-Reading Harmonic Measuring Instrument.—E. Hueter, p. 454.
- A System for Suppressing Hum by a New Filter Arrangement.—P. H. Craig, p. 395.
- Current Collection in Hydrogen Atmosphere.—R. M. Baker, p. 453.
- A Ballistic Hysteresisgraph.—H. C. Lehde, p. 223.
- The Stability of Impregnating Compounds in Electrical Fields.—S. S. Gorodetzky and V. A. Karassev, p. 338.
- An Electrical Impulse Rate Indicator and Recorder.—W. W. Macalpine, p. 109.
- Method of Construction of Inductances Allowing Adjustment in Test Room.—Comp. franç. Thomson-Houston, p. 280.
- Report of Committee D-9 on Electrical Insulating Materials.—p. 164.
- Elektrophotographie von Isolierstoffen (Electro-photography of Insulating Materials).—A. Gemant, p. 396.
- Der Spannungserlauf bei der Stossprüfung nach Aufnahmen mit dem Kathodenstrahl-Oszillographen (The Potential Curve in Impulse Testing of Insulating Materials) as recorded with the C. R. Oscillograph.—W. Schilling and J. Leuz, p. 283.
- The Physics of Insulating Materials.—A. Morris Thomas, p. 281.
- Properties and Uses of the A.E.G. Rubberless Insulating Materials (Various Types of Tenacit).—A.E.G., p. 573.
- The Electrical Insulating Paper: The Effect of Beating: The Dielectric Strength of Celophane and the Papers impregnated with Plastics.—K. Atsuki and M. Matsuoaka, p. 282.
- Pressgas als Isolation in Hochspannungsapparaten (Compressed Gas as Insulation in High Tension Apparatus).—A. A. Bólsterii, p. 454.
- The Insulation of Pyrex Glass after Heating in Vacuo.—J. H. Mitchell, p. 283.
- "Thioborite," a New Insulator: "La Thiolithe" Insulating Varnishes (Phenol Derivatives).—p. 454.
- Oszillographie von Strömen in Isolierstoffen (Oscillography of Currents in Insulators).—A. Gemant, p. 164.
- Die Frequenzabhängigkeit der Dielektrizitätskonstante und der Dämpfung von festen Isolatoren (The Frequency Variation of the Dielectric Constant and the Attenuation in Solid Insulators).—R. Weber, p. 626.
- Teildurchschlag von festen Isolatoren (Partial Breakdown of Solid Insulators).—Lydia Inge and A. Walthers, p. 164.
- Feldverteilung und Durchschlagsspannung von festen Isolatoren. I (Distribution of Field and Breakdown Voltage of Solid Insulators. I).—Lydia Inge and A. Walthers, p. 165.
- Untersuchungen über der Einfluss der Wärme auf den elektrischen Durchschlag fester Isolatoren (Investigations on the Influence of Heat of the Electrical Breakdown of Solid Insulators).—K. Moerder, p. 165.
- Untersuchungen über die dielektrische Festigkeit fester Isolatoren (Investigations on the Dielectric Strength of Solid Insulators).—K. Meyer, p. 164.
- A Study of Telephone Line Insulators.—L. T. Wilson, p. 108.
- Isolatoren aus Kieselsäureglas-Quarzisolatoren (Insulators of Silicate-Glass—Quartz Insulators).—F. Skaupy, p. 108.
- Experimental Investigation of the Effect of Magnetic Fields on the Dielectric Strength of Insulators.—A. Sinurow, p. 164.
- Insulators Tested: (5) Vitreosil and Pyrex.—W. H. Griffiths, p. 223.
- The "Prism Derivator" and the "Differentio-Integrator".—E. von Harbou, p. 453.
- A Photoelectric Integrator.—T. S. Gray, p. 572.
- Das Eindringen elektromagnetischer Wellen in hochgesättigtes Eisen (The Penetration of Electromagnetic Waves into Highly Saturated Iron).—F. Ollendorff, p. 282.
- A Simplified Method for the Calculation of Iron Conductors for Transmission Lines.—W. C. Kooiebakin, and The Calculation of the A.C. Resistance of Iron Wire.—I. Antik, p. 223.
- Eine Methode zur Messung von Eisenverlusten bei Hochfrequenz (A Method of Measuring Iron Losses at High Frequencies [7,000-70,000 Cycles/Sec.]).—P. Glebow: K. Schmidt, p. 281.
- Magnetostatik der Massekerne (Magnetostatics of Compressed Iron Powder Cores).—F. Ollendorff, p. 627.
- Highly Purified Iron Resembling Copper in Softness and Other Properties.—L. Schlecht, p. 627.
- Experimental Researches on the Physical Properties of Cold-drawn Thin Iron Wires.—M. M. Tschetwerowa, p. 338.
- A Device for Maintaining Isochronism in Low-Power Electric Motors.—N. F. S. Hecht and D. P. Alexandor, p. 108.
- A Review of the Use of Kerr Cells for the Measurement of Time Intervals and the Production of Flashes of Light.—J. W. Beams, p. 163.
- An Adjustable [Air] Leak for X-Ray Tubes.—H. Kersten, p. 626.
- Zur Definition der elektromagnetischen Streuung (On the Definition of Electromagnetic Leakage).—E. Weber, p. 109.
- Factors Affecting the Output of Leclanché Cells.—V. A. Kostjeyev, p. 626.
- Measurement of Lenard Rays.—L. S. Taylor, p. 626.
- Surface Charge Figure. [Lichtenberg] Figure and Its Applications.—Y. Toriyama, p. 337.
- Light-Ray Pointers for Charting Angles [for Direction-Finding, etc.].—Askania Works: Möller, p. 559.
- Die Untersuchung dielektrischer Verluste flüssigen Isolierstoffe bei kurzen Wellen mit dem Kalorimeter (Calorimetric Investigation of the Dielectric Loss of Liquid Dielectrics for Short Waves).—H. Vogler, p. 451.
- An Improved Method for the Comparison for Small Magnetic Susceptibilities.—R. A. Feraday, p. 627.
- An Autographic Apparatus for Determining Inflection Points in Magnetic Susceptibility Curves.—J. L. Haughton, p. 282.
- Berekening der Veldsterkte bij Permanente Magneten (Calculation of the Field Strength for Permanent Magnets).—W. Eleutlaas, p. 281.

- Permanent Magnets for Electronic Instruments.—W. H. Hoppe, p. 627.
- Magnetisierung und magnetische Alterung von Dauermagneten für elektrische Messinstrumente (The Magnetisation and Magnetic Ageing of Permanent Magnets for Electrical Measuring Instruments).—E. Schrankow and B. Janovsky, p. 109.
- British Standard Specification for Mains Supply Apparatus.—p. 620.
- Measurement of Extremely Low Pressures by the Ionisation Manometer.—R. Sewig, p. 338. See also Vacuum.
- A New Design of an Ionisation Manometer.—E. K. Jaycox and H. W. Weinhart, p. 628.
- Mica.—J. H. Frydender, p. 283.
- The Permittivity and Power Factor of Micas.—C. Dannatt and S. E. Goodall, p. 338.
- Some Properties of Foreign and Domestic Micas.—A. B. Lewis, E. L. Hall and F. R. Caldwell, p. 573.
- The Use of Small-Scale Models in the Design of Air-Core and Iron-Core Reactors.—Brooks, p. 628.
- The Electrical Resistance of Moisture Films on Glazed Surfaces.—G. G. Small, R. J. Brookshank and W. M. Thornton, p. 232.
- Some Peculiarities in the Thermo-Electric Properties of Monel Metal.—E. Meschter, p. 223.
- Mycalex—A Molding Material with Unique Properties.—L. E. Barringer, p. 573.
- Photométrie des Neonglimmlichtes (Photometry of the Neon Glow Light).—M. J. Druyvesteyn and N. Warmoltz, p. 453.
- Note on the Use of the Flashing Neon Lamp Circuit for Physiological Purposes, and on a Time-Marker for Use with the Circuit.—W. A. Leyshon, p. 627.
- Sulle Lampade a Neon (Neon Lamps [and their Photoelectric Sensitivity]).—N. Carrara, p. 165.
- Neon Tube Light and Factors Governing its Life.—R. R. Machlett, p. 287.
- A Periodic Contactor Operated by a Neon-Tube Oscillator.—H. J. Reich, p. 396.
- An Amplifier, String Galvanometer and Photographic Camera Designed for the Study of Action Currents in Nerve.—A. Forbes, H. Davis and J. H. Emerson, p. 222.
- Nickel-Iron Alloys and their Application to Instrument Construction.—F. E. J. Ockendon, p. 627.
- Nickel-Iron Alloys in Low-Frequency Transformers, p. 627.
- Note on the Electrical Resistance of Contacts between Nuts and Bolts.—F. Wenner, G. W. Nusbaum, and B. C. Cruickshanks, p. 164.
- Zur Frage der Gültigkeit, etc. (On the question of the Validity of Ohm's Law for Cu_2O . A Comment on the Paper "Variable Resistances and their Hydrodynamical Analogy" by R. Auerbach).—E. Engelhard and B. Gudden, p. 625.
- Oscillatore di elevata Stabilità per Frequenze ultracustiche (A Supersonic Oscillator with Frequency Stabilisation of a High Order).—M. Boella, p. 107.
- Design Notes on Beat Frequency Oscillators [for Audio- or Low Radio-Frequencies].—G. A. Brueske, p. 512.
- The Development of a Standard High-Frequency Oscillator of Wide Range.—Sims and Ibhawy, p. 277.
- The New Siemens Universal Oscillograph.—Eichler and Gaurz, p. 452.
- A Simple Oscillograph.—Tabard: Sprenger, p. 396.
- Un Oscillographe automatique pour l'enregistrement des Perturbations des Réseaux (An Automatic Oscillograph for Recording Disturbances of Power Networks).—J. Fallou, p. 282.
- A Rapid-Record [String] Oscillograph.—A. M. Curtis and I. E. Cole, p. 625.
- The Use of Triode Valves with Duddell Type Oscillographs.—E. L. E. Wheatcroft and A. Graham, p. 282.
- Nouveaux Oscillographes Blondel et leurs Applications (new Blondel Oscillographs and their Applications).—J. Vassilière-Arliac, p. 108.
- Design of Vacuum Prebaking Furnace [for Outgassing Metal Parts of Vacuum Tubes].—L. R. Hafstad and O. Dahl, p. 51.
- Electrolytic Phenomena in Oxide-Coated Filaments.—J. A. Becker, p. 628.
- A Method of Winding [Pancake] Regenerator Coils.—J. R. Roebuck, p. 51.
- Paragutta, a New Insulating Material for Submarine Cables.—A. R. Kemp, pp. 164 and 223.
- Parallelgeschaltete Induktionsmaterial auf gemeinsamen Kern (Parallel-Connected Inductances on a Common Core).—R. Goldschmidt, p. 280.
- Konstruktion des Ersatzwiderstandes parallel Geschalteter Widerstände (Graphical Construction for the Equivalent Value of Paralleled Resistances).—H. Kind, p. 513.
- Stromregelungen bei Laboratoriumsmessungen (The Regulation of Current in Laboratory Measurements (by Parallel Resistances for Coarse and Fine Adjustments)).—G. Hauffe, p. 513.
- Die Permeabilität der Ferromagnetika in hochfrequenten elektromagnetischen Feldern (The Permeability of Ferromagnetics in High-Frequency Electromagnetic Fields).—N. N. Malov, p. 626.
- Die Permeabilität von Eisen, Nickel und Kobalt zwischen 10^4 und 10^7 Hertz (The Permeability of Iron, Nickel and Cobalt at Frequencies between 1 and 10 Megacycles per Sec.).—M. J. O. Strutt, p. 627.
- Über die magnetischen Eigenschaften der Perminvare (The Magnetic Properties of Perminvars).—H. Kühlewein, p. 627.
- On the Attenuating Layer Photoelectric Effect of X-Radiation.—Lange and Selenyi, p. 508.
- The Action of Low Speed Electrons on Photographic Emulsions.—R. E. Burroughs, p. 452.
- The Action of Low Speed Electrons on Photographic Emulsions.—L. A. Jones and R. E. Burroughs, p. 626.
- Über punktweise Aufnahme quasistationärer Vorgänge (On Point-by-Point Photography of Quasi-Stationary Phenomena).—M. Buge, p. 164.
- Papers on the Application of a C-R. Oscillograph to Piezo-Electric Measurements.—Watanabe, p. 396.
- An Investigation of Problems relating to the Use of Pivots and Jewels in Instruments and Meters.—V. Stott, p. 572.
- An Improved Feussner Type Potentiometer.—M. Eppley and W. R. Gray, p. 513.
- A Rolling-Contact Potentiometer.—Dralowid Works, p. 628.
- Radio Power Apparatus.—S. L. Abrahams, p. 627.
- Filament Supply for Two-Volt Tubes: The Air-Cell Type "A" Battery [Air-Depolarised Primary Battery, Zinc/Carbon in Caustic Soda].—L. S. Fox, p. 626.
- A Highly Selective "Pulse Amplifier."—Roters and Paulding, p. 55.
- The Technique of Copper-Pyrex Tube-Seals.—H. W. B. Skinner and J. H. Burrow, p. 164.
- Über die elektrische Leitfähigkeit von amorphem Quarz (On the Electrical Conductivity of Amorphous Quartz).—W. Gnann, p. 281.
- The Sputtering of Quartz Fibres.—G. M. Jones, p. 628.
- Two Improvements in the Technique of Kymograph Recording.—Wichart, Thienes and Visscher, p. 282.
- Appareil enregistreur pour tous Dispositifs à Spot (Recording Apparatus for "Spot of Light" Instruments).—M. Prot, p. 396.
- An Automatic Recording Camera for Discontinuous Operation.—C. G. Sumner, p. 338.
- Theorie des Thunischen Zeitdehnern und ihre Anwendung in der Aufnahmepraxis (Theory of the Thun "Time Extender" [Special Slow-Motion Apparatus] and its Use in Recording).—W. Ende, p. 51.
- A New Type of Recording Drum.—Casella & Co., p. 51.
- Valve Ignix (The Ignix Type 10 Valve for Full-Wave Rectification).—L. La Porte, p. 164.
- Theorie der Polaritätseffekte beim Stromdurchgang durch feste Stoffe (Theory of Polarity Effects [Rectification] in the Passage of Electrical Current through Solids).—P. Böning, p. 281.
- The Use of a Kenotron as a "Current Limiter" for the Rectification of a Pulsating Current.—W. Witorsky and D. Stepanov, p. 279.
- Rettificazione mediante Diodi in Circuito formati da Resistenza e Induttanza (Rectification by Diodes in Circuits composed of Resistance and Inductance).—N. Carrara, p. 625.
- Le Redressement dans les Éléments à Oxyde de Cuivre (Rectification in Copper-Oxide Elements).—R. Jaquet, p. 625.
- Polyphase Rectification Special Connections.—R. W. Armstrong, pp. 279 and 396.
- A Graphic Method for Determining the Current and Voltage Forms of a Rectified A.C. Smoothed by Choke Coils or Condensers.—H. Immelen, p. 626.
- The Calculation of Harmonics in Rectified Currents.—E. L. E. Wheatcroft, p. 164.
- The Theory of a Rectifier with Falling Characteristic of Hyperbolic Form.—Stierstadt, p. 379.
- Zur Theorie der Gleichrichterwirkung (On the Theory of Rectifier Action).—C. Wagner, p. 625.
- Copper-Oxide Rectifier of Many Series Elements of Wire Form.—Siemens and Halske, p. 451.
- The Use of the Copper-Oxide Rectifier for Instrument Purposes.—J. Sahagen, p. 279.
- Recent Researches on the Copper-Oxide Rectifier and Photoelectric Cell.—L. F. Bates, p. 397.
- Nouveaux Redresseurs à Oxyde Cuivrique (New Copper-Oxide Rectifiers).—H. Pelabon, p. 110.
- Influence des Traitements thermiques sur les Caractéristiques des Redresseurs à l'Oxyde de Cuivre (The Effect of Thermal Treatments on the Characteristics of Copper Oxide Rectifiers).—L. Dubar, p. 279.
- Zur Wirkung der Gleichrichter (On the Action of Rectifiers).—W. Ch. van Geel, p. 513.
- Raddrizzatori elettronici (Electronic Rectifiers).—p. 397.
- Dry Plate Rectifier using Selenium or Sulphur.—Mallory, p. 224.
- Der Selengleichrichter (The Selenium Rectifier).—F. Noack, p. 164.
- New Selenium [Rectifier] Cell.—p. 337.
- The Practical Use of the Selenium Rectifier.—E. Schwandt, p. 279.
- On the Glow Discharge at the Active Electrode of an Electrolytic Rectifier.—J. S. Forrest, p. 164.
- Die Erzeugung von hochgespanntem Gleichstrom aus Drehstrom (The Production of High-Voltage D.C. from a Three-Phase Current [by a Mechanical Rectifier]).—W. Deutsch and W. Hoss, p. 279.
- The Constructional Development of the Commutator of the Jet Wave Rectifier.—J. Hartmann, p. 281.
- Gleichstrommaschinen zur Beseitigung von Gleichrichterstörungen I, II. (D.C. Motors for Smoothing the Output from Rectifier Plants, Parts I and II).—H. A. Rathke, p. 453.

- Vacuum [Rectifier and Relay] Tubes in Industry.—P. G. Weiller, p. 461.
- Ein gasgefüllter Kleingleichrichter mit Oxidglühkathode (A Small Gas-filled Rectifier with Oxide-coated Cathode).—M. Knoll, p. 279.
- On a Kenotron Rectifier with a Condenser.—D. V. Stepanov, p. 279.
- Mercury-arc Power Rectifier Auxiliaries and Accessories.—E. S. Waterman, p. 337.
- New Trends in Mercury Arc Rectifier Developments.—O. K. Marti, p. 164.
- New Design of Mercury Vapour Rectifier.—Oerlikon Company, p. 397.
- A Full-Wave Mercury-Vapour Rectifier Tube: a New Rectifier for Low-Power Supplies.—P. Schwerin, p. 395.
- Hot Cathode Rectifiers with Metallic Discharge Chambers, with Great Constancy of Output.—H. Wendt, p. 164.
- Glühkathoden-Gleichrichter für Hochspannung, insbesondere für Rundfunksender (Hot-Cathode Rectifiers for High Voltages, particularly for Broadcasting Transmitters).—A. Glaser: A.E.G., p. 393.
- Quecksilberdampf-Gleichrichter mit Glühkathode (Hot-Cathode Mercury Vapour Rectifiers).—A. Glaser: A.E.G., p. 625.
- Fortschritte auf dem Gebiete des Oxydkathoden-Gleichrichters (Progress in Oxide-Coated Cathode Rectifiers).—W. Gernerhausen, p. 164.
- Etat actuel de nos Connaissances sur l'Arc à Mercure à basse Pression (Present Knowledge of the Low Pressure Mercury Arc [as in Rectifiers]).—M. Leblanc: M. Demontvignier, p. 513.
- Mercury Arc Rectifiers for Radio Transmitters.—R. H. Osborn, p. 337.
- Rectifiers.—See also under "Properties of Circuits."
- Propriétés électriques du Contact Métal-Sulfure de Cuivre (Electrical [Rectifying] Properties of the Metal-Copper Sulphide Contact).—J. Cavrel, p. 337.
- Über Gleichrichterwirkungen an der Grenze von Kupferoxydul gegen aufgebrauchte Metallelektroden (On the Rectifying Actions at the Surface of Contact of Copper Oxide and Applied Metallic Electrodes).—W. Schottky, R. Störmer and F. Waibel, p. 451.
- The Rectifying Elements of Copper Oxide.—L. Dubar, p. 280.
- O meždufazovom drossle dlia moshchnih Kenotronnih ustanovok (On Interphase Reactors for High Power Thermionic Rectifying Systems).—M. I. Kontorovitch, p. 280.
- Relaxation Oscillations.—See under "Properties of Circuits."
- Sensitive Relay on the Rotating Clutch Principle.—Le Film Ozaphane, p. 628.
- Automatic Time-Delay Relay [for Plate Voltage of Mercury Rectifiers, etc.].—C. Huff, p. 513.
- Grid-glow Relay for Breaking 165 kW.—Westinghouse Co., p. 281.
- A Slow-Acting Vacuum Tube Relay.—D. Pollack, p. 165.
- Moving Magnetised Band or Disc as Delay-Action Relay.—S.F.R., p. 165.
- Use of a Thermic Flasher in a Relay Circuit [to avoid Sparking and Chattering in Gradual Working].—A. W. Stevenson, p. 50.
- Relays.—See also Switches.
- Negative Impedances and the Twin 2: Type Repeater.—G. Crisson, p. 627.
- Synthetic Resins: Their Uses as Insulator Material.—E. A. Bevan, p. 223.
- La Réalisation d'une Résistance pour les Mesures en très haute Tension (The Design of a Resistance [of Negligible Reactance and Capacity to Earth] for Measurements at Very High Voltages).—P. de la Gorce, p. 163.
- Variable Widerstände und ihre hydrodynamische Analogie (Variable Resistances and their Hydrodynamical Analogy).—R. Auerbach, p. 223.
- Über Hochfrequenzwiderstände (Resistances for High Frequencies).—M. Wien, p. 395.
- The Properties of Sputtered Metal Resistors.—L. C. Van Atta, p. 110.
- Theory of a Combined Series and Potentiometer Rheostat.—J. R. Nielsen: —, Dodge, p. 513.
- Rotating Condenser Device for Stepping up to High D.C. Potential.—A. Verigo, p. 281.
- An Apparatus for Obtaining High Speeds of Rotation.—J. W. Beams, p. 164.
- Rubber Vulcanised with Trinitrobenzene will not Tarnish Copper, Silver or Mercury.—Bureau of Standards, p. 51.
- The Versatility of Application of Selsyn Equipment.—R. A. Corby, p. 108.
- Coil Resistance Shunts: A Simple Graphical Construction.—W. A. Barclay, p. 629.
- The Electro-Optical Shutter and Spark Break-down.—F. G. Dunnington, p. 628.
- The Electro-Optical Shutter.—H. W. Washburn, p. 628.
- Générateur de F.E.M. étalonées sur Ondes courtes (Calibrated Source of High Frequency Potentials on Short Wavelengths [Signal Generator]).—P. David, p. 512.
- Signal Generator for Low Radio-Frequencies.—Brueske, p. 512.
- The Design and Construction of Standard Signal Generators.—C. J. Franks and M. Ferris, p. 512.
- The Design of Radio-Frequency Signal Generators.—J. R. Bird, p. 338.
- Sur la Résistivité électrique du Silicium (The Electrical Resistance of Silicon).—Ch. Bedel, p. 337.
- Smoothing.—W. T. Cocking, p. 224.
- Cold "Soldering".—M. C. Marsh, p. 165.
- Soldering Tungsten.—R. d'E. Atkinson, p. 109.
- Soldering Tungsten.—R. d'E. Atkinson, p. 109.
- A Method for Precise Speed Control Developed in Connection with an Absolute Measurement of Resistance.—F. Wenner and C. Peterson, p. 627.
- A Spherical Projection Chart for Use in the Study of Elliptically Polarised Light.—F. E. Wright, p. 51.
- Propriétés électriques des Métaux en Couches minces préparées par Projection thermique et cathodique (The Electrical Properties of Metals in Thin Films prepared by Thermal and Cathodic Sputtering).—F. Joliot, p. 623.
- Sur la Projection cathodique des Éléments, et Quelques Applications (Cathode Sputtering of the Elements and Some Applications).—F. Joliot, p. 626.
- Sputtering.—See also under "Miscellaneous."
- A new [Rotating Prism] Form of Stroboscope.—R. G. Standerwick, p. 51.
- The Mercury-Vapour Light of a Thyratron as a Powerful Stroboscopic Light Source.—H. F. Edgerton, p. 572.
- Current Oscillograms of the Surge Generator of the High-Voltage Laboratory of the Electro-Institute.—I. S. Stekolnikov, p. 338.
- The A.E.G. Continuous Surge Recorder.—A.E.G., p. 452.
- An Electrical Hair Trigger (6 Ampère, 220 Volt Vacuum Switch Using Elasticity of Corrugated Glass).—Siemens and Halske, p. 628.
- A Vacuum-tube Time Switch.—W. K. Kearsley, p. 338.
- Switches.—See also Relays.
- A Radio Method for Synchronising Recording Apparatus.—T. Parkinson and T. R. Gilliland, p. 337.
- Note on the Operability of a Synchronous Motor at the End of a Transmission Line.—W. H. Ingrant, p. 453.
- Copiatori di Movimenti a Distanza—Tele-indicatori (The Reproduction of Movements at a Distance—Teleindicators).—G. Sartori: Piazzoli, p. 452.
- Telemetering.—V. Janicki, p. 454.
- Discussion on Telemetering.—p. 454.
- Thermocouples Whose Elements are Longitudinally and Transversely Magnetised Wires of Nickel and of Iron.—W. H. Ross, p. 628.
- Herstellung von Thermoelementen aus dünnen Drähten (The Construction of Thermo-Elements from Thin Wires).—O. Kantorowicz and R. Reinecke, p. 109.
- Neue Strahlungsmessgeräte—Thermoelemente—von gesteigerter Empfindlichkeit und Einstellschnelligkeit (New Radiation Measuring Apparatus—Thermo-Elements—with Increased Sensitivity and Rapidity of Adjustment).—C. Müller, p. 453.
- Thermo-Junctions at High Radio-frequencies.—F. M. Colebrook, p. 572.
- A Thermometer for Precision Calorimetry.—T. C. Sutton, p. 338.
- A Compensated Thermopile for Measurements of Total Radiation.—J. Guild, p. 223.
- General Theory of Design and Construction of Sensitive Vacuum Thermopiles.—C. H. Cartwright, p. 109.
- Étude sur les Piles thermoelectriques (Research on Thermopiles: Part I.—Experimental. Part II.—Mathematical Theory).—J. Chappuis and A. Gouffé, p. 454.
- Ein neuer Thermoregulator für den Betrieb von adiabatischen Kalorimetern (A new Thermo-Regulator for the Control of Adiabatic Calorimeters).—H. Rieche and R. Grau, p. 512.
- A Thermostat Regulator.—E. O. Adams, p. 512.
- Magnifying Mechanism suitable for Thermostatic Control.—Erb, p. 338.
- The Use of Thyratrons for High Speed Automatic Counting of Physical Phenomena.—C. E. Wynn-Williams, p. 572.
- The Starting-Time of Thyratrons.—A. W. Hull and L. B. Snoddy, p. 572.
- Linear Time Scale for Voltage Range Up to 1,000 Volts.—C. K. Stedman, p. 336.
- Filament Transformer.—H. B. Dent, p. 338.
- Transformer Cores of Wound Strip.—Swendsen, p. 109.
- Audio-frequency Transformers [Comparison of Mumetal and Radiometal with Stalloy, chiefly as regards Magnetic Damage by Excessive Fields].—p. 627.
- Transient Currents in Transformers.—H. M. Turner, p. 222.
- A Note on the Timing of Electrically Independent Transient Circuits for High-speed Oscillographic Work.—L. B. Snoddy and J. C. Street, p. 337.
- An Experimental Method of Studying Transient Phenomena [using the "Transient Visualiser"].—H. M. Turner, p. 281.
- The Distortionless Amplification of Electrical Transients [for Oscillograph Work].—Oatley, p. 442.
- The Heating of Dielectrics in an Ultra-High-Frequency Field.—Pätzold, p. 39.
- Marconi Undulator Type U.G.6a.—Marconi Company: J. A. Smale, p. 223.
- Réalisation d'un Éjecteur à Vapeur de Mercure (A Mercury Vapour Ejector, its Design and Properties [for High Vacuum]).—P. Ansiau, p. 280.
- A Rotary Pump for High Vacuum.—Pulsoneter Eng. Co., p. 222.
- Eine automatische Alarmvorrichtung bei Ausfrigergefässen von

- Hochvakuumapparaturen (An Automatic Alarm Device for Cooling Chambers of High Vacuum Apparatus).—J. Obrist, p. 512.
- Elektrometrische Messungen sehr kleiner Hochvakuumdrucke mit Hilfe von Ionisationsströmen: das Raumladungsmanometer (Electrometer Measurements of Very Small High-Vacuum Pressures with the Help of Ionisation Currents: the Space Charge Manometer).—W. Molthan, p. 108.
- Low Vacuum Pressure Control Apparatus.—L. A. Richards, p. 222.
- A Direct-Reading Electrical Vacuum Meter.—M. Wellauer, p. 51.
- Ein fettfreies Glasventil (A Greaseless Glass Valve).—M. Bodenstein, p. 51.
- A Device for Obtaining Very Small Electric Currents of Known Magnitude.—L. P. Smith, p. 512.
- The Measurement [by a Point-to-Plate Spark Gap] of the Voltage Operating a Self-Rectifying X-Ray Tube.—C. V. Kent, p. 222.
- Voltage Compensator.—Sola Corporation, p. 163.
- Photoclectric Master Voltage Control, used in Valve Test Rooms.—W. P. Koehel, p. 228.
- A Magnetically Operated A.C. Voltage Control Device.—J. G. Sola, p. 223.
- Die elektrische Spannungsregelung mittels Kohledruck-Widerständen (Voltage Regulation by Varying-Pressure Carbon Resistances).—H. Grob, p. 108.
- A Vacuum-Tube Voltage Regulator for Alternators.—L. C. Verman and L. A. Richards, p. 110.
- A Vacuum-Tube Voltage Regulator [for A.C., combining Short-Circuit Protection].—L. C. Verman and L. A. Richards, p. 628.
- Use of the Thyatron as a Voltage Regulator.—H. W. Dodge and C. H. Willis, p. 626.
- The "Rectron" Fully-Automatic Mains Voltage Regulator.—Rectron Company, p. 452.
- Voltage Regulators, "Rectox" and others, at the Paris Exhibition.—p. 452.
- A.C. Voltage Stabiliser Maintaining Constant Output Voltage for Input Variations of $\pm 30\%$.—Soc. Electro-Constructives, p. 628.
- A Voltage Transformer for use in the Measurement of Small Voltages.—A. H. M. Arnold, p. 282.
- Ein neuer Spannungswandler für Höchstspannungen (A New Voltage Transformer for Extremely High Potentials [for Measuring Purposes: Biermann's System]).—J. Goldstein; Biermann, p. 626.
- Wave-Form of Pulsating D.C. Currents Produced by FG-67 Thyratrons.—W. B. Nottingham, p. 572.
- Note on the Use of the Cyclogram for the Determination of Wave-Form.—Win. Cramp, p. 164.
- Über einen Apparat zur Erzeugung von tonfrequenten Wechselströmen mit rechteckiger Kurvenform (An Apparatus for the Generation of Audio-frequency A.C. of Rectangular Wave-Form).—W. Keil and R. Sewig, p. 281.
- The Generation of [Large] Current Pulses of Rectangular Wave-Form [By the use of Thyratrons and an Oscillatory Timing Circuit].—A. J. Maddock, p. 512.
- A Simple Method of Dissolving the Silver Coating of Wollaston Wire.—A. Rostagni, p. 628.
- Woods for Insulation.—A. R. Dunton and A. W. Muir, p. 223.

STATIONS, DESIGN AND OPERATION.

- Type A.V.M.s Set for Military Aeroplanes.—Soc. Franç. Radio-Elec., p. 110.
- Wireless Communication in Africa.—p. 515
- Wireless Communications for Africa: A Chain of New Marconi Stations.—p. 573.
- Aircraft Radio Development.—Bell Laboratories, p. 338.
- Improvements to the Aircraft Set Type A.V.L.10.—Soc. Franç. Radio-Elec., p. 455.
- Radio Telephone Equipment for Airplanes.—D. K. Martin, p. 283.
- A Modern Broadcasting Station [Beresfield, Australia (2NC)].—R. Lawson, p. 573.
- Aviation Communication.—J. S. Richardson, p. 166.
- European Aviation Radio.—G. C. Gross; L. M. Hull, p. 338.
- Les Ondes courtes dans l'Aviation (Short Waves in Aviation).—R. Hermann and P. Grenier, p. 629.
- Funktechnik und Luftverkehr (Wireless Technique and Aviation).—H. Schmidt-Reps., p. 110.
- La Collaboration de la T.S.F. et de l'Aviation (The Collaboration between Wireless and Aviation).—P. Marty, p. 398.
- Fragen und Ziele der Flugsicherung (The Problems and Objectives of Aids to Aviation).—R. Benkenburg, p. 455.
- Radiodiffusion en France de l'Atterrissage des Aviateurs Costes et Bellonte aux États-Unis (Broadcasting, in France, of the Account of the Landing in the U.S.A. of the Aviators Costes and Bellonte).—C. Platrier, p. 53.
- Das "Haus des Rundfunks" in Berlin ("Broadcasting House," Berlin).—p. 283.
- Die rufunktechnischen Einrichtungen im neuen "Haus des Rundfunks" in Berlin (The Broadcasting Installations in the new Berlin "Broadcasting House").—G. Lubzynski and K. Hoffmann, p. 455.
- Field Strengths of the Bombay Broadcasting Station.—Doraswami and Kantelet, p. 283.
- The Radio Communication Services of the British Post Office.—A. G. Lee, p. 52.
- Basis Established by the Federal Radio Commission for the Division of Radio Broadcast Facilities Within the United States.—p. 165.
- Broadcast Program Protection.—W. A. R. Brown, p. 165.
- New Wave-changes, New Broadcast Stations, Interval Signals, etc.—p. 339.
- Some Developments in Broadcast Transmitters.—I. J. Kaar and C. J. Burnside, p. 53.
- The Propagation of Broadcast Waves [particularly Fading Phenomena].—Bohm, p. 605.
- Messung und Betriebsüberwachung von Rundfunkfernleitungsnetzen (The Testing and Service Inspection of Line Networks for Broadcasting).—L. Fenyö and H. Hofmann, p. 630.
- Die Leitung im Dienste des Rundfunks (Land Lines and Cables in the Service of Broadcasting).—K. Höpfner, p. 630.
- Low-frequency High Power Broadcasting as applied to National Coverage in the United States.—W. H. Wenstrom, p. 514.
- Ten Years of Broadcasting.—C. W. Horn, p. 339.
- Radiation Measurements of Klagenfurt, Linz, Stuttgart and Witzleben Broadcasting Stations.—Thomson and Thierer, p. 339.
- Federal Radio Commission on Carrier Power [for Broadcasting Stations].—p. 629.
- Un nouveau Poste de Radiodiffusion à grande Puissance (A New High Power Broadcasting Transmitter).—D. B. Mirk, p. 53.
- A Wireless Broadcasting Transmitting Station for Dual Programme Service.—P. P. Eckersley and N. Ashbridge, p. 53.
- Field Strength Contour Map of the Calcutta Broadcasting Station.—Rakshit, p. 225.
- Wireless Developments in Canada.—p. 111.
- Von Ardenne's Scheme for Distant Broadcast Reception in Cities.—W. Runge, p. 110.
- Die grundsätzlichen Schwierigkeiten bei der Feldverstärkung (The Fundamental Difficulties in Field Strengthening [Distant Reception in Cities]).—M. von Ardenne, p. 224.
- Eine Methode zur Schaffung guter Empfangsverhältnisse für den Rundfunk in der Grossstadt (A Method of Ensuring Good Broadcast Reception Conditions in a Large City).—M. von Ardenne (see also Schwandt, p. 224), pp. 52 and 165.
- Some Developments in Common Frequency Broadcasting.—G. D. Gillett, p. 573.
- Common Frequency Broadcasting Development.—G. D. Gillett, p. 283.
- Synchronized [Common Wave] Broadcasting Successful in Six-Month Test.—p. 339.
- Moderne quartzgesteuerte Gleichwellensender (Modern Quartz-controlled Common Wave Broadcasting Transmitters).—F. Gerth and W. Hahnemann, p. 397.
- Le problème de l'onde unique en Téléphonie sans fil (The Problem of Common Wave Working in Wireless Telephony).—R. Moens and M. Cosyns, p. 454.
- Common Wave Broadcasting.—See also Simultaneous, Synchronism.
- Field Strength Measurements on Daventry 5XX.—Naismith, p. 376.
- Field Strength Measurements on Daventry 5XX.—Naismith; Reyner, p. 491.
- The Marconi Dory Transmitter [Emergency: with Automatic Call Letters Transmitting Device].—Marconi Company, p. 53.
- Local Amplification of Field Strength.—E. Schwanitz, p. 224.
- Les Mesures d'Intensité de Champ et leur Application pratique (Field Strength Measurements and their Practical Application).—S. Lenoire, p. 165.
- Accurate Radio Frequency Transmissions on 5,000 kc.—Notes from the U.S. Bureau of Standards, p. 339.
- Standard Frequency Station W1XP of the A.R.R.L. System.—H. A. Chinn, p. 339.
- The New German Broadcasting Stations: Interference and Fading Troubles of Mühlacker: Description of the Heilsberg Station, etc.—p. 225.
- Der deutsche Kurzwellen-Weltgrundfunksender (The German Short Wave "World" Broadcasting Station [Zeeseen, near Königswusterhausen]).—W. Meyer, p. 110.
- Suggested Lay-out of a Transmitting Station to avoid the Radiation of Harmonics.—Ditcham, p. 63.
- The Heilsberg High Power Broadcasting Station.—p. 283.
- Telephone Transmitting Equipment on Board the "Homeric".—p. 498.
- Radio Station Interference.—C. R. Stoner, p. 573.
- La Réunion de l'Union internationale de Radiodiffusion à Semmering 2 au 14 Février, 1931 (The Meeting of the International Broadcasting Union at Semmering).—p. 573.
- The Role of Radio in Growth of International Communication.—H. H. Buttner, p. 225.
- Pausen und Zeitangaben (Interval Signals and Time Signals [in Broadcasting]).—K. Banerjt, p. 339.
- KDKA's New 400 kw. Transmitter.—A. Dinsdale, p. 398.
- The Ljubljana Broadcasting Station.—M. Osana, p. 165.
- La Liaison Radiotéléphonique Madrid-Buenos-Aires (The Madrid-Buenos Aires Telephone Service).—E. M. Deloraine, pp. 110 and 166.
- Micro-Ray.—See Ultra-Short-Waves.
- Desert Mobile Wireless Telegraph Stations [20-50 and 600-2,150 Metre Waves] for the Egyptian Government.—Marconi Company, p. 53.
- A Meter for Indicating 100 per Cent. Modulation.—G. F. Lampkin, p. 515.

- Betriebskontrolle von Kurzwellensendern (The **Monitoring of Short Wave Transmitting Stations**).—H. Mögel, pp. 52 and 110.
- Monitoring the Operation of Short-Wave Transmitters**.—H. Mögel, p. 283.
- Grossrundfunksender Mühlacker (The **Mühlacker High Power Broadcasting Station**).—W. Meyer, p. 165.
- Overseas Radio Extensions to Wire Telephone Networks**.—L. Espenschied and W. Wilson, pp. 283 and 454.
- Overseas Radio Telephone Service: Lost Circuit Time Analysed**.—F. A. Cowan, p. 573.
- Les Liaisons régulières radiotéléphoniques entre l'Observatoire météorologique du Pic du Midi et la Plaine (The Establishment of Constant Radio-telephonic Communication between the Pic du Midi Meteorological Observatory and the Plain [Short and Ultra-Short Waves]).—H. Garrigue, p. 513.
- Rasin at Work: Good Crystal Reception from the New Transmitter All Over Po. and.—p. 283.
- Das Polizei-Funknetz Ungarns (The Hungarian Police Wireless Network).—A. Szentirmai, p. 111.
- The Quartz-controlled **Pontoise** Transmitter.—Bigogne and Vigneron, p. 166.
- Circuit Equipment for **Program Distribution**.—R. A. Leconte, p. 339.
- Underground Circuits for the Transmission of **Broadcast Programmes**.—A. C. Timmis and C. A. Beer, p. 166.
- Die Übertragung von Rundfunkprogrammen auf Kabelleitungen (The Transmission of Broadcasting Programmes Over Cables).—H. F. Mayer, p. 630.
- Radio Telephony: a Year of Achievement—Opening of Ship and Shore, Australian and South American Services**.—H. Faulkner, p. 166.
- The **RCA World-Wide Radio Network**.—A. A. Isbell, p. 110.
- Multiple **Re-Broadcast**.—p. 224.
- Rebroadcasting Distant Transmission**.—G. W. O. H.: von Ardenne, p. 224.
- R. C. A. Diversity Receiving System for **Re-Broadcasting**.—Peterson, Beverage and Moore, p. 398.
- Re-diffused Radio**.—P. P. Eckersley: Rediffusion, Ltd., p. 514.
- Rugby G.P.O. Radio Station**.—p. 110.
- Recent Developments in Radio Telephony [The **Rugby Short Wave Equipment**].—p. 110.
- Radio Telephony at the **Rugby Station**.—p. 110.
- Gewaltige Sendereubauten in Russland (Huge New Station Construction in **Russia**).—p. 166.
- Dichte der kommerziellen Kurzwellenstationen (World) Density of **Commercial Short Wave Stations**.—E. Quack and H. Mögel, p. 110.
- Der gegenwärtige Stand der Kurzwellentechnik (The Present Position of **Short Wave Technique**).—E. Wolf, p. 110.
- On the **Simultaneous Operation of Different Broadcast Stations on the Same Channel**.—P. P. Eckersley, p. 283.
- Broadcasting by High Power Stations with Aerials giving No **Space Wave**.—Lorenz Company, p. 514.
- Stockholms Nya Rundradestation (The New **Stockholm Broadcasting Station**).—S. Lemoine and E. Magnusson, p. 455.
- The **Strasbourg Broadcasting Station**.—p. 110.
- Studios**.—See under "Acoustics and Audio-frequencies."
- Field Strength Measurements of 2FC, **Sydney, N.S.W.**—Tippet and Baker, p. 165.
- A Radio Field-Strength Survey within One Hundred Miles of **Sydney**.—W. G. Baker and O. O. Pulley, p. 629.
- Synchronism of Broadcast Stations**.—p. 398.
- The Importance of Phase Control in **Synchronizing Common Wave Broadcasting**.—C. W. Horn, p. 165.
- New **Telephony System**.—p. 454.
- The Radio Telephony **Terminal**.—W. H. Scarborough, p. 339.
- Terminal Equipments for Short Wave Point to Point Radio Links**.—F. de Fremery and P. R. Thomas, p. 110.
- [Broadcast] **Wireless on Trains**.—p. 166.
- Ultra-Short-Wave Broadcasting**.—German State P.O.: E. Rhein, p. 89.
- Vierfachrundfunk auf einer Ultrakurzwellen (Multiple Broadcasting on One **Ultra-short Wave**).—M. von Ardenne, p. 52.
- Ultra-Short-Wave Broadcasting: Latest Progress**.—p. 224.
- Ultra-Short-Wave Broadcasting**.—E. Schwandt, p. 397.
- Vorarbeiten für den künftigen Ultrakurzwellen-Rundfunk (Development Work for Future **Ultra-Short-Wave Broadcasting**).—E. Schwandt: Schröter: Leithäuser, p. 514.
- Ultrakurzwellen-Rundfunk (**Ultra-Short-Wave Broadcasting**).—F. Schröter, p. 629.
- Das Mikrostrahlensystem (The **Micro-Ray System [Ultra-Short-Wave Beam Tests, Dover-Calais]**).—p. 573.
- Ultra-Short-Wave Equipment for Tanks and Armoured Cars**.—Marconi Co., p. 110.
- Ultra-Short-Wave Radio-telephonic Service France-Corsica**.—Beauvais, p. 32.
- Der heutige Stand der Ultrakurzwellen-Technik (The Position Today of **Ultra-Short-Wave Technique**).—K. Sohnemann, p. 629.
- Berlin **Ultra-Short-Wave Transmissions Suspended**.—Telefunken Company, p. 514.
- Ultra-Short-Wave Working in Moscow and Suburbs**.—Shmakov, p. 339.
- Rundfunk auf Kurzwellen (**Broadcasting on [Ultra] Short Waves**).—F. Meissner and M. Libau, p. 110.
- Ultra-Short Waves for Broadcasting**.—G. Leithäuser, p. 514.
- Zur Technik des Sendens und Empfangens von Ultrakurzwellen, die mit mehreren modulierten Hochfrequenzen moduliert sind (On the Technique of Transmission and Reception of **Ultra-Short Waves Modulated with Several Modulated High Frequencies**).—M. von Ardenne, p. 224.
- Der derzeitige Stand der Entwicklung der ultra-kurzen Wellen unter Berücksichtigung ihrer Verwendungsmöglichkeiten für Rundfunkzwecke (The Present Position in the Development of the **Ultra-Short Waves**, with regard to their Practical Possibilities for Broadcasting).—F. Gerth, p. 397.
- Telephony on [**Ultra-Short Waves of**] 18 Centimetres.—I. T. and T. Laboratories, p. 339.
- U.R.S.I. Cosmic Data Broadcasts**.—p. 53.
- Latest Developments of Service and Technique in Telephony in the **U.S.A.**.—K. Höpfer, p. 110.
- The **Vatican Wireless Station**, p. 573.
- The **Warsaw Broadcasting Transmitter**.—W. T. Ditcham, p. 53.
- Wireless Communications**.—Chetwode Crawley, p. 224.

GENERAL PHYSICAL ARTICLES.

- Bestimmung der adsorbierten Gashaut an metaloberflächen durch Wägung (Determination by Weighing of the **Adsorbed Gaseous Layer on Metal Surfaces**).—I. Strohhacker, p. 166.
- Untersuchung des Einflusses adsorbierter Gase auf den Hochfrequenzwiderstand eines Platindrähtes (Investigation of the Influence of **Adsorbed Gases on the High Frequency Resistance of a Platinum Wire**).—H. Dobretsenberger, p. 166.
- Sur la Désintégration artificielle de l'Aluminium (The Artificial Disintegration of **Aluminium**).—M. de Broglie and L. Leprince-Ringuet, p. 631.
- The **Annihilation of Matter**.—J. H. Jeans, p. 515.
- Observations d'une Émission particulière par la Cathode métallique refroidie d'un Arc électrique (Observations on a Peculiar Emission from the Cooled Metallic Cathode of an **Electric Arc**).—G. Laudet, p. 340.
- On the Fraction of Current carried by Electrons at the Cathode of a Mercury **Arc**.—K. T. Compton, p. 456.
- The Distribution of Electrons in the **Atom**.—L. Goldstein, p. 111.
- Sur la Mécanique quantique des Chocs atomiques (The Quantum Mechanics of **Atomic Collisions**).—L. Goldstein, p. 398.
- On the Charge Distribution and Diamagnetic Susceptibility of **Atoms and Ions**.—G. W. Brindley, p. 340.
- Ein Kathodenoszillogramm des Durchschlags bei statischer Spannung (A Cathode-Ray Oscillogram of **Breakdown** with Static Voltage).—W. Rogowski and A. Kleinperer, p. 53.
- Luftdurchschlag und Überschlag mit Wechselspannung von 50 und 100,000 Hertz (**Breakdown and Flash-over in Air with Alternating Voltage at 50 and 100,000 c.p.s.**).—J. Kamphulte, p. 226.
- Optische Untersuchung der Funkenzündung in Luft von Atmosphärendruck mittels des Kerreffektes (Optical Investigation of **Sparking Breakdown in Air at Atmospheric Pressure using the Kerr Effect**).—L. v. Hämö, p. 226.
- Positive Ionen mit hohen Ionisierungsvermögen und deren Einfluss auf dem elektrischen Durchbruch in Luft (Positive Ions of High Ionising Power and Their Influence on **Electrical Breakdown in Air**).—O. Mayr, p. 54.
- Der elektrische Durchschlag von Luft im inhomogenen Felde (Electrical **Breakdown of Air in an Inhomogeneous Field**).—E. Marx, p. 167.
- Über den Durchschlag flüssiger Isolierstoffe (On the **Breakdown of Liquid Insulators**).—F. Koppelman, p. 111.
- The Effect of Field Strength and Free Electrons on the **Breakdown Time of Spark Gaps [Lichtenberg Figure Methods]**.—J. A. Tiedeman, p. 455.
- Über die Druckabhängigkeit der Durchschlagsspannung bei dielektrischen Flüssigkeiten (On the Dependence of the **Breakdown Voltage of Dielectric Liquids on Pressure**).—H. Eder, p. 53.
- Durchschlagsspannung und Bestrahlung (**Breakdown Voltage and Irradiation**).—K. Masch, p. 226.
- On the Theory of the **Brownian Motion**.—G. E. Uhlenbeck and L. S. Ornstein, p. 167.
- The Potential of the Walls in the **Cathode Dark Space** [and the Determination of Townsend's Ionisation Coefficient for Electrons].—J. W. Beck and K. G. Emelius, p. 225.
- 500 Kilovolt **Cathode Rays**.—R. E. Volbrath, p. 631.
- Zur Theorie des elektrischen Kontaktes (On the Theory of the **Electric Contact**).—W. Ehrenberg and H. Honl, p. 515.
- The Distribution of Electricity near the Surface of **Contact of Two Conductors [Theoretical Investigation]**.—A. T. Waterman, p. 515.
- Contact Potential between Iron and Nickel**.—G. N. Glasoe, p. 225.
- Untersuchungen über Kontaktpotentiale. II. Ein Versuch zur Bestimmung der Potentialdifferenzen zwischen Salzen und ihren gesättigten Lösungen (Investigations on **Contact Potentials**. II. Experimental Determination of the Potential Differences between Salts and their Saturated Solutions).—Marianne Lederer, p. 225.
- Untersuchungen über Kontaktpotentiale etc. (Investigations on

- Contact Potentials.** I. Experimental Measurement of the Contact Potentials between Metals and Insulators.—F. Polednik, p. 225. Untersuchungen über Kontaktpotentiale. III.—Zur Theorie der Kontaktpotentiale (Investigations on Contact Potentials. III.—On the Theory of Contact Potentials).—R. Fürth, p. 515.
- Prüfung zweier Verfahren zur Bestimmung von Kontaktspannungen an Halbleitern (Test of Two Methods for the Determination of Contact Potentials at Semi-Conductors).—G. Mönch, p. 515.
- Cosmic Rays.**—See under "Atmospherics and Atmospheric Electricity."
- Indeterminacy of Coulomb's Law.**—G. Lemaître, p. 631.
- On the Combined Effects of the Internal Electric Field of a Uniaxial Crystal and of a Magnetic Field Normal to the Optical Axis.—J. Becquerel and L. Matout, p. 574.
- New Interpretation of the Magneto-Electric Effect on the Polarising Action of Crystals.—J. Becquerel and L. Matout, p. 630.
- Experimental Researches on the Magnetic Properties of Crystals: Contribution to the Measurement of Magnetic Fields [the Direct-reading Crystal "Gaussmeter"].—G. Dupouy, p. 455.
- Zur Theorie der gedämpften Schwingungen (The Theory of Damped Oscillations).—V. S. Vrkljan, p. 285.
- The Complex Nature of Dielectric Absorption and Dielectric Loss.—E. J. Murphy and H. H. Lowry, p. 111.
- The Dielectric Constant of Carbon Dioxide as a Function of Temperature and Density.—F. G. Keyes and J. G. Kirkwood, p. 111.
- Untersuchungen über den Einfluss starker elektrischer Felder auf die Dielektrizitätskonstante von Flüssigkeiten (Experimental Investigations on the Influence of Strong Electric Fields on the Dielectric Constants of Liquids).—H. Gündermann, p. 111.
- Über den allgemeinen Charakter und die Gestalt, etc. (On the general Character and the Form of the Formula for the Dielectric Constant of Inhomogeneous Mixtures).—A. Piekara, n. 111.
- The Intramolecular Field and the Dielectric Constant.—F. G. Keyes and J. G. Kirkwood, p. 285.
- Recent Dielectric Constant Theory and its Relation to Problems of Electrical Insulation.—J. W. Williams, p. 455.
- Zur Deutung der Stromleitung in dielektrischen Flüssigkeiten bei hohen Feldern (On the Meaning of the Conduction of Current in Dielectric Fluids under Strong Fields).—A. Nikuradse, p. 340.
- A Search for the Source of Dielectric Polarization.—R. D. Bennett, p. 111.
- Dielektrische Eigenschaften der Seignettesalzkristalle (Dielectric Properties of Crystals of Seignette Salt—Sodium Potassium Tartrate).—P. Kobeko and J. Kertschatov, p. 284.
- Contribution to the Theory of Dielectrics.—G. Guéhen, p. 284.
- Theory of Dielectrics.—G. Guéhen, p. 631.
- Dipoles in Relation to the Anomalous Properties of Dielectrics.—S. Whitehead, p. 111.
- The Conduction of Electricity in Liquid Dielectrics.—D. H. Black and K. H. Nisbet, p. 111.
- X-Ray Studies of Motions of Molecules in Dielectrics under Electric Stress.—R. D. Bennett, p. 455.
- Application of Gauss's Theorem and Coulomb's Law to the Surfaces of Separation in Dielectrics.—A. K. Kotelnikoff, p. 340.
- Electromotive Force of Dielectrics.—K. Lark-Horowitz, p. 340.
- Properties of Dielectrics in Electric Fields.—G. L. Addenbrooke, p. 399.
- Theory of Dielectrics.—J. H. J. Poole, p. 455.
- On the Interpretation of Dirac's α Matrices.—G. Breit, p. 284.
- On a Generalised Problem of Dirichlet.—M. Brelot, p. 111.
- The Spectra of the Corona Discharge.—H. Oyama, p. 456.
- Measurement of Space-Potential in High Frequency Discharge.—D. Banerji and R. Ganguli, p. 168.
- The Problem of the Mechanism of Spark Discharge.—L. B. Loeb, p. 168.
- Electrical Discharge in Gases.—K. Schaposhnikof, p. 456.
- Oscillations and Travelling Striations in an Argon Discharge Tube.—T. C. Chow, p. 456.
- The Propagation of Luminosity in Discharge Tubes.—J. W. Beams, p. 188.
- Oscillations in Discharge-Tubes and Allied Phenomena.—J. J. Thomson, p. 283.
- Oscillations in Discharge-Tubes.—W. L. Brown and H. McN. Cowan, p. 630.
- High-Frequency Discharges in Mercury, Helium and Neon.—C. J. Brasefield, p. 340.
- Décharges de haute fréquence dans l'Azote en présence du Mercure (H.F. Discharges [λ to m.] in Nitrogen in the Presence of Mercury).—R. Zouckermann, p. 340.
- High Frequency and Direct Current Discharges in Helium.—F. L. Jones, p. 340.
- The Mechanism of Spark Discharges.—J. Slepian, p. 168.
- Mechanische Verformungen durch elektrische Entladungen (Mechanical Deformations produced by Electrical Discharges).—O. Bethge, p. 456.
- Electronic Velocities in the Positive Column of High Frequency Discharges.—E. Hedemann, p. 456.
- The Fall of Potential in Condensed Discharges.—J. C. Street, p. 456.
- Uniform Columns in Electric Discharges.—J. S. Townsend, p. 456.
- High-Frequency Oscillations in Surface Discharges.—T. Nishi and K. Ikeda, p. 631.
- The Sparking Potential of Air for High-Frequency Discharges.—Gill and Donaldson, p. 607.
- Gasentladungen bei sehr hohen Frequenzen (Gas Discharges at Very High Frequencies).—L. Rohde, p. 630.
- Discharges.—See also under "Phototelegraphy" and "Atmospherics" (Spark).
- The Rôles of Discrete and Continuous Theories in Physics.—A. Ruark, p. 340.
- Sulla Relazione $E = h\nu$ nella Meccanica ondulatoria (On the Relation $E = h\nu$ in Wave Mechanics).—E. Persico, p. 226.
- Frequency Variations due to the Electrodeless Discharge.—J. T. Tykociner and J. Kunz, p. 284.
- Sur un nouvel Aspect de la Décharge en haute Fréquence (A New Phenomenon in the Electrodeless Discharge).—M. Chenot: G. Ferrié, p. 166.
- Sur la Théorie de la Décharge sans Électrode (On the Theory of the Electrodeless Discharge).—F. Esclangon, p. 515.
- Electrodeless Discharge at Ultra-High Frequencies.—Esclangon p. 630.
- Intensities of the Magnetic and Electric Illumination Components in the Electrodeless Discharge.—C. T. Knipp, p. 515.
- Relative Intensities of the Magnetic and Electrostatic Illumination Components in the Electrodeless Discharge.—C. T. Knipp, p. 515.
- Possible Direct Reading Methods for Measuring the Current in the Electrodeless Discharge.—C. T. Knipp, p. 630.
- The Electrodeless Discharge in Mercury Vapor.—H. Smith, W. A. Lynch and N. Hilberry, p. 515.
- Electrodeless Discharge Characteristics of Hydrogen and Nitrogen.—O. Stuhlman, Jr. and H. Zur Burg, p. 630.
- Current, Pressure and Frequency Relationships for the Initiation and Maintenance of the Electrodeless Glow Discharge.—M. L. Braun, p. 168.
- Neue Untersuchungen über die elektrolytische Ventilwirkung. I. Die Oxydschicht des Tantals (Recent Investigations of the Electrolytic Valve Effect. I. The Oxide Layer of Tantalum).—A. Güntherschulze and H. Betz, p. 515.
- A Determination of e/m for an Electron by Direct Measurement of the Velocity of Cathode Rays.—Charlotte T. Perry and E. L. Chaffee, p. 167.
- Direct Determination of the Volume of an Electron.—V. Posejpal, p. 167.
- Die spezifische Ladung des Elektrons (The Specific Charge on the Electron).—F. Kirchner, p. 226.
- Les Lois de Variation, avec le Milieu, de la Charge massique de l'Électron et de l'Intensité d'un Courant électrique (The Laws of Variation, with the Medium, of the Mass Charge of the Electron and of the Intensity of an Electric Current).—L. Genillon, p. 399.
- Die verallgemeinerten Kugelfunktionen, etc. (Generalised Spherical Harmonics and the Wave Functions of an Electron in the Field of a Magnetic Pole).—I. Tamir, p. 631.
- Über die Bestimmung der spezifischen Ladung des Elektrons aus Geschwindigkeitsmessungen (On the Determination of the Specific Charge on the Electron from Velocity Measurements).—F. Kirchner, p. 631.
- Fadenförmige, sichtbare Elektronenstrahlen (Visible Filiform Electron Beams).—E. Brüche and W. Ende, p. 167.
- Elektronenaustausch langsamer Ionen, II (Electron Exchange by Slowly Moving Ions, II).—H. Fallmann and B. Rosen, p. 168.
- L'Introduction de l'Échange dans la Statistique d'un Gaz d'Électrons (The Introduction of Exchange in the Statistics of an Electron Gas).—L. Goldstein, p. 226.
- Sur le Calcul graphique des Grandeurs attachées à l'Électron en Mouvement (The Graphical Calculation of the Magnitudes associated with the Electron in Motion).—G. Fournier, p. 226.
- Electronic Emission from a Metal Target Bombarded with Positive Ions.—C. L. Utterback and W. Geer, p. 167.
- Théorie électronique de l'Éther, de la Lumière, de l'Électromagnétisme et de la Gravitation (The Electronic Theory of the Ether, Light, Electro-Magnetism and Gravitation).—A. Vironnet, p. 455.
- Wave Mechanics of Deflected Electrons.—C. Eckart, p. 167.
- Distinction between Contact-Potential Effects and True Reflection Coefficients for Low-Velocity Electrons.—H. E. Farnsworth and V. H. Goerke, p. 167.
- Action of High Speed Electrons on Methane, Oxygen and Carbon Monoxide.—J. C. McLennan and J. V. S. Glass, p. 168.
- Sur la Capture d'Électrons par des Ions positifs (The Capture of Electrons by Positive Ions).—J. L. Destouches, p. 225.
- Quantum-Mechanical Motion of Free Electrons in Electromagnetic Fields.—E. H. Kennard, p. 285.
- Remarks on some Publications of Ramsauer and of Franck and Jordan [on the Mean Free Path of Electrons in Gases].—V. A. Bailey, p. 455.
- Die Theorien von G. Hertz über die Bewegungen langsamer Elektronen in Gasen (The Theories of G. Hertz on the Movements of Slow Electrons in Gases).—V. A. Bailey, p. 455.
- The Motion of Electrons in a Homogeneous Electrostatic Field Bounded on Both Sides.—S. Sczenziowski, p. 631.
- On the Electrostatic Field due to an Electrified Conductor within a Tube or Channel.—Y. Miyamoto, p. 456.
- The Resultant and Resultant Moment of the Electrostatic Pressures in a Plane Field, Calculated by Analogy with the Hydrodynamic Pressures on the Surface of an Immersed Solid.—A. Masotti, p. 631.
- Über ein Gesetz, das verschiedene Eigenschaften ferromagnetischer

- Kristalle miteinander verknüpft (A Law Linking up Various Properties [Magnetostriction, Internal Energy Density, etc.] of **Ferromagnetic Crystals**).—N. S. Akulov, p. 53.
- The Hall Effect and the Magnetic Properties of Some **Ferromagnetic Materials**.—E. M. Pugh, p. 167.
- Ferromagnetismus und elektrische Eigenschaften. II. Mitteilung. Die Deutung der magnetischen Widerstandserhöhung ferromagnetischer Elektronenleiter (**Ferromagnetism and Electrical Properties**). II. The Interpretation of the Magnetic Increase of Resistance of Ferromagnetic Conductors.—W. Gerlach, p. 574.
- Irrational Motion of a Compressible Inviscid Fluid.—H. Bateman, p. 225.
- Forced Vibrations** with Combined Viscous and Coulomb Damping [Mathematical Investigation].—J. P. D. Hartog, p. 54.
- On the **Fundamental Constitutive Equations** in Electromagnetic Theory.—C. Kapan and F. D. Murnaghan, p. 54.
- Gamma Rays** from Potassium.—F. Behounek; W. Kolhörster, p. 167.
- The Conductivity of **Gases** in Uniform Electric Fields.—McCallum and L. Jones, p. 608.
- Or the Distribution of Space-Potential in High-Frequency **Glow Discharge**.—D. Banerji and R. Ganguli, p. 284.
- Or the Distribution of Electric Force and Rise of Temperature in the **Glow Discharge**.—J. M. Holm, p. 340.
- Oscillations in the **Glow Discharge** in Argon.—G. W. Fox, p. 455.
- Sur le Calcul et la Mesure des Champs électromagnétiques dans un Univers non Euclidien. Expression, etc. (The Calculation and Measurement of Electromagnetic Fields in a Non-Euclidean Universe. Electro-magnetic Equation for the **Gravitational Forces** acting on Electrified Particles).—M. Morand, p. 166.
- Classical and Modern **Gravitational Theories**.—A. Press, p. 284.
- The Production of **High Speed Canal Rays** Without the Use of High Voltages.—E. O. Lawrence and D. H. Sloan, p. 225.
- Researches on the Thermodynamics of **Hysteresis**.—A. Guilbert, p. 349.
- Neue Unbestimmtheitseigenschaften des elektromagnetischen Feldes (New Properties of **Indefiniteness** of the Electromagnetic Field).—P. Jordan and V. Fock, p. 284.
- Was ist ein Isolator? (What is an **Insulator**?)—A. Meissner, p. 112.
- Sopra un Esempio di Trattazione quantistica di un Fenomeno di Interferenza (An Example of the Quantistic Treatment of an **Interference Phenomenon**).—G. Racah, p. 226.
- Theorie der intermittierenden Wirkung und ultrarotes Bandenspektrum (The Theory of **Intermittent Action**, and the Infra-red Band Spectrum).—K. C. Kar and B. Biswas, p. 111.
- The Elementary Processes of **Tonisation** by the Impact of Material Particles: Comprehensive Survey and Long Bibliography.—H. Kallmann and B. Rosen, p. 631.
- The Propagation Phenomena in **Gases Ionized** by Very High Frequency Discharges.—Chenot, p. 261.
- Calcolo statistico dello Spettro di un Atomo ionizzato (Calculation, by Fermi Statistics, of the Spectrum of an **Ionized Atom**).—E. Segre, p. 226.
- Sur le Champ cylindrique ionisé et la Durée de l'arcours des Ions (The Cylindrical **Ionized Field** and the Path Time of the Ions).—M. Pauthener and M. Moreau-Hanot, p. 398.
- Ionized Gases** and Coulomb's Law.—Jonescu, p. 315.
- The Mobility of **Ions** in Pure Gases.—A. M. Tyndall and C. F. Powell, p. 168.
- Über die Temperaturabhängigkeit der Kerrkonstanten von Gasen, etc. (On the Temperature Variation of the **Kerr Constant** for Gases and the Results in the Case of Methyl and Ethyl Alcohol—Preliminary Communication).—H. A. Stuart, p. 53.
- The **Kerr Electro-Optical Effect** in Gases.—E. C. Stevenson and J. W. Beams, p. 399.
- The Velocity of **Light**.—Gheury de Bray, p. 317.
- The Electromagnetic Field of **Light Quanta**.—F. J. v. Wisniewski, p. 167.
- Elementary **Light Quantum**.—E. Klein, p. 340.
- Über makroskopische Oszillatoren, deren Frequenzen eindeutige Energiefunktionen sind (On **Macroscopic Oscillators**, whose Frequencies are Unique Functions of the Energy).—C. H. Johansson, p. 284.
- Propagation of **Magnetic Disturbances** along Wires.—R. M. Bozorth and J. F. Dellinger, p. 574.
- Combination of the Simultaneous Optical Effects of Rotary Magnetic Polarisation and **Magnetic Double Refraction** in a Liquid.—G. Dupouy and M. Schérer, p. 574.
- Sur les Propriétés optiques d'un Liquide placé dans un Champ magnétique et traverse par un faisceau polarisé de Direction quelconque (The Optical Properties of a Liquid in a **Magnetic Field** and Traversed by a Polarised Beam in Any Direction).—A. Cotton, p. 399.
- Effect of **Magnetic Fields** on Dielectrics.—S. Whitehead; J. B. Miles, p. 111.
- Effect of **Magnetic Fields** on Dielectrics.—P. L. Burns, p. 111.
- Magnetic Lag** at Low Flux Densities.—L. W. McKeehan, p. 574.
- The Study of the **Magnetic Properties** of Matter in Strong Magnetic Fields. I. The Balance and its Properties. II. The Measurement of Magnetisation.—P. Kapitza, p. 574.
- Magnetism and Electrodynamics**.—Irene E. Viney, p. 284.
- Zur Theorie der Magnetostriction und der Magnetisierungskurve (On the Theory of **Magnetostriction** and the Magnetisation Curve).—W. Heisenberg, p. 574.
- Material and Radiation Waves**.—A. M. Mosharrafa, p. 455.
- Elektrische und mechanische Effekte an Metalldrähten bei thermischer, magnetischer oder akustischer Beeinflussung der Struktur (Electrical and Mechanical Effects on **Metallic Wires** Structurally Influenced by Heat, Magnetisation or Sound).—A. v. Hippel and O. Storsdahl, p. 574.
- Electric Conductivity and Optical Absorption in **Metals**—Supplementary [Ratio between Steady-Current Conductivity and Light-Wave Conductivity in Metals].—E. H. Hall, p. 631.
- I.—On the Modifications in the Fine Structure of a Spectral Ray produced by **Molecular Diffusion**—Study as a Function of the Angle of Diffusion. II.—On the Fine Structure of a Spectral Ray after Molecular Diffusion.—M. Vacler; J. Cabannes, p. 167.
- Relations simples du Spectre moléculaire avec la Structure de la Molécule (Simple Relations between **Molecular Spectrum and Molecular Structure**).—H. Deslandres, p. 225.
- Évaluation statistique de l'Énergie d'interaction de Coulomb dans une Molécule (Statistic Evaluation of the Coulomb Energy of Interaction in a **Molecule**).—L. Goldstein, p. 167.
- Elektrische Momente einiger Moleküle (Electrical Moments of Some **Molecules**).—H. Müller and H. Sack, p. 112.
- Undersökningar beträffande ömsesidiga Induktioner mellan parallella, i Ändpunkterna jordade Ledningar (Investigations on the **Mutual Induction** between Parallel Conductors Earthed at the Ends).—G. Swedenborg, p. 340.
- The Starting Potentials of the Corona Discharge in **Neon**.—F. M. Penning, p. 455.
- Interpretation of Negative Volt-Ampère Characteristics of **Neon Positive Column**.—C. G. Found, p. 284.
- On a Possible Conception of **Nuclear Phenomena**.—M. de Broglie, p. 111.
- Kovariante Tensorformen des Ohmschen und des Jouleschen Gesetzes (Covariant Tensor Form of **Ohm's and Joule's Laws**).—A. Byk, p. 166.
- Nouvelle Hypothèse sur le Rayonnement et sur l'Optique des Corps en Mouvement (A New Hypothesis on Radiation and on the **Optics of Bodies in Motion**).—A. Sésnat, p. 340.
- Over de Baau van electrisch geladen Deeltjes onder Invloed van een electrostatisch Veld (On the **Path** of Electrically Charged Particles under the Influence of an Electrostatic Field).—J. H. van der Tuuk, p. 167.
- Das Verhalten der magnetischen Anfangspermeabilität bei kurzen elektrischen Wellen (The Behaviour of the Initial Magnetic **Permeability** with Short Electric Waves).—R. Michels, p. 630.
- Non Existence d'un Spin des Photons (The Non-Existence of **Photon-Spin**).—A. Kastler, p. 515.
- Photophoresis** and the Influence upon it of Electric and Magnetic Fields.—F. Ehrenhaft, p. 340.
- Contribution to Study of Effect of Elliptical **Polarisation** upon Energy Transmission.—R. V. Baud, p. 340.
- Behaviour of **Positive Ions** in Hydrogen.—A. C. G. Mitchell, p. 168.
- The Production of an Intense Beam of Hydrogen **Positive Ions**.—L. R. Maxwell, p. 340.
- Absorption Coefficient of Slow Hydrogen **Positive Rays** in Hydrogen.—R. E. Holzer, p. 168.
- Relation entre le l'arcours d'un Proton rapide dans l'Air et l'ionisation qu'il produit, etc. (Relation between the Path of a Rapid **Proton** in Air and the Ionisation It Produces. Application to the Study of the Artificial Disintegration of the Elements).—L. Leprince-Ringuet, p. 515.
- Über die Beteiligung von Protonen an der Elektrizitätsleitung in Metallen (On the Part played by **Protons** in the Conduction of Electricity in Metals).—A. Coehn and W. Specht, p. 53.
- Versuche über das Pseudohochvakuum (Research into the "**Pseudo-High Vacuum**").—E. Baßler, p. 630.
- À Propos de l'Électricité, l'Éther et les Quanta (Electricity, the Ether and **Quanta**).—F. Perrier; R. Ferrier, p. 340.
- Mécanique quantique des Chocs de seconde Espèce (**Quantum Mechanics** of Collisions of the Second Kind).—L. Goldstein, p. 339.
- A Point of Analogy between the Equations of the **Quantum Theory** and Maxwell's Equations.—M. Fahnny, p. 339.
- Ansätze zur Quantenelektrodynamik (Suggestions for a **Quantum Theory** of Electrodynamic).—M. Born and G. Rumer, p. 455.
- The "Infinite Energy of Radiation at the Absolute Zero" Difficulty in the **Quantum Theory**, and its Solution.—L. Rosenfeld and J. Solomon, p. 515.
- On the Saturation of the After-Effect of **Quartz**: Further Studies on the Anomalous After-Effect of Dielectrics in their Apparent Resistivity.—H. Saegusa and S. Shimizu; S. Shimizu, p. 574.
- Recombination** in Mercury Vapor.—H. W. Webb and D. Sinclair, p. 340.
- The **Recombination** of Ions in Air and Oxygen in Relation to the Nature of Gaseous Ions: The Recombination of Ions in Argon, Nitrogen, and Hydrogen.—O. Lühr, p. 112.
- Corrected Values for the Coefficient of **Recombination** of Gaseous Ions.—O. Lühr and N. E. Bradbury, p. 399.
- Electrical **Resistance** of Nickel and Permalloy Wires as Affected by Longitudinal Magnetisation and Tension.—L. W. McKeehan, p. 167.
- Über die metallische Widerstandsänderung in starken Magnetfeld-

- ern (On the Variation of Metallic Resistance in Strong Magnetic Fields).—N. H. Frank, p. 167.
- On the Rotation of Dielectrics in Electrostatic Fields and Related Phenomena.—L. G. Vedy, p. 226.
- Über einen klassischen Effekt bei der Streuung von Strahlung (On a Classical Effect in Radiation Scattering).—O. Halpern, p. 285.
- The Velocity Distribution of Secondary Electrons from Molybdenum.—T. Soller, p. 167.
- Secondary Emission from Metals by Impact of Metastable Atoms and Positive Ions.—W. Uytendhoeven and M. C. Harrington, p. 167.
- Théorèmes relatifs à la Brilliance des Sources secondaires (Theorems relating to the Brilliance of Secondary Sources).—J. Dougrnon and P. Wagnot, p. 226.
- The Sesmat Hypothesis and the Michelson Experiment.—A. Sesmat, p. 455.
- Über die Hautwirkung ferromagnetischer Drähte bei Hochfrequenz (On the Skin Effect of Ferromagnetic Wires at High Frequencies).—M. Wien, p. 630.
- A Theoretical Discussion of the Electrical Properties of the Soil.—White, p. 434.
- The Striated Discharge.—D. A. Keys and J. F. Heard, p. 168.
- Striated Discharges.—L. H. G. Huxley, p. 630.
- Moving Striations in Positive Column in Rare Gases.—R. Whiddington, p. 168.
- Townsend's Theorie, Gasentladung und Durchschlag (Townsend's Theory, Gas Discharge and Breakdown).—W. Rogowski, p. 630.
- The Effect of Transient Voltages on Dielectrics. IV.—Law of Impulse Spark-over and Time Lag.—F. W. Peek, p. 112.
- Undulatory Geometry and Its Dynamic Considerations.—A. Bull, p. 226.
- Conoidal Propagations in Undulatory Geometry: Waves Derived from the Ellipsoid.—A. Bull, p. 340.
- Recherches sur l'Effet Volta (Researches on the Volta Effect).—E. Dubois, p. 225.
- Über eine neue Form der quasi-elektromagnetischen Gleichungen der Wellenmechanik (On a New Form of the Quasi-Electromagnetic Equations of Wave Mechanics).—W. Alexandrow, p. 166.
- The Application of the Classical Statistic Conceptions to the Wave Mechanics.—J. Ulmo, p. 340.
- Sur la Mécanique ondulatoire des Champs d'Ondes (The Wave Mechanics of Wave Fields).—Gr. C. Moisil, p. 226.
- Durchgang des elektrischen Stromes, etc. (Passage of Electric Current through Solid Paraffin (1) Unilluminated and (2) under X-Ray Illumination).—W. M. Tutschewitsch, p. 111.
- The Effect of Piezo-Electric Oscillation on the Intensity of X-Ray Reflections from Quartz.—Fox and Carr, p. 570.
- A Comparison of the Critical Angle of Reflection and the Index of Refraction of X-Rays.—H. E. Stauss, p. 54.
- Über die Ionisation von Gasen durch kurzwellige Röntgenstrahlen (On the Ionisation of Gases by Short-Wave X-Rays).—K. Schocken, p. 168.
- On the Intensity of Total Scattering of X-Rays by Monatomic Gases.—Y. H. Woo, p. 225.

MISCELLANEOUS.

- Abaque pour le Calcul des Fonctions circulaires et hyperboliques de Variables complexes (Abac for the Calculation of Circular and Hyperbolic Functions with Complex Variables).—L. Abélès, p. 169.
- Early Developments in A.C. Circuit Theory. Some Notes on the Application of Complex Methods to the Solution of A.C. Circuit Problems.—J. Windred, p. 168.
- Aeronautic Radio Research.—Notes from the U.S. Bureau of Standards, pp. 170 and 515.
- Work of the German Research Establishment for Aircraft for 1930.—H. Fassbender, p. 54.
- Aircraft Radio Research.—U.S. Bureau of Standards, p. 170.
- Summary of the Work of the German Aircraft Research Establishment (Wireless Division) for 1929/30.—p. 399.
- Annual Report of the Wireless Division of the German Aircraft Research Establishment.—H. Fassbender, p. 574.
- The Erb Amplifying Mechanism, for Small Movements: Applicable to Thermostats, etc.—A. Erb, p. 341.
- An Arrangement for Amplifying Weak Electric Currents, and Its Application to Recording the Luminous Flux from Stars.—P. Lejay, p. 286.
- A Preliminary Report of the Application of the Photoelectric Cell to the Reading of Minima in a Magneto-optic Method of Analysis of Chemical Compounds in Solution.—F. Allinson, J. H. Christensen and G. V. Waldo, p. 399.
- The Oscillating Arc: Elements of Group VI.—E. Z. Stowell, p. 516.
- Determining Comparative Areas of Irregularly-shaped Microscopic Objects by the Use of a Photoelectric Cell.—A. Savage and M. C. Jamieson, p. 170.
- Communication Engineering in Australia.—J. M. Crawford, p. 516.
- Australian Radio Research Board—Second Annual Report.—p. 55.
- Automatic Telephone Calls rendered as Voice Calls.—p. 228.
- Counting Bees by Wireless.—p. 458.
- The Blind, Devices for.—See under "Acoustics" and "Phototelegraphy."
- The Body as Antenna.—Raab, p. 227.
- Advances in Transoceanic Cable Technique.—H. Mason, p. 168.
- Telephone Cables.—J. Collard, p. 341.
- The New Twelve-Channel Carrier Current Service with 120 Cycles/Sec. Spacing, Berlin-Cologne.—K. Wedler: A.E.G., p. 287.
- Developments in the Art of Telegraphy [chiefly Carrier Current Telegraphy].—R. B. Steele, p. 341.
- Téléphone par Courants porteurs sur Lignes à haute Tension (Carrier Current Telephony on H.T. Power Lines).—M. Saglio, p. 457.
- Expériences sur l'Engagement d'Atomes dans un Faisceau magnéto-cathodique ou cathodique (Experiments on the Catching-up of Atoms in a Magneto-cathodic or Cathodic Beam).—E. Henriot, O. Goche and F. Dony-Hénault, p. 341.
- Radio Electric Clock System.—H. C. Roters and H. L. Paulding, p. 55.
- The Coefficient of Correlation and Occasions when It is Meaningless.—R. Bilancini, p. 631.
- The Dielectric Constant of Complex Colloidal Systems. C. Marie and N. Marinisco, p. 399.
- Colour Definition by Photoelectric Measurements.—H. Ellsworth and P. McMichael, p. 228.
- Replacing the Telephone by a Loud Speaker in Conductivity Measurements.—L. du Nouy, p. 286.
- Hochfrequenzleitfähigkeit, starker Elektrolyte in wässrigen Zuckerlösungen (High-Frequency Conductivity of Strong Electrolytes in Aqueous Sugar Solutions).—S. Mizushima and H. Sack, p. 169.
- A Relation between Continued Fractions and Hyperbolic Functions (Application to Wave Filter Theory).—H. Ataka, p. 631.
- Do Radio Manufacturers Care? [A Plea for Co-Operation in Research and Merchandising].—A. C. Lescaurou, p. 287.
- The Influence of the Crystal-Orientation of the Cathode on that of an Electro-deposited Layer.—W. A. Wood, p. 285.
- Elektrische Entladungen in Kristallen (Electrical Discharges in Crystals).—Lyla Inge and A. Waltherr, p. 169.
- Fitting Observations to a Curve.—N. Campbell, p. 169.
- Analytische Auswertung empirischer Kurven (The Analytical Treatment of Empirical Curves).—W. Holzer, p. 399.
- Instrument for Detecting Buried Metallic Bodies.—T. Theodorsen, p. 170.
- Detecting Flaws and Vibrations in Ferromagnetic Articles.—J. Peltier, p. 170.
- Detecting Hidden Fissures in Rails.—H. C. Drake: — Sperry, p. 286.
- A Sensitive Induction Balance for the Purpose of Detecting Unexploded Bombs.—T. Theodorsen, p. 170.
- A Permanent Detector using a Compressed Synthetic Powder, p. 632.
- Copper-Oxide Detectors.—V. N. Lepeshinskaja, p. 112.
- On the Unidirectional Conductivity of Detectors.—V. D. Kuznetsov and A. A. Gabovitch, p. 55.
- Schwächung von Strahlen verschiedener Wellenlänge durch Tauchsichten (The Weakening of Rays of Various Wave Lengths by Layers of Dew).—C. Müller, R. Frisch and W. Scheib: Baseler, p. 227.
- Properties of Dielectrics in Electric Fields.—A. M. Thomas, p. 227.
- Numerical Solution of Differential Equations.—p. 285.
- Über eine Methode zur schnellen numerischen Lösung von Differentialgleichungen zweiter Ordnung (on a Method for Rapid Numerical Integration of Second Order Differential Equations).—E. Madelung, p. 285.
- Anwendung der Integralgleichungen auf Beugung und Eigenschwingungen in der elektromagnetischen Lichttheorie (Application of Integral Equations to Diffraction and Characteristic Vibrations in the Electromagnetic Theory of Light).—W. Sternberg, p. 55.
- Distant Control Device Working on Ultra-Short Waves.—Besson, p. 50.
- Observations upon the Use of the Divining Rod in Germany.—C. A. Browne, p. 286.
- The Divining Rod Problem.—Buth, p. 170.
- The Electrical Conductivity of the Earth.—I. Königsberger, p. 112.
- An Investigation of Earthing Resistances.—Discussion.—P. J. Higgs: P. D. Morgan and H. G. Taylor: G. F. Tagg, p. 169.
- Variation de la Résistance des Prises de Terre traversées en Permanence par un Courant alternatif (Variation of the Resistance of Earths traversed continually by A.C.).—G. Viel, p. 169.
- Education by Radio: Report of U.S. Advisory Committee.—p. 170.
- Methode zur angenäherten Lösung von Eigenwertproblemen in Anwendungen auf Schwingungsprobleme (Method for the Approximate Solution of Eigenvalue Problems, with Applications to Oscillation Problems [Mathematical Investigation]).—W. Meyer zur Capellen, p. 341.
- Anwendung der Methode der unendlichen Determinanten zur Berechnung der Eigenwerte im Falle des Starkeffekts (Application of the Method of Infinite Determinants to the Calculation of the Eigenvalues in the Stark Effect).—K. Basu, p. 169.
- On the Intensity of Polarisation or the Dielectric Displacement of a Permanent Electret: Effects of Electric Force on a Permanent Electret.—M. Eguchi, p. 168.
- The Electrical Polarization of Electrets.—M. Ewing, p. 516.
- The Electric Field produced by a Line Carrying Alternating Current,

- in the presence of the Ground.—J. B. Pomey; J. R. Carson, p. 169.
- Décharge à haute Fréquence dans les Gaz raréfiés ([Ultra] High Frequency [Electrodeless] Discharge in Rarefied Gases).—F. Escandon, p. 632.
- Electromagnetic Reactions** between Conducting and Magnetic Material, and an Alternating Current [Mathematical Investigation].—S. Whitehead, p. 516.
- Electron Devices** in D.C. Power Transmission: Revolutionary Practices, resulting in Economies and Advantages.—C. W. Stone, p. 458.
- Industrial Uses of Electron Tubes**.—W. R. G. Baker, A. S. Fitzgerald, and C. F. Whitney, p. 227.
- Electron Tubes in Industrial Service**.—p. 386.
- High Lights on Electronic Devices in Industry**.—p. 227.
- Resistance-Capacity Method of Measuring the Psycho-Galvanic Reflexes** [Variations of Body Resistance under Emotional Stimulus].—G. G. Blake, p. 632.
- The Use of the Sea's Thermal Energy.—G. Claude, p. 170.
- Energy Supply in the Arctic Regions**.—H. Barriot, p. 170.
- A Quantitative Experimental Method of Mapping Equipotential Lines, and its Application to Electric Precipitation Problems.—A. W. Simon and L. C. Kron, p. 112.
- Über ein Phänomen des Auftretens von Aquipotentiallinien im elektrischen Feld (A Phenomenon of the Appearance of Equipotential Lines in an Electric Field).—P. Böning, p. 227.
- Olympia, 1936 [Radio Exhibition]: A General Impression—and some Details.—p. 170.
- The 1936 German Radio Exhibition.—p. 112.
- The German Radio and Phono Exhibition.—G. W. O. H., p. 112.
- The Seventh International Radio Exhibition, Paris, 1936.—p. 170.
- Les Tendances actuelles de l'Industrie radioélectrique (The Trend of Progress in the Radio Industry [based on the 1936 Paris Exhibition]).—L. Abèles, p. 456.
- Physical and Optical Societies Exhibition (3 papers).—p. 287.
- Finding the Expeditions.—p. 516.
- Fehlerortbestimmungen mit dem Kathodenscillographen (Fault Locating [in Cable Systems or Overhead Lines] by the C.-R. Oscillograph).—J. Rohrig; Rogowski and Flegler, p. 287.
- High-Frequency Heater for Production of Artificial Fever.—p. 286.
- The Use of Filters with Photoelectric Tubes [in Measuring Concentration of Solutions].—L. R. Koller, p. 399.
- Distance Determination by Foghorn and Wireless Telephony: Extension to Preventing Collisions at Sea.—p. 43.
- Über ein optisches Verfahren zur Fourier-Analyse (On an Optical Method of Fourier Analysis).—B. Germansky, p. 227.
- On the Summability of Fourier Series.—E. Hill and J. D. Tamarkin, pp. 168 and 515.
- The Application of Functional Operations to a Class of Integral Equations occurring in Physics. [Application to Electric Circuit Theory].—H. P. Thielman, p. 226.
- The Photographic Effects of Gamma-Rays.—J. S. Rogers, p. 287.
- Report on the Geodetic Application of Wireless Telegraphy.—H. L. P. Jolly, p. 457.
- Geo-electrical Prospecting**.—A. B. Edge, p. 285.
- The Direct Measurement of Wavelength and Damping of Electromagnetic Waves in Rock [Geophysical Prospecting].—Petrowsky, p. 317.
- Geophysical Prospecting** using Observed Variation of Signal Strength.—Chapman and Franklin, p. 516.
- The Imperial Geophysical Experimental Survey: Review of Its Final Report.—T. W. Edgeworth David, p. 632.
- The Detection of Rock Salt by the Methods of Electrical [Geophysical Surveying].—T. Alty and S. Alty, p. 227.
- Über ein Verfahren zur graphischen Behandlung elektrischer Schwingungsvorgänge (On a Method for the Graphical Treatment of Electrical Oscillatory Phenomena).—F. Kirschstein, p. 226.
- On Some Problems in the Conduction of Heat [Mathematical Investigation in Terms of Wave-Trains].—G. Green, p. 632.
- Über die Energieumwandlung Wärme-Elektrizität (The Direct Conversion of Heat into Electrical Energy).—O. Gunof, p. 170.
- The Heating Effect of Short Radio Waves.—J. C. McLennan, p. 286.
- The Heating of Electrolytes in High-Frequency Fields.—J. C. McLennan and A. C. Hurton (see also Pätzold, same page), p. 54.
- Die Formel von Heaviside, ihre strenge Herleitung, kritische Wertung und Verallgemeinerung (The Heaviside Formula, its Strict Derivation, Critical Appreciation and Generalisation).—H. Schulz, p. 168.
- I.E.E. Wireless Section**: Chairman's Address.—C. E. Rickard, p. 170.
- Impulse Functions** [Application to Theory of Transients].—W. E. Sumpner, p. 227.
- Index Operators** [Application to Electric Circuit Theory].—W. E. Sumpner, p. 631.
- On the Possibility of Applying the Cathode-Ray Oscillograph to the Indicator for High-Speed Engines.—J. Obata and Y. Munetomo, p. 286.
- A Valve-operated Coreless Induction Furnace for High Temperature Research.—F. Adcock, p. 285.
- Über die Verwendung sichtbarer und unsichtbarer, insbesondere ultraroter Strahlen für Nachrichtenübermittlung und Verkehrsicherung (On the Application of Visible and Invisible—particularly Infra-Red—Rays for Transmission of News and Safeguarding of Traffic).—G. Gresky, pp. 341 and 515.
- Infra-Red Photography** with "Aga" Neocyanin, Kryptocyanin, etc.—W. Dieterle, p. 458.
- Infra-Red Ray Communication**.—Michelsen; Schroter, p. 112.
- Infra-Red**.—See also under Ultra-Violet.
- Ein allgemeines Integrationsverfahren für quasiharmonische Schwingungsvorgänge (A General Integration Method for Quasi-Harmonic Oscillation Processes).—E. Scherwin, p. 227.
- Vektordarstellung von Interferenzerscheinungen (The Vectorial Representation of Interference Phenomena).—W. Spath, p. 227.
- Interference**.—See under "Reception."
- New Methods of Recording and Observing Angular Motion and Vibration in Internal Combustion Engines, using Television Technique.—A. Blondel, p. 632.
- The Role of Radio in the Growth of International Communication.—H. H. Buttner, p. 457.
- 7th Assembly of the International Electrotechnical Commission (I.E.C.), 1936: Radio Communications.—Internat. Electrot. Committee, p. 170.
- Beschlüsse der Internationalen Elektrotechnischen Kommission [I.E.C.] über Grössen und Einheiten (Decisions of the International Electrotechnical Commission [I.E.C.] on Magnitudes and Units).—p. 287.
- La Propagation curvilinee d'Intégrales invariants. Cas des Intégrales doubles. Propagation corpusculaire (Curvilinear Propagation of Invariant Integrals. The Case of Double Integrals. Corpuscular Propagation).—A. Buhl, p. 456.
- Fixation elective des Ions médicamenteux par l'Electro-aimant (Control of Medicinal Ions by an Electro-Magnet).—D. la Tour du Pin, p. 575.
- The Opening of the Delft Laboratory of Technical Physics.—M. de Haas; H. B. Dorgelo, p. 287.
- The Application of Least Squares.—W. E. Deming, p. 226.
- Some Series and Integrals Involving Associated Legendre Functions.—W. N. Bailey, p. 631.
- Talking Along a Beam of Light.—M. Leeuwijn, p. 228.
- The Conduction of Light and X-Rays through Tubes.—F. Jentsch and E. Nahrung, p. 516.
- The Mechanical Equivalent of Light.—Ornstein, van der Held and Vermeulen, p. 631.
- Mecroscope**.—See Sounds in Moving Mechanisms.
- The Medical and Surgical Applications of Electricity.—B. Leggett, p. 286.
- An Electro-chemical Interpretation of Memory.—G. W. Crile, p. 286.
- Influence des Oscillations à haute Fréquence sur les Traitements des Produits métallurgiques (The Influence of High Frequency Vibrations on the Treatment of Metallurgical Products).—G. Mahoux, p. 228. See also p. 632.
- A Microscopic Method to give an increase of Resolution up to 10 to 20 Times beyond the Ordinary Microscope, using Scanning and Building Up by Photoelectric Means.—E. H. Syge, p. 285.
- Physical Detectors of "Mitogenetic Radiation."—O. Glasser and V. B. Seitz, p. 632.
- Mitogenetic Rays**.—Tokin; Stempell, p. 286.
- Über den physikalischen Nachweis mitogenetischer Strahlung und die Intensität der Muskelstrahlung (The Physical Demonstration of Mitogenetic Rays, and the Intensity of the Radiation from Muscle).—G. Frank and S. Rodionow, p. 632.
- Mutual Impedance** of Grounded Wires on the Surface of a Two-layer Earth.—J. Riorden and E. D. Sunde, p. 457.
- The National Physical Laboratory. Report for the Year 1935.—p. 170.
- National Physical Laboratory Annual Visit.—p. 632.
- Discharges in Neon.—P. Johnson, p. 169.
- Das Genauigkeitsmass von Summen, Differenzen, Produkten und Quotienten der Beobachtungsreihen (The Measure of Accuracy of Sums, Differences, Products and Quotients of Series of Observations).—p. 456.
- Fitting Observations to a Curve.—N. Campbell, p. 169.
- On Simultaneous Operational Calculus [Application to Electric Circuit Theory].—B. van der Pol and K. F. Niessen, p. 226.
- On the Operational Solution of Linear Finite Difference Equations [Theory Applicable to Wave Filter Chains].—L. M. Milne-Thomson, p. 226.
- On Heaviside's Operational Solution of a Volterra's Integral Equation when its Nucleus is a Function of $(x-\xi)$ [Application to Electric Circuit Theory].—S. Koizumi, p. 226.
- Telefonia ottica con Radiazioni invisibili (Optical Telephony with Invisible Radiations).—Q. Majorana, p. 228.
- Detection of Oxygen in a Gas through its Effect on the Emission from a Tungsten Filament.—Langmuir and Villars, p. 518.
- Engineering applied to Packaging.—D. Cassidy, p. 458.
- Publication Instead of Patent.—p. 456.
- Is a Radio Patent Pool the Way Out?—p. 516.
- The Patent Pool and the Radio Inventor.—p. 632.
- On Periodicity in Series of Related Terms.—G. Walker, p. 456.
- The Photo Cell as applied to Industrial Problems.—J. V. Breisky, p. 228.
- Photoelectric Apparatus for Testing Electricity Meters.—R. Laurent, p. 516.
- Applications for the Lange Photoelectric Cell: The Silver Selenide Cell.—B. Lange, p. 458.

- Photoelectric Cells in Industrial Processes.**—C. A. Styer and E. H. Vedder, p. 399.
- Photoelectric Methods for the Examination and Analysis of Liquids.**—P. Jakuschoff, p. 341.
- A New Photographic Effect.**—F. E. Poindexter, p. 287.
- Über objektive Vergleichsphotometer (On Objective Comparison Photometers).**—H. Reichmann, p. 458.
- Power Control by Means of Phototubes.**—Baker, Fitzgerald and Whitney, p. 632.
- Zehn Jahre Forschung auf dem Physikalisch, medizinischen Grenzgebiet (Ten Years Research in the Physical-Medical Boundary Zone).**—F. Dessauer, p. 632.
- The German Physicists and Mathematicians' Convention in Königsberg, 1930.**—p. 112.
- Piezo-Electric Accelerometer and its Use in Measuring the Velocity of Elastic Waves [Earth Tremors].**—Y. Katō and S. Nakamura, p. 170.
- Piezo-Electric Gage and Amplifier.**—R. A. Webster, p. 458.
- A New Design of C-R Oscillograph and Its Applications to Piezo-Electric Measurements: Study on Impact Test by Means of Piezo-Electricity and C-R Oscillograph.**—S. Watanabe, p. 399.
- Piezo-Electric Measurement of Rapid Pressure Changes.**—Oerlikon Company, p. 170.
- Un Myographe Piezo-électrique. Son Application à l'Analyse de la Secousse isométrique des Muscles (A Piezo-Electric Myograph and Its Application to the Analysis of the Isometric Contraction of Muscles).**—A. M. Monnier, p. 458.
- The Piezo-Electric Oscillator in the Power Industry.**—B. H. Buckingham, p. 632.
- Reducing the Friction of Pivots by Piezo-Electric Vibration.**—Straubel, p. 575.
- Engineering Research in the Post Office.**—B. S. Cohen, p. 341.
- Symposium on Co-ordination of Power and Telephone Plant.**—p. 458.
- Contribution to the Study of the Influence of Power Lines on Telephonic Lines and Measures to Reduce It.**—Klewe, Rachel, Clausen, Geise, Zastrow and Schulze, p. 169.
- Measurements of Pressures, especially in Liquids, by the Frequency-Dependence of the Dielectric Constants.**—F. Trenkelenburg, p. 170.
- Notes on the Probabilities Relating to Intermittent Phenomena of Variable Duration.**—E. Baticle, p. 456.
- The Theory of Probability: Some Comments on Laplace's Théorie Analytique.**—E. C. Molina, p. 169.
- Bayes' Theorem [on a *posteriori* Probability Problems].**—E. C. Molina, p. 456.
- La Propagande illicite et la Radiodiffusion (Illicit Propaganda and Broadcasting).**—p. 457.
- An Automatic Race Timer.**—E. A. Speakman, p. 458.
- On the Mechanism of Very Absorbable Radiation emitted by Compressed Crystalline Substances under High Potentials.**—I. A. Balinkin, p. 169.
- Radiation from Metals Bombarded by Low-Speed Electrons.**—F. L. Mohler and C. Boeckner, p. 632.
- Naissance et Développements de la Radio-électricité (The Birth and Developments of Radio-Electricity).**—A. Blondel, p. 228.
- The Radio Laboratory of the Electrotechnical Institute of the Technical High School, Vienna.**—M. Reithofer, p. 170.
- Extension of Radio Research Facilities: National Bureau of Standards to Construct Laboratory to Expand Research Facilities.**—Bureau of Standards, p. 456.
- The Statistical Energy-Frequency Spectrum of Random Disturbances.**—J. R. Carson, p. 631.
- Reciprocity Theorem.**—See under "Propagation of Waves."
- Can a Wireless Receiver Record and Preserve Transmissions at Fixed Hours? [Telegraph-Receiver Combination].**—W. Holz, p. 170.
- Electronic Recording of High Speed Projectiles.**—p. 228.
- Valve Methods of Recording Single Alpha-Particles in the Presence of Powerful Ionising Radiations.**—C. E. Wynn-Williams and F. A. B. Ward, p. 458.
- Singularities Presented by Bodies Submitted to the Action of Resistance Cells.**—G. Reboul, p. 458.
- Exploration of Rotating Ferromagnetic Parts by the use of Rotating Fields.**—J. Peltier, p. 287.
- On Rotations in Ordinary and Null Spaces.**—S. A. Schelkunoff, p. 341.
- Soviet Russia's "Five-Year Plan" for Radio.**—M. Codel, p. 399.
- Science and Broadcasting.**—E. J. Holmyard, p. 170.
- All-weather Sextant using Infra-red Photo-electric Cell.**—Macneil, p. 341.
- Die Entwicklung der Kurzwellentechnik (The Development of Short-Wave Technique).**—O. Hohn and F. Schröter, p. 631.
- The Meascope: An Equipment for the Auscultation of Abnormal Sounds in Moving Mechanisms.**—Vassilière-Arhiac, p. 285.
- Bactericidal Effects of High Frequency Audible Sound Waves.**—O. B. Williams and N. Gaines, p. 458.
- Germes Killed in Laboratory by High-Pitched Sound Waves.**—O. B. Williams and N. Gaines, p. 458.
- Die Wirkung des magnetischen Feldes auf die langwellige Strahlung des elektrischen Funkens (The Effect of a Magnetic Field on the Long wave Radiation of the Electric Spark [when passing through a mixture of Canada Balsam and Molybdenum Granules]).**—N. A. Lewitsky, p. 399.
- Application of Spinor Analysis to the Maxwell and Dirac Equations.**—O. Laporte and G. E. Uhlenbeck, p. 515.
- [Practical Technique of] Cathode Sputtering.**—C. H. Cartwright, p. 228.
- Cathode Sputtering in a Commercial Application.**—H. F. Fruth, p. 575.
- Sputtering.**—See also under "Subsidiary Apparatus."
- The Electrical State of the Sun.**—R. Gunn, p. 516.
- Eine Wanderwellenleitung mit kleinem Wanderwellenwiderstand (A Surge Cable with Small Surge Resistance).**—K. Beyerle, p. 286.
- The Radio Knife [Electro-Surgery].**—C. R. Underhill, p. 228.
- Über zwei Formeln aus der Theorie des Wartens vor Schergruppen (Further Development of] Two Formulae in the Theory of Waiting for Groups of Switches [in a Telephone System]).**—F. Pollaczek, p. 632.
- Über die Lösung von Schwingungsaufgaben mittels symbolischer Differentialrechnung (On the Solution of Oscillation Problems by means of Symbolic Differentiation).**—W. Gauster, p. 168.
- Sulla Transmissione a Distanza dei Valori di Misura (Telemetering).**—O. Colonna, p. 286.
- Engineering Testimony before Official Bodies.**—E. H. Felix, p. 457.
- Thyratron Stabilizer for X-Ray Tubes.**—W. K. Kearsley, p. 112.
- Traffic Controlled by Light Beams.**—R. C. Hitchcock, p. 287.
- Telephoning from Trains: the Canadian National Railways System.**—J. C. Burkholder, p. 112.
- Transients and Fourier Integral.**—N. N. Krylov, p. 341.
- Outline Notes on Telephone Transmission Theory.**—W. T. Palmer, p. 168.
- Biological Effects of Fields Oscillating at Ultra-High Frequencies.**—S. Jellinek, p. 169.
- Die Erwärmung der Elektrolyte, etc. (The Heating of an Electrolyte in an [Ultra-] High Frequency Condenser Field, and its Significance in Medicine).**—J. Patzold (see also McLennan and Burton, same page), p. 54.
- An [Ultra-Micrometer] Instrument for Measuring Small Displacements [Balanced Magnetic Circuit and Variable Air Gap].**—B. F. Langer; J. G. Ritter, p. 458.
- Theoretical and Experimental Investigation of a Method of Registering Small Capacity Changes, for the Continuous Recording of Processes in Progress [Ultra-Micrometer].**—A. Schulze and G. Zickner, p. 169.
- Ultra-Micrometer Measurements of the Tensions in the Interior of a Homogeneous Solid.**—P. Santo Rini, p. 287.
- An [Ultra-Micrometer] Apparatus for Registering Capacity Changes, and Its Application as an Indicator in the Manufacture of Rubber.**—H. Carsten and C. H. Walter, p. 575.
- Selbsttätiges Aufzeichnen von Arbeitsvorgängen (The Automatic [Ultra-Micrometer] Recording of Workshop Processes).**—A. Schulze and G. Zickner, p. 169.
- Depth- and Selective-Effects of Short and Ultra-Short Electric Waves.**—E. Schliephake, p. 458.
- Applications médicales des Ondes ultracourtes (Medical Applications of Ultra-Short Waves).**—P. Ancelme; Kotzareff, p. 458.
- Action of Ultra-Short Waves on Silkworms.**—G. Mezzadrolì and E. Varetton, p. 286.
- Apparatur für starkes Ultraviolett und Ultrarotes Licht und über das Photographieren mit Wärmestrahlen (Apparatus for Strong Ultra-violet and Infra-red Light, and Photography with Heat Rays).**—J. Plotnikow, p. 112.
- Radio Charts the Upper Air.**—J. D. Van Brakie, p. 112.
- Compte rendu de l'Assemblée générale de l'Union radio-scientifique internationale tenue à Copenhague du 27 Mai au 6 Juin, 1931 (Report of the U.R.S.I. Assembly in Copenhagen, 27th May to 6th June, 1931).**—G. Ferrié, p. 574.
- U.R.S.I. Cosmic Data Broadcasts.**—p. 170.
- The Cooperation Committee [U.R.S.I.] Program for 1930-1931.**—p. 574.
- The Action of Very High Frequency Fields [$\lambda = 15$ Metres approx.] on Organic Tissues.**—J. Saidman, R. Cahen and J. Forestier, p. 286.
- Radio Technique at the Vienna Autumn Fair.**—E. Mittelmann, p. 170.
- Thermionic Valves in a Viscosity Meter.**—Symmes: Hercules Powder Co., p. 228.
- Method of obtaining a Visible Spectrum of Waves of Radio Frequency.**—J. C. McLennan and A. C. Burton, p. 54.
- Note on the "Non-Dangerous" Voltage of Electric Currents.**—F. Féraud, p. 287.
- The Auscultation of Watches with the Aid of Valve Amplifiers.**—G. P. Aray and A. Tissot, p. 228.
- A Method of Weather Forecasting.**—R. C. Colwell, p. 341.
- The Ionic Wind Voltmeter and The Electrostatic Relay.**—W. M. Thornton, M. Waters and W. G. Thompson, p. 458.
- New Developments in Wireless Communication.**—Chetwood Crawley, p. 516.
- The Wireless Engineer—A Change in Name Only.**—p. 574.
- Wireless Progress in 1930.**—p. 341.
- The Concentrating of X-Rays.**—M. Pierucci, p. 227.
- Electrical Method for the Measurement of Young's Modulus.**—L. N. Tomilina, p. 287.

