

# INDEX

Fourth Volume—January, 1911, to December, 1911

## GENERAL INDEX

[Illustrated articles are indicated thus \*. Editorials are indicated thus †]

### A

Absolute-Permissive Block System, by W. K. Howe.....	*144, 171
Accident Bulletin.....	240
Accident Conference, New York.....	79
Accidents, The Truth About.....	†429
Adams & Westlake:	
Exhibit.....	*165
Supply News.....	243
Adams Motor Car.....	168
Alabama Great Southern, Construction.....	204
Albany Southern, Train Orders.....	*315
Alternating Current as Applied to Signaling, by James H. Cormick.....	*69, 112
Alternating Current Machinery.....	124
Alternating Current Signaling on the Santa Fe, by J. E. Saunders.....	*213
Alternating-Current Track Circuit Calculations.....	†245, *268
Aluminum, Solder for.....	55
Ambach, E. T., Gauge Plates for Switch Points.....	*385
American Conduit Co.:	
Supply News.....	35, 123
Trade Publication.....	325
American Electric Railway Association:	
Committee on Block Signaling.....	79
Convention.....	*384
Convention Date.....	†167
American Electric Railway Manufacturer's Association, Meeting of.....	285
American Railway Association:	
Decision Regarding Uniform Signaling.....	241
Signal Indications.....	†245
American Railway Engineering Association Twelfth Annual Convention.....	77, †85
American School of Correspondence, Treatise on Alternating Current Machinery.....	123
American Society of Mechanical Engineers, Sixty-third Annual Meeting.....	118
Anderson, James:	
Cross Protection for Power Operated Signals.....	*335
Detector Protection Circuits.....	*416
Route Locking at a Power Plant.....	†334
Angles, Laying Out with Carpenter's Square.....	74
Annunciator.....	*244
Annunciator Circuit.....	*317
Application from "One Who Knows".....	338
Arkenburgh, W. H.:	
Arrangement of Automatic Block Signals.....	*296
Automatic Signals as a Means of Fuel Economy.....	420
Case of Trouble.....	15
Check-Locking Circuit.....	*274
Releasing Electric Detector Locking.....	171
Signaling for Different Speeds.....	*365
Arrangement of Automatic Block Signals, by W. H. Arkenburgh.....	*296
Arrester Box, Bracket for, by T. W. Scott.....	*159
Aspects, Switch Indicator.....	†108
Association of Railway Electrical Engineers:	
Convention.....	240
Proceedings.....	113
Semi-annual Convention.....	160
Association of Railway Telegraph Superintendents:	
Annual Meeting.....	113
Convention.....	204
Meeting.....	77, 120, 240, 424
Atchison, Topeka & Santa Fe:	
Alternating-Current Signaling.....	*213
Automatic Signaling in Los Angeles.....	*409
Construction.....	160, 204, 319
Signal Work.....	121
Train Dispatching by Telephone.....	357

Atlantic Coast Line:	
Automatic Signals.....	*140
Battery Housing.....	*185
Train Dispatching by Telephone.....	390
Aurora, Elgin & Chicago, New Signals.....	321
Automatic Block Signals:	
Arrangement.....	*296
Cost.....	398, *412
Electric Lighting.....	*318
Installation.....	
Atchison, Topeka & Santa Fe, By P. B. Hyde.....	*409
Atlantic Coast Line.....	*140
Chicago Great Western, By J. Beaumont.....	*172
Chicago, Indianapolis & Louisville, By E. G. Stradling.....	*433
Cumberland Valley.....	205
Electric Railways in New York State.....	*65
Ft. Dodge, Des Moines & Southern Pacific, By Alf Munthe.....	*41, 456
Vermillion River Bridge.....	*232
Maintaining with Section Forces.....	384
Means of Fuel Economy, By W. H. Arkenburgh.....	430
Mileage in Service.....	23
Station Lighting From.....	*312
System for Electric Railways.....	*49
Automatic Reactance, General Railway Signal Co.....	*457
Automatic Signal & Appliance Co., Supply News.....	325
Automatic Stops.....	†222
Bridgeport Wreck.....	313
Interborough Rapid Transit, By J. M. Waldron.....	224d
Railway Safety Equipment Co.....	38
"The League for Public Safety".....	†38

### B

Ball Game, Railway Signal Association, Snap-Shots.....	*417
Baltimore & Ohio:	
Construction.....	83, 77, 120
Signaling & Interlocking.....	321
Train Dispatching by Telephone.....	320
Batteries, Caustic Soda Signal.....	*47
Battery Basket.....	*158
Battery Calculations for Line Circuits, By E. Simpson.....	*356
Battery Connections, and Track Circuit Relays, By C. G. Stecher.....	*149
Battery Coppers, Cleaning.....	15
Battery Housing on the Atlantic Coast Line.....	*185
Batterymen, Becoming a Maintainer, By J. O'Leary.....	97
Baxter, S. L.:	
Comment on Crossing Bell Circuit.....	170
Kink.....	*157
Labor Costs of Bonding.....	431
Staff System on the Southern Pacific.....	*183
Beaumont, J., Automatic Signals on the Chicago Great Western.....	*172
Beck Automatic Electric Safety & Signal Switch Co., Supply News.....	243
Belle Isle Motor Co.:	
Engine Test.....	36
"Hill Climber".....	*244
Bessemer & Lake Erie, Train Dispatching by Telephone.....	319
Bezer, Henry:	
Foreign Current Protection Circuit, Line Crossing and Clear Failures.....	*212
Bill of Mechanical Interlocking Material, Standard Outline.....	*249, †249
Bill to Compel Uniform Signaling.....	138
Birchard, Ralph, Supply News.....	457
Blackmore, George A., Supply News.....	207

Block Signal and Train Control Board:	
Inspections.....	†168
Opinions.....	†128
Results of Inspections Made by.....	185
Third Annual Report.....	61, 108, 153, †168
Block Signal Committee, Report to the Indiana Commission.....	121
Block Signal Laws:	
Digest of.....	†209
Wisconsin.....	205, 280
Block Signals:	
Electric Lines in New York State, Mileage.....	†167, *259
"Overhead" Systems.....	137
Performances, Illinois Traction System.....	352
Railways of the United States.....	193
Block Signaling, The Problem, By Col. H. G. Prout.....	411
Block Signaling, Committee on, American Electric Railway Association.....	79, 381
Block System, The Absolute-Permissive.....	171
Block System, Mileage in Service.....	23
Bloodthirsty Public, The.....	†395
Blueprints:	
Restoring Overexposures.....	171
Preserving.....	302
Blue Stone, Removing when Crystallized, Board of Railway Commissioners of Canada, Block and Interlocking Rules.....	390
Board of Signaling Experts, For a, J. G. Van Zandt.....	88
Bonding:	
Applying.....	388
Inspecting, By C. C. Rinker.....	398
Locating Faults.....	339
Observations on.....	*386
Bootleg and Elevator Wiring.....	40
Boston Mfg. Co., W. F. Supply News.....	245
Boston & Albany Signalmen.....	*283
Boston & Maine, Construction.....	30
Boston Elevated, Spacing Signals.....	32
Brach Supply Co., L. S.:	
Duplex Pocket Meter.....	*125
New Specifications.....	*322
Trade Publication.....	82
Brashares, H. E.:	
Electric Lighting for Automatic Signals.....	*318
Bridge Lock Solenoids, Havana Electric Light & Railway Co.....	*88
Bridgeport Wreck and Automatic Stops.....	313
Broken Bond Wires, To Prevent.....	450
Broken Rail Protection.....	†361
Broom and Scraper, Combination.....	*75
Bryant, Stanley C., The Care of Signal Motor Brushes and Commutators.....	*269
Bryant Zinc Co.:	
Illuminated Sign.....	166
Train Annunciator.....	*244
Supply News.....	163, 207
Buda Co., Supply News.....	123
Buffalo Grip, The Improved.....	*285
Buffalo, Rochester & Pittsburgh: Construction.....	120
Tests.....	160

### C

Cable Posts, Pinnacle.....	*28
"Cab" Signaling, Great Western Railway System of.....	314
Canadian Pacific, Train Dispatching by Telephone.....	119, 160, 240
Case, Arthur E., Explanation of Stray Currents.....	182
Case of Trouble.....	92
Catalogues, Dimensions.....	3
Catechism on Direct-Current Apparatus, Fairbanks-Morse & Co.....	83

442115

Caustic Soda Signal Batteries. By A. G. Shaver ..... 947

Central Electric Co., Supply News ..... 163

Central Railroad of New Jersey, Electric Interlocking at Allentown, Pa. .... \*344

Electro-Pneumatic Plants at Jersey City ..... \*369

Central Vermont, Train Dispatching by Telephone ..... 204

Charging Station, New York Central & Hudson River ..... \*14

Charging Storage Batteries, Apparatus for. By H. K. Ferguson ..... 229

Check-Locking Circuit. By W. H. Arkenburgh ..... \*274

Chesapeake & Ohio: Construction ..... 32, 454

Train Dispatching by Telephone ..... 77

Chicago & Eastern Illinois, Construction ..... 30, 118

Chicago & Milwaukee Electric Ry., Safety of Operation ..... 148

Chicago & Northwestern: Chicago Terminal Signaling and Interlocking ..... \*210, \*236, \*376

Circuits ..... 186

Committees of Safety ..... 322

Construction ..... 119, 204, 319, 456

Intercommunicating Signal System in Chicago Terminal ..... 353

Train Dispatching by Telephone ..... 357

Chicago & Western Indiana: Construction ..... 118, 120, 454

Train Dispatching by Telephone ..... 77

Chicago, Burlington & Quincy: Construction ..... 30, 160, 279, 319

Train Dispatching by Telephone ..... 240

Chicago Electrical Show, Exhibitors ..... 32

Chicago Great Western: Automatic Signals ..... \*172

Construction ..... 204, 319

Night Indication ..... 320

Railway School ..... 424

Chicago, Indianapolis & Louisville: Construction ..... 77, 118, 279, 319, 454

Signaling ..... 241, \*433

Suit ..... 30

Chicago, Milwaukee & Puget Sound: Construction ..... 424

Train Dispatching by Telephone ..... 204

Chicago, Milwaukee & St. Paul: Construction ..... 119, 160, 161, 390

Train Dispatching by Telephone ..... 390

Chicago Pneumatic Tool Co.: Supply News ..... 207

Trade Publication ..... 325

Chicago Rapid Signal & Supply Co., Incorporation ..... 467

Chicago, Rock Island & Pacific: Construction ..... 160, 161, 454

Train Dispatching by Telephone ..... 390

Chicago Signal Club ..... 454

..... 33, 161, 205, 360, 381, 425,

Chicago, St. Paul, Minneapolis & Omaha, Construction ..... 160

Chicago, Terre Haute & Southeastern, Construction ..... 160

Chisel for Cutting Rail "Flins" ..... 116

Choke Coil Lightning Arresters ..... 99

Cincinnati, Hamilton & Dayton, Train Dispatching by Telephone ..... 390

Circuits: Bezer Foreign Current Protection, Carried Through Electric Line Crossings. By G. H. Dryden ..... \*202

Check-Locking. By W. H. Arkenburgh ..... \*274

Computations on Direct Current ..... \*192

Control Motor Cars ..... \*26

Gauntlet Track Protection. By James H. Cormick ..... \*349

Indicator ..... \*156, \*277

Locking, Failure of ..... 317

Detector Protection ..... 317

Annunciator ..... 317

Route Locking ..... 117

Station Protection. By H. W. Cooper ..... \*238, 295

Telephone, The Kellogg "Booster" ..... 33

Three-Position Signal ..... 19

Circuit Plans: Simplified ..... 1167

By E. Winans ..... 211

By W. J. Throwgood ..... \*386

Use of Colors on ..... 202

Clausen, L. R.: Signaling Practice on Steam Railways ..... 92

Uniform Signaling ..... 169

Clayton, M. M.: Making Manipulation Charts ..... \*313

Standard Symbols ..... \*248

Clearance Points, Marking ..... 275

Clear Failures and Line Crosses. By Henry Bezer ..... \*213

Cleveland, Cincinnati, Chicago & St. Louis: Construction ..... 454

Derailment on ..... 425

Closed Track Circuit. By J. P. Coleman ..... \*104

Coleman, J. P., The Closed Track Circuit ..... \*104

Collision on Lancashire & Yorkshre ..... 341

Colorado Springs Convention, The. By A. G. Shaver ..... 282

Columbia & Puget Sound, Train Dispatching by Telephone ..... 279

Commercial Acetylene Company, Supply News ..... 35

Commission Meeting on Standard Rules ..... 320, 391

Committees: Law, R. S. A. .... 247

Personnel, Railway Signal Association ..... 1429

Reports, Railway Signal Association ..... 221

Safety, Chicago & North-Western, Signaling, American Electric Railway Association ..... 304, 205

Common Wire, Size Required ..... \*159

Commutator Cleaner ..... \*76, \*318

Comparisons, Railway Mileage and Block Signal Mileage ..... 1167

Compensation: Charts ..... \*378

Table ..... \*117

Compensator, Lary-Jack ..... \*10

Concrete Form & Engine Co.: Exhibit ..... \*126

Power Car ..... \*294

Conditions Governing Track Section Length ..... \*190

Conduit: Systems for Railway. By Harold K. Weid ..... 265

Tower Wiring ..... 97

Connections for Portable Storage Batteries ..... \*76

Construction Work, Labor Saving in ..... 389

Contact Signals for Electric Railways. By Carl P. Nachod ..... 200

Contacts, Bad. To Avoid. By C. A. Gillespie ..... \*203

Continuous Circuit Extra Cell Switch. By B. H. Pickard ..... \*266

Control Circuits, The Fundamental Principles of ..... \*404

Controlled Manual Signals on the N. C. & St. L. .... \*234

Convention: American Railway Engineering Association ..... 185

Dates, Railway Signal Association and American Electric Railway Association ..... 1167

Railway Signal Association ..... 1291

Cook Railway Signal Co., Test of System ..... 393

Cooper, H. W.: Station Protection Circuit ..... \*238, 295

The Practical Lessons ..... 87

Two-Crossing Bell Circuit ..... \*153

Corey, F. B., Supply News ..... 426

Cornick, James H.: Alternating Current as Applied to Signaling ..... \*69, \*113

Circuit for Gauntlet Track Protection ..... \*349

Northern Pacific Standard Symbols ..... \*294

Costs: Automatic Block Signaling ..... 398, \*412

Data ..... 1395

Data in Signal Work ..... \*332, 350

Primary Batteries, E. E. Hudson-Safety Legislation, E. E. Hudson ..... 1822

Track Circuit Section ..... 272

Counter Readings, Chart for. By C. M. Eckert ..... 423

Crank Arm, Stroke ..... 29

Crank Arm Support ..... \*422

Crank Pins, Gilling ..... \*75

Crossings, Electric Line, Carrying Circuits Through ..... 202

Crossing Bells: At Galveston, Tex. By E. Hanson ..... \*156

In Automatic Territory. By A. B. Schov ..... 144

Operation ..... 278, 318

Crossing Bell Circuit: Double-Track, \*73, 157, 170, \*201, 132, Single-Track ..... \*422

Special. By E. G. Stradling ..... 110

Trap ..... \*99

Cross Protection: At All-Electric Interlocking Plants. By Sol Murray ..... \*106

Editorial Comment ..... 1331

For Indicators ..... \*363

For Power Operated Signals. By James Anderson ..... \*335

Cumberland Valley: Automatic Signals on ..... 205

Construction ..... 30, 160, 240

Cut-Out Derails ..... \*239

Cutting Out Gravity Cells ..... \*73

Dallas (Tex.) Water Street Interlocking Plant, Raising ..... \*115

Dean, Aaron, Supply News ..... 207

Delaware & Hudson Co., Construction ..... 119

Delaware, Lackawanna & Western, Construction ..... 118

Derails at Interlocking Plants ..... \*362

Derails, Cut-Out ..... \*13

Detector Bar Adjustment ..... \*123

Device for Preventing Railway Collisions. Denver, Laramie & Northwestern, Construction ..... 77

Detector Bar, Drop-Forged Link ..... \*36

Detector Protection Circuit: By R. R. Rockwell ..... \*317

By James Anderson ..... \*416

Direct Current Apparatus, Catchism on, Fairbanks-Morse Co., Construction ..... 82

Direct-Current Circuit Computations ..... \*192

Direct Reading Ohmmeter ..... \*360

Dispatcher Train Order Signals ..... \*289

Distant Signals ..... 324

Joseph Dixon Crucible Co.: Graphite and graphite lubricants ..... 84

Trade Publication ..... 243, 325

Dodgson, F. L. and S. N. Wight, Symbols and Nomenclature for Written Circuits ..... \*178

Dog Chart: A Good, E. J. Relph ..... \*120

Drawing ..... 395

Double-Track Bell Circuits ..... \*201

Drafting Room Rules, Signal ..... \*157, 452

Drawbridge Circuit Controllers ..... \*124

Dressel Railway Lamp Works, Supply News ..... 35, 81

Drift Punch, Making ..... 424

Drill Press, Power Operated ..... \*316

Dryden, G. H.: Combination Electric and Oil Lamp, Double-Track Crossing Bell Circuit ..... \*201

Kink ..... \*202

Duluth & Iron Range, Train Dispatching by Telephone ..... 304

Duplex Metals Co.: Supply News ..... 426, 457

Trade Publication ..... 343

Earning by Saving ..... 1292

Eckert, C. M.: Chart for Counter Readings ..... 423

Oil Can That Will Not Spill ..... \*424

Thos. A. Edison, Inc., Supply News ..... 343

Edmunds, F. W., Supply News ..... 350

Educating the Operating Department ..... \*131, 343

Education and Better Work ..... \*127

Effect of Treatment on the Electrical Resistance of Timber ..... 233

Eichblatt, C. H., The Adjustment of Semaphore Signals ..... \*446

Electric and Oil Lamp, Combination. By G. H. Dryden ..... \*457

Electric Detector Locking, Releasing ..... 171

Electric Interlocking Plants: Cross-Protection ..... \*106

Installation at Allentown, Pa. .... \*344

Remedying a Case of Trouble ..... 15

Electric Lamp Signal System ..... 352

Electric Lighting for Automatic Signals. By H. E. Brahares ..... \*318

Electric Railways: Automatic Bell Signal System for. Automatic Signals in New York State ..... \*65

Condition in Massachusetts ..... 99

Contact Signals ..... 200

Court Decision ..... 31

Hearings on Operating Methods ..... 32

Mileage in Canada ..... \*128, 293

Signaling: Conditions Affecting ..... \*124

Reports on ..... \*131

Some Conditions to be Taken Into Account ..... 324

Summary of Practices on ..... 406

Electric Storage Battery Co., Trade Publication ..... 81

Electrical Resistance of Timber, The Effect of Treatment on the ..... 233

Electrical Testing Laboratories, Supply News ..... 81

Electromotive Force ..... 117

Electro-Pneumatic Interlocking Installations: Bryn Mawr, Pa., Pennsylvania R. R. .... \*275

Erie Terminal, Jersey City, N. J. .... \*289

Jersey City ..... \*369

Push Button Machines on Missouri Pacific ..... \*264

Electrose Insulation ..... 326

Elgin, Joliet & Eastern, Construction ..... 119

Ellis, Frederick W., Suggested Specifications for Testing Switch & Signal Motors ..... 315

El Paso & Southwestern Construction ..... 118

Emergency Resistance in Testing. By F. H. Kingsley ..... 157

Erie: Construction ..... 120

Jersey City Terminal, Signaling and Interlocking ..... 40, \*89, 248

Evansville & Terre Haute: Construction ..... 118

Suit ..... 30

Train Dispatching by Telephone ..... 77

Exhibitors, Railway Appliance Association ..... 83

Exhibits at Boston, Association of Railway Telegraph Superintendents ..... 282

Extra Cell Switch ..... \*278

F "Failure," For a Better Use of ..... 1896

Fairbanks-Morse & Co.: Catchism on Direct-Current Apparatus ..... 82

Motor Car ..... \*126

Supply News ..... 35

Faulty Bonds, How to Locate ..... 451

Federal Legislation For Promoting Railway Safety. By F. O. Melcher ..... 340

Federal Signal Co., Exhibit of ..... 166

Ferguson, H. K.: Apparatus for Charging Storage Batteries ..... 229

Supply News ..... 325

Fibre End Posts, Protecting ..... \*365

Fisher, O. C., How the Public Values the Signals ..... \*432

Flexible Steel Armored Hose, Sprague Electric Co. .... \*394

Generated for Jon R Roma (University of Illinois at Urbana-Champaign) on 2016-03-12 01:18 GMT / http://hdl.handle.net/2027/chi.103590178 Public Domain, Google-digitized / http://www.hathitrust.org/access\_use=pd-gd-google

Floating Storage Batteries for Signaling. \*428  
 Follett, W. F., New Haven Signal Department Repair Shop. \*261  
 Foot-Brace for Interlocking Levers. By T. E. Kirkpatrick. \*421  
 Foreign Current Protection. \*30  
 Fort Dodge, Des Moines & Southern, Inspection Trips. 454  
 Fort Wayne & Wabash Valley Traction Co., Construction. 77  
 Foster, W. E.:  
 Combining Polarized Track Circuit and Line Control. \*462  
 Mechanics of the Compensator. \*19  
 Foster, James W., Supply News. 285  
 Future of the Signal Engineer. \*127

G

Gas Engine Cooling System. \*338  
 Gasoline Engine Applied to Velocipede Car. 207  
 Gauge, Distance and Leveling. \*25  
 Gauge Plates:  
 For Switch Points. By E. T. Ambach. \*385  
 To Prevent Spreading. By E. M. Sconce. \*202  
 Gauntlet Track Protection, Circuit for. \*349  
 Gedeon, J., Commutator Cleaner. \*818  
 General Electric Co.:  
 Exhibit. 163  
 Mercury Rectifier. 123  
 Reorganization. 326  
 Trade Publication. 82, 123  
 General Railway Signal Co.:  
 Annual Banquet. \*125  
 Exhibit. \*164  
 Rules for Company Employes. 354  
 Supply News. 81  
 Trade Publications. 82, 123, 285, 325, 427  
 Gibbs, George, Signaling on the New York Tunnel Extension of the Pennsylvania. 224a  
 Gillispie, C. A., Kink. \*202  
 Gill Selectors, New York Central. \*427  
 Glass-Break Key-Box. \*116  
 Goodhart, George M.:  
 Double-Track Crossing Bell Circuit. 132  
 Kink. \*73  
 Gould Storage Battery Co., Trade Publications. 426  
 Government Report on the Fort Wayne Derailment. 425  
 Grand Central Terminal, New York, 400-Lever Interlocking Machine. \*185  
 Grand Trunk, Construction. 454  
 Grand Trunk Western, Bonds Issued. 160  
 Graphite and Graphite Lubricants, Joseph Dixon Crucible Co. 84  
 Graphite Instead of Oil. 203  
 Gravity Cells:  
 Conditions of. 121  
 Cutting Out. \*773  
 Gray-Thurber Automatic Train Control & Signal Co., Supply News. 163  
 Great Northern:  
 Construction. 30, 390  
 Train Dispatching by Telephone. 319, 390  
 Train Stop System on. \*444  
 Great Western Railway System of "Cab" Signaling. By Hedley Prout. \*814  
 Griffith, L. R., Kink. \*277  
 Grip Nut Company, Trade Publication. 35  
 Ground Cone, Paragon. 126  
 Ground Detector, By Sol Murray. \*423  
 Guard Wires, Taking the Slack Out. \*429  
 Gulf Coast Construction Gang. \*428

H

Hacksaw Blade Case. By H. T. Phillips. 378  
 Hall Signal Co.:  
 Supply News. 81  
 Trade Publication. 163, 325  
 Hanson, E., Crossing Bells at Galveston, Tex. \*156  
 Harpers Magazine, Signal Maintenance. 22  
 Havana Electric Light & Railway Co., New Bridge Lock Solenoids. \*83  
 Hayes Derailers:  
 New. \*326  
 Use on Southern Pacific. \*360  
 Hayes Track Appliance Co.:  
 New Factory. 124  
 Trade Publication. 427  
 Hazard Manufacturing Co., Trade Publications. 325, 392  
 Hense, Carl, Supply News. 243  
 Heyer, G. K., Supply News. 243  
 Highway Crossing Bell, Railroad Supply Co. \*393, \*457  
 Hobart-Alfree Co.:  
 Supply News. 81  
 Trade Publication. 163  
 Hobson, J. S., Recent Improvements in Signaling. 47  
 Hoeschen Mfg. Co., Supply News. 325  
 Holt, Henry R., "My First Kink". 87  
 "Honor Where Honor is Due". 40  
 Hoogen, M., Over-Running of Signals. \*12  
 Hovey, W. G., Supply News. 350  
 Howard, L. F., Supply News. 428  
 How the Public Values the Signals. By O. C. Fisher. \*432  
 Howe, W. K., The Absolute-Permissive Block System. \*144  
 Hoyt Electric Instrument Works, Supply News. 375  
 Hudson, E. E., Costs of Primary Batteries. 139

Hudson & Manhattan, Signal Performance Record. 58  
 Hyde, P. E., Automatic Signaling in Los Angeles. \*409

I

Illinois Central:  
 Construction. 120, 319, 357  
 Construction Gang. \*122  
 Educational Bureau. 320, 390  
 Signaling and Interlocking. 279  
 Illinois Electric Railway Association:  
 Meeting. 119  
 Organization. 78  
 Illinois Traction System:  
 Block Signal Performance. 352  
 Construction. 30, 31, 77, 118, 204, 320, 357  
 Signaling. \*98, \*372  
 Signals on Vermilion River Bridge. \*322  
 Illuminated Sign Brvant Zinc Co. 166  
 Illumination of Tunnels Controlled by Signals. 357  
 Imperial Rubber Co., Supply News. 285  
 Index to Signal Literature. 110  
 Indiana Railroad Commission:  
 Block Signal Committee Conference. 455  
 Block Signal Law. 78, 121, 160  
 Circular. 161  
 Decision in Grand Trunk Suit. 466  
 Grand Trunk Order. 390  
 Inspection. 240  
 Meeting. 171  
 Michigan Central Decision. 319  
 Orders. 281, 347, 357, 424  
 Indiana Union Traction System, Construction. 424  
 Indianapolis and Cincinnati Traction Co., Construction. 78, 454  
 Indianapolis, Columbus & Southern Traction Co., Construction. 77  
 Indirect Lighting System for Signal Towers. \*330  
 Indication Common, Size of. \*159  
 Indicator Circuits. \*158  
 Induction Coil Ground Test. 318, \*388  
 Ingalls-Shepard Forging Co.:  
 Drop-Forged Detector Bar Link. \*36  
 Trade Publication. 82  
 Inspections. The Block Signal & Train Control Board's. \*168  
 Inspection to Prevent. \*429  
 Institution of Signal Engineers, Meetings. 161, 240  
 Instruction Schemes for Signalmen. \*246  
 Instruction System, Pennsylvania. \*231  
 Insulation:  
 Between Interlocking and Rails. 76  
 Five Track Crossings. By L. E. Schoonmaker. \*202  
 Track Circuit and Protective Wiring. 56  
 Insulator Ties. \*274  
 Interborough Rapid Transit:  
 Automatic Train Stop. 244d  
 Construction. 119  
 New Interlocking Plant. 449  
 Subway Improvements. 443  
 Intercolonial Railway of Canada, Construction. 160  
 Interlocking:  
 Chicago & North-Western Terminal. By J. A. Peabody. \*375  
 Comparison of. 8  
 Grand Central Terminal, 400-Lever Electric Machine. \*185  
 Grand Central Terminal, Station "B". 357  
 Louisville & Nashville. 357  
 Pennsylvania R. R. "R" Cabin. \*142  
 Raising the Dallas (Tex.) Water Street. \*115  
 Spokane, Portland & Seattle, By Al Munthe. \*303  
 Winnipeg Union Station. 358  
 Uniformity in Requirements. \*118  
 International Automatic Signal Co.:  
 Incorporation. 392  
 Supply News. 426  
 International Railway and Land Transport Exhibition, Exhibits. 36  
 Interpole Motors for Signal Work. 468  
 Interstate Commerce Commission's Accident Bulletin. 204  
 Interurban Railways:  
 Block Signals. 347  
 Indiana Committee Conference. 319  
 Train Dispatching. 46  
 Iowa & Illinois, Construction. 319  
 Isometric Drawing in Signal Work. \*851

J

Johns-Manville Co., H. W., Trade Publication. 457  
 Johnson, Arthur H.:  
 Erie Terminal Plant at Jersey City. 40  
 Johnston, D. B., Pulley for Lifting Semaphore Castings. 277  
 Joint Committee, Engineering Association, Plans of. 241  
 Joint Railway Commission Meeting. 280  
 Junction Box. \*238

K

Kansas City Terminal, Construction. 304  
 Kellogg Switchboard & Supply Co.:  
 "Booster" Telephone Circuit. 83  
 Trade Publications. 285, 392  
 Kenly Co., W. K., Supply News. 81

Kerite Insulated Wire & Cable Co., Supply News. 307  
 Key-Box, Glass Break. \*117  
 "Kiel" Strengthening. 116  
 Klingesmith, J. M., Supply News. 426  
 Kingsley F. H.:  
 Comparing Signal Performances. 167  
 Emergency Lighting Outfit. 421  
 Kink. 157  
 Kink, Definition of. \*391  
 Kirkpatrick, T. E., Foot-Brace for Interlocking Levers. \*421  
 Klirchberg, Harold, Supply News. 81  
 Kolb, E. W., Pinnacle for Cable Posts. \*28

L

Labor:  
 Cost for Bonding. By S. L. Baxter. 431  
 Cost of Pole Lines. 367  
 Saving in Construction Work. 389  
 Lake Arthur, Jennings & Northern, Construction. 77  
 Lake Erie & Western, Construction. 80, 390  
 Lake Shore & Michigan Southern:  
 Right Hand Running. 31  
 Signal Department Shops. \*63  
 Train Dispatching by Telephone. 78  
 Lake Superior & Ishpeming, Construction. 80  
 Latch Locking. By T. W. Scott. 158  
 Latimer, J. B., Signaling on the Panama Railroad. 40  
 Laws, Interlocking. 8  
 Laying Out Angles With Carpenter's Square. \*74  
 Leadout Insulation. \*238  
 League for Public Safety, and Automatic Stops. 138  
 Legislation for Safety, Cost of. \*323  
 Lehigh Valley:  
 Construction. 31, 424, 454  
 Train Dispatching by Telephone. 77, 279, 319  
 Visible and Audible Signals at Road Crossings. 78  
 Lehigh Valley Transit Co., Construction. 77  
 Lettering Operating Charts. 366  
 Letters from an Old Railway Official to His Son, a General Manager. 800  
 Lever Rooms, For Better Looking. \*420  
 Lewis, C. E., Train Dispatching on Interurban Railways. 46  
 Lewis, L. V., Alternating-Current Track Circuit Calculations. \*268  
 Lighting Outfit, An Emergency. By F. H. Kingsley. 431  
 Lightning Arresters:  
 Box Fastening. \*202  
 By E. A. Thomas. \*450  
 Hone. 344  
 Testing. 358  
 Ligon, William D., Underground Electric Distribution. 448  
 Line Crosses and Clear Failures. By Henry Bezer. \*212  
 Local Conditions, Influence of. 310  
 Locating Grounds by Means of Induction Coils. \*348  
 Locking Circuit, Failure of. By J. O'Brien. \*317  
 Locking, Mitre Box for Cutting. \*74  
 Locking Template. \*158, \*238  
 Lock Nuts to Prevent Lost Motion. 116  
 Logan, O. B., Standard Symbols. \*323  
 Long Island Railroad, Construction. 30  
 Lost Motion in Pipe Lines. 62  
 Loughbridge, M. H., Signaling and Interlocking on the New York, Westchester & Boston. \*252  
 Louisville & Nashville, Interlocking on. 357  
 Louisiana Western, Construction. 77  
 Lutz-Lockwood Mfg. Co., Supply News. 123, 243

M

Machado & Roller Co., Supply News. 35  
 Maintainer or "Trouble Shooter". \*396  
 Maintenance:  
 Planning. By J. O'Brien. \*276  
 Signal with Section Forces. 384  
 Track Circuit. By C. G. Stecher. \*308  
 Views on. 366  
 Manipulation Charts, Making. By M. M. Clayton. \*318  
 Manual Block System, Mileage in Service. 23  
 Marker Lights, Missouri Pacific. \*424  
 Massey Co., C. F.:  
 Supply News. 31, 285  
 Trade Publication. 325  
 Material and Estimate Forms. 372  
 McCormick Company, New Offices of. 207  
 Mechanical Interlocking:  
 Bill of Material, Standard Outline. \*249  
 Method of Raising. \*26  
 Melcher, F. O., Some Thoughts Upon the Proposed Federal Legislation for Promoting Railway Safety. 340  
 Mercury Arc Rectifiers for Charging Signal Batteries. By R. E. Russell. \*66  
 Mercury Contact Treadle for Signals. \*329  
 Method of Laying Trunking, Suggested. \*76  
 Metropolitan Street Railway, Tall Lights. 340  
 Metropolitan West Side Elevated, Construction. 320  
 Mexico Tramways Co., Construction. 357  
 Michel, A. Eugene, Supply News. 427

Michigan Central: Construction 118  
 Train Dispatching by Telephone 30  
 Michigan Central & Indiana Harbor, Wreck 119  
 Michigan Railroad Commission, Investigation of Safety Devices 360  
 Michigan United Railways, Construction 119, 160  
 Minerallic Specialties 285  
 Minert, A. A., Klink 276  
 Minnesota Railroad Commission, Conference 31  
 Miskella, W. J., Telephone Train Dispatching 211  
 Miskelly, Sam., Klinks 25, 159  
 Missouri, Kansas & Texas: Construction 30  
 Train Dispatching by Telephone 240  
 Missouri Legislature, Grade Crossing Protection Law 160  
 Missouri Pacific: Marker Lights 424  
 Push-Button Interlocking Plants 264  
 Mitre Box for Cutting Locking 74  
 Mobile & Ohio, Construction 319  
 Morgan, H. G., Storage Batteries on Track Circuits 129  
 Morris, D. R., Trunking Expansion Joints Motor Brushes and Commutators, Care of, Stanley C. Bryant 260  
 Motor Cars: Adams 166  
 Attachment, by L. R. Griffith 277  
 Fairbanks-Morse Co. 26  
 Ignition Troubles, Preventing 339  
 Norfolk & Western 235  
 One-Man 208  
 Record 208  
 Safety Circuit Control 208  
 Motor Connections, Effect of Wron 385  
 Motors, Switch and Signal, Suggested Specifications for Testing 315  
 Mojave Indians on Signal Work 134  
 Mudge Co., Burton W., Adams Motor Car 208  
 Mueller & Co., R. S., Universal Test Clip 36  
 Munthe, Alf.: Automatic Signals on the Northern Pacific 41, 218  
 Interlocking on the Spokane, Portland & Seattle 303  
 Murray, Sol.: Cross Protection at All-Electric Interlocking Plants 106  
 Ground Detector 423  
 Pole Changer Tests and Adjustments 263

N

Nachod, Carl P., Contact Signals for Electric Railways 200  
 Nachod Signal Co., Supply News 163, 207  
 Nachod Signal System 49, 232  
 Nailed Joints, Strength of 316  
 Nashville, Chattanooga & St. Louis: Construction 120, 454  
 Controlled Manual Signals 234  
 Signal Department Shops 99  
 National Association of Railway Commissioners, Convention 424  
 National Appliances Association, Annual Exhibition 426  
 National X-Ray Reflector Co., Indirect Lighting System for Signal Towers 330  
 New York Accident Conference 79  
 New York Central & Hudson River: Charging Station 78  
 Collision on 30, 31, 240, 243, 425  
 Construction Details 15  
 Reunion of Signal Department Employees and Interlocking 122  
 Signaling and Interlocking 11  
 Sewer Lock 183  
 New York, Chicago & St. Louis, Train Dispatching by Telephone 357  
 New York, New Haven & Hartford: Construction 30, 118  
 Signal Department Repair Shop, By W. F. Pollett 261  
 New York, Ontario & Western, Construction 30, 31, 319, 454  
 New York, Westchester & Boston: Construction 77  
 Signaling and Interlocking 353  
 Nomination Circular, Railway Signal Association 322  
 Norfolk & Western Motor Cars 235  
 Northern Pacific: Automatic Signals on 41, 218  
 Construction 30, 118  
 Standard Symbols, By James H. Cormick 294  
 Northumberland Yard Interlocking, New North Western Construction Co., Supply News 457  
 Northwestern Pacific Railway, Construction 390  
 Number Boards, Attaching to Signal Posts 202  
 Nungesser Carbon & Battery Co., Supply News 427

O

O'Brien, J.: Failure of Locking Circuit 317  
 How a Batterymen Became a Maintainer 97  
 Planning Maintenance Work 276  
 Oil Can that Will Not Spill, by C. M. Eckert 424

Okonite Co.: Supply News 392  
 Trade Publication 427  
 Operating Crossing Bells 278  
 Oppelt, J. H., Preventing Failures from Changing Rails 334  
 Oregon-Washington Railroad & Navigation Co.: Construction 30, 118  
 Train Dispatching by Telephone 279, 319  
 Orange County Traction Co., Construction Organization: Signal Department 293  
 Signalmen 1210  
 Outlook for 1912 and Retrospect of 1911, "Overhead" Block Signal Systems 137  
 Overlap and Trainmen 212  
 Over-running Signals Legally Defined 323

P

P. & M. Co.: Bond Wire Protectors 286  
 Supply News 207  
 Trade Publication 243, 426  
 Pacific Electric Railway, Danger Signals, Paragon Railroad Construction 40, 357  
 Pancost, A. G., Klinks 26  
 Paragon Sellers Co.: Paragon Ground Cone 126  
 Trade Publication 83  
 Parnell, L., "Honor Where Honor is Due" 40  
 Peabody, J. A., Interlocking on the North-Western Terminal 375  
 Pencil Lines, Fixing 117  
 Pennsylvania: Construction 30, 118, 279  
 Efficiency Tests 279  
 Instruction System 339  
 Northumberland Yard Interlocking, "R" Cabin Interlocking 142  
 Safety Rules 30  
 Signal Department Repair Shop 181  
 Signaling at Washington, D. C. 286  
 Signaling on the New York Tunnel, Train Dispatching by Telephone 3, 77, 205, 240, 390  
 "WH" Cabin at Bryn Mawr, Pa. 275  
 Pere Marquette, Train Dispatching by Telephone 279  
 Phillips, H. T., Hackshaw Blade Case 273  
 Photograph First Annual Meeting Signal Association 243  
 Pickard, B. H., Klink 366  
 Pinnacle, Cable Post 28  
 Pipe Lines: Carrier Base, Universal 394  
 Carrying Under Track 26  
 Compensation 29  
 Compensator 12  
 Length 29  
 Longest 87  
 Lost Motion 29  
 Pittsburg & Lake Erie, Train Dispatching by Telephone 240  
 Pocket Meter, The Brach Duplex 125  
 Points and Stock Rails, Relative Positions 431  
 Polarity of Circuit 99  
 Polaris, Track Circuit and Line Control, Combining, by W. E. Foster 452  
 Pole Changer Tests and Adjustments, by Sol Murray 263  
 Portable Storage Batteries: Connectors for 76  
 Local Conditions and Comparisons 127  
 Portable Telephones 244  
 Porter, L. B., Push-button Cutout for a Crossing Bell 422  
 Potter-Winslow Co., Supply News 163, 325  
 Power Car, Concrete Form & Engine Co. Power Operated Signals, Cross Protection for, by James Anderson 335  
 Power Plant, Route Locking at, Practical Applied Electricity, by David Penn Moreton, Book Review 295  
 Practical Lessons in Signaling: I. The Typical Direct Current Track Circuit 4  
 II. Track Circuit Insulation and Protective Wiring 56  
 III. Conditions Governing Track Section Lengths 100  
 IV. Battery Connections and Track Circuit Relays 149  
 V. Track Circuit Installation and Care of Batteries 189  
 VI. Track Circuit Tests 216  
 VII. Maintenance of the Track Circuit Comments on 1, 39, 87, 132  
 Preventing Failures from Changing Rails, by J. H. Oppelt 334  
 Primary Batteries: Costs 129  
 Renewing, by W. A. Richman 423  
 Replacing Cells 62  
 Principles of Railway Signaling, 92, 135, "Proceed, Pass Next Signal at Medium Speed," by A. H. Rudd 333  
 Professional Relations 424  
 Profiting by Experience, Discussion of Engineering Work of Signaling 395  
 Protection, The Quality of 128  
 Prout, Hedley, Great Western Railway System of "Cab" Signaling 314  
 Prout, H. G., The Problem of Block Signaling 411  
 Public Service Commission of Maryland, Investigation 160  
 Pulley for Lifting Semaphore Castings, by D. B. Johnston 277  
 Punches, Special 29

Push-button Cutout for a Crossing Bell, by L. B. Porter 422  
 Push-button Interlocking Plants, Missouri Pacific 264

Q

Quality of Protection 128  
 Queen & Crescent: Signal Gang 466  
 Train Dispatching by Telephone 204

R

Rail Joint Co., Supply News 207  
 Railroad Commission of Michigan, Block System Notice 118  
 Railroad Supply Co.: Locomotive Type Highway Crossing Bell 395  
 Supply News 285  
 Railway Accidents: Decrease in Fatalities 321  
 The Truth About 438  
 Railway Club of Pittsburgh, Meeting of 118  
 Railway Appliances Association, List of Exhibitors 83  
 Railway Automatic Safety Appliance Co., Automatic Train Stop Tests 82  
 Railway Commissions, Uniformity in Requirements 13  
 Railway Mileage and Block Signal Mileage, Comparison of 167  
 Railway Safety Equipment Co., Automatic Stop 36  
 Railway Signal Association: Board of Direction 35  
 Committees 16  
 Committee Reports 225  
 Convention 1187, 358, 384a  
 Dinner 283  
 Journal 31  
 March Meeting 78  
 Meeting 224b  
 Nomination Circular 322, 359  
 Officers and Board of Direction 111  
 Plans for Meeting 245  
 Proceedings of Stated Meeting 229  
 Publications 359  
 Stated Meeting 185, 110  
 Two-Day Meeting 1209  
 Railway Signaling, The Principles of 135  
 Railway Signaling Club, Early Photograph of 324  
 Railway Telegraph Superintendents' Association: Convention 280  
 Meeting of 455  
 Recent Improvements in Signaling, by J. S. Hobson 47  
 Recorder, Switch Deflection 22  
 Rectifiers, Mercury Arc, for Charging Signal Batteries 66  
 Reinhardt, Edgar, Station Lighting from Automatic Signals 312  
 Relay: Shipping Case 203  
 Wiring 18  
 Wiring in Box 15  
 Releasing Electric Detector Locking, by W. H. Arkenburgh 171  
 Relph, E. J.: Good Dog Chart 130  
 Semaphore Shaft Key 76, 88  
 Report of the Block Signal and Train Control Board, Third Annual 61, 108  
 Remedy for Burns 117  
 Retrospect of 1911 and Outlook for 1912, 1430  
 Rhea, Frank, Supply News 325  
 Rheostat Emergency Release, By J. E. Saunders 276  
 Richman, W. A.: Kink 355  
 Renewing Primary Batteries 423  
 Rife, W. H., Switch Movement Retaining Wall 217  
 Rinker, C. C.: Inspecting the Bonding 398  
 New Signaling and Interlocking on the New York Central 111  
 Rocker Shafts, Supporting 116  
 Rocker Shaft Wall Caps 116  
 Rockford Motor Car, The 207  
 Rockwell, R. R., Detector Protection Circuit 317  
 Route Locking: At a Power Plant, by James Anderson 134  
 Circuit 117  
 Rudd, A. H.: Principles of Railway Signaling 135  
 "Proceed, Pass Next Signal at Medium Speed" 333  
 Summary of Recent Progress in Signaling 53  
 Rules for Signal Company Employees 354  
 Russell, R. E., Mercury Arc Rectifiers for Charging Signal Batteries 66  
 Rusted Nuts, Loosening of 330  
 Ruthven Railway Signal Co., Signal Test 163

S

St. Louis & San Francisco, Construction New Signals 30, 119  
 San Francisco, Oakland & San Jose Consolidated Ry., Construction 390  
 Sangamon Electric Co., Trade Publication 82

Saunders, J. E.:  
 Alternating-Current Signaling on the Santa Fe ..... \*213  
 Kink ..... \*276  
 Scheve, A. B., Crossing Bells in Automatic Territory ..... 144  
 School of Railway Signaling: Instruction Papers.....243, 285, 360, 427  
 Publication ..... 123  
 Schoonmaker, L. E., Kink ..... \*202  
 Scoone, E. M., Kink ..... \*202  
 Scott, T. W., Kinks ..... \*158  
 Scrap Rail, An Economical Use of ..... \*337  
 Screw Lock, New York Central ..... \*183  
 Seaboard Air Line, Train Dispatching by Telephone ..... 205  
 Section Men and Signal Maintenance ..... 364  
 Securing Water for Batteries, by W. A. Richman ..... 355  
 Semaphore Lamps, The Adjustment of, by O. H. Eichblatt ..... \*446  
 Semaphore Oil ..... 392  
 Semaphore Shaft Key Dimensions, E. J. Relph ..... \*76, 88  
 Shaver, A. G.:  
 Caustic Soda Signal Batteries ..... \*47  
 The Colorado Springs Convention ..... 282  
 Sheboygan Railway & Electric Co., Merit System ..... 118  
 Sheffer, H. H., Improved Indicator Circuit ..... \*158  
 Sibila, W. C., Standard Signal Symbols, Signal and Section Forces, Co-operation Between ..... 363  
 Signal Appliance Association Report ..... \*427  
 Signal Batteries:  
 Caustic Soda ..... \*47  
 Mercury Arc Rectifiers for Charging ..... \*66  
 Signal Blades and Signal Contact Springs, Adjustment of ..... \*452  
 Signal Circuit, Three-Position ..... 19  
 Signal Committee A. E. R. A., Meeting of Signal Department ..... 156  
 Base Ball Team ..... \*359  
 Organization ..... 293  
 Repairs ..... 208  
 Repair Shops, Lake Shore & Michigan Southern ..... \*63  
 Repair Shops, Nashville, Chattanooga & St. Louis ..... 99  
 Repair Shop, New York, New Haven & Hartford ..... \*261  
 Repair Shop, Pennsylvania ..... \*181  
 Repair Shop, Union Pacific ..... 231  
 Signal Engineer:  
 Future of ..... \*127  
 Informal Conferences in New York ..... \*245  
 Signal Failure:  
 From Corroded Wires ..... 387  
 Interesting ..... 327  
 Use of ..... \*396  
 Signal Foundations, The Evolution of ..... \*385  
 Signal Indications:  
 Decision of American Railway Association ..... \*245  
 Upper Left Hand Quadrant for Electric Signs ..... 248  
 Signal Lamp and Its Efficiency ..... 405  
 Signal Literature, Index ..... 110  
 Signal Locations, Describing ..... \*291  
 Signal Mechanism, Case Wiring ..... \*19  
 Signal Motor Brushes and Commutators, The Care of, by Stanley C. Bryant ..... \*260  
 Signal Performances:  
 Comparing, by F. H. Kingsley ..... 157  
 Record on Hudson & Manhattan ..... 88  
 Signals:  
 At Road Crossing, Lehigh Valley ..... 78  
 European Experiments with Schemes to Prevent Over-running ..... \*12  
 Over-running ..... 12  
 Spacing, Boston Elevated ..... 32  
 Tested in Indiana ..... \*223  
 Train Order ..... \*295  
 Signaling:  
 Alternating Current as Applied to ..... \*69, \*112  
 Apparatus for College Instruction in Bill to Compel Uniform ..... \*368  
 Cost Data ..... \*850  
 Defined by a Signalman ..... 122  
 Development of ..... 432  
 Electric Railway ..... \*128, \*246  
 For Different Speeds, by W. H. Ark- enburgh ..... \*365  
 For the "One-Car" Train ..... 367  
 Installation:  
 Baltimore & Ohio ..... 321  
 Chicago & North-Western Ter- minal in Chicago ..... \*226  
 Chicago, Indianapolis & Louis- ville ..... 241  
 Erie ..... \*69, 248  
 Illinois Central ..... \*79  
 Illinois Traction System ..... \*273  
 New York Tunnel Extension of the Pennsylvania, by George Gibbs ..... 224a  
 New Westchester & Bos- ton, by M. H. Loughridge ..... \*353  
 Panama Railroad ..... 40  
 Washington, D. C. ..... \*266  
 Instruction ..... \*351  
 Literature, Recent Additions to ..... 186  
 Practical Lessons ..... \*4, \*54, \*149, \*189, \*216, 406  
 Practice on Electric Railways ..... 92, 185, 169  
 Practice on Steam Railways ..... 92, 185, 169  
 Practice on the Principal Railways of the United States and Canada, Partial Summary ..... 345, 346  
 Recent Improvements in ..... 47  
 Summary of Recent Progress in ..... 53  
 Superintendent on ..... 416  
 Uniformity in Requirements ..... \*2  
 With Track Trip Control ..... 408  
 Signaling Subjects, Practical Discussions on ..... \*361  
 "Signalmen" ..... \*209, 243  
 Signalmen's Benefit Association Rail ..... 456  
 Simmons Hardware Co., Supply News ..... 285  
 Simpson, E., Battery Calculation for Line Circuits ..... \*356  
 Smith, Charles F., Union Pacific Signal Repair Shop ..... 231  
 Solderall Co., Supply News ..... 426  
 Solder for Aluminum ..... 55  
 Solenoids, Bridge Lock, Havana Electric Light & Railway Co ..... \*83  
 Southern Pacific:  
 Construction ..... 30, 31, 119, 121  
 Lamp Markers ..... 357  
 Rule Regarding Switch Lights ..... 78  
 Staff System ..... \*133  
 Track Improvements ..... 122  
 Southern Railway, Construction ..... 240  
 Space Interval and Speed-Time Curves, The, by J. G. Van Zandt ..... \*133  
 Spanner, Shifting ..... 28  
 Sparrow, W. K., Substitutes for Wood Trunking for Railway Signal Con- ducts ..... 227  
 Special Committee on Relation of Rail- way Operation to Legislation ..... 390  
 Specifications for Testing Switch and Signal Motors, Suggested, by Fred- erick W. Ellis ..... 316  
 Speed Limit Indicator ..... \*302  
 Split Link Opener ..... \*158  
 Spokane, Portland & Seattle, Interlock- ing ..... \*303  
 Sprague Electric Co., Flexible Steel Armored Hose ..... \*394  
 Staff System on the Southern Pacific, by S. L. Barker ..... \*133  
 Stake Holder ..... \*25  
 Standard Outline Bill of Mechanical Interlocking Material ..... \*249  
 Standard Rules, Wisconsin Commission Meeting of ..... 320  
 Standard Signals, Washington State Rail- road Commission ..... 161  
 Standard Symbols ..... \*3, \*129, \*131, 170, 188, \*248, \*294, \*333, \*362  
 Standard Underground Cable Co., Trade Publication ..... 427  
 Standards ..... 334  
 Standard Meeting of The Railway Signal Association, The ..... \*185, 110, \*224b  
 Station Lighting from Automatic Sig- nals, by Edgar Reinhart ..... \*312  
 Station Protection Circuit, by H. W. Cooper ..... \*238, 295  
 Steam Railways, Signaling Practice on, Stecher, C. G.:  
 Battery Connections, and Track Cir- cuit Relays ..... \*149  
 Comment on the Practical Lessons ..... 40  
 Cutting Out Gravity Cells ..... \*73  
 Maintenance of the Track Circuit ..... \*308  
 Track Circuit Installation and Care of Batteries ..... \*189  
 Stick Relay Buzzer Circuit ..... \*355  
 Stiles, T. Geo., Co.:  
 Drawing, Circuit Controllers ..... \*134  
 Supply News ..... 35  
 Storage Batteries:  
 Apparatus for Charging ..... 222  
 Arrangement in Box ..... \*15  
 By A. E. Watson, Book Review ..... 334  
 Connectors for Portable and Com- parisons ..... \*127  
 Use on Track Circuits, by H. G. Mor- gan ..... \*139  
 "Storage Battery Engineering," by Lamar Lyndon, Book Review ..... 368  
 Stradling, E. G.:  
 Automatic Block Signals on the Monon ..... \*433  
 Special Crossing Bell Circuit ..... 119  
 Stratford-on-Avon & Midland Junction Ry., Telegraphy to Moving Train ..... 119  
 Stray Currents, Explanation of, by Ar- thur E. Case ..... 132  
 Stray Current Problem, J. L. Watson ..... 88  
 Stromberg-Carlson Dispatcher's Signals, The ..... \*326  
 Substitutes for Wood Trunking for Rail- way Signal Conduits, by W. K. Sparrow ..... 227  
 Summary of Recent Progress in Signal- ing, by A. H. Rudd ..... 53  
 Summary of Signaling Practice ..... 345, 368, 406, 454  
 Sunset Lines, Construction ..... \*74  
 Support for Switch Box Connecting Rod ..... \*429  
 Surprise Checks ..... 227  
 Switch:  
 Deflection Recorder ..... \*22  
 For Extra Cell ..... \*278  
 Switch Box ..... 74  
 Connecting Rod Support ..... \*76  
 Terminal Connectors for ..... \*168  
 Switch Indicator Aspects ..... 217  
 Switch Movement Retaining Wall, by W. E. Rife ..... \*75  
 Switch Point Spreader ..... 217  
 Symbols and Nomenclature for Written Circuits, by F. L. Dodgson and S. N. Wight ..... \*178  
 Systematic Inspection ..... 451  
 Tappet Universal for S. & F. Locking ..... \*157  
 Telephone Circuit, The Kellogg "Booster," Kellogg Switchboard & Supply Co. ..... 83  
 Telephone Train Dispatching, by W. J. Miskella ..... 211  
 Miskella ..... \*76  
 Terminal Interlocking, The Newest ..... \*1210  
 Terminal Plant at Jersey City, The Erie Terre Haute, Indianapolis & Eastern, Construction ..... \*319, 390, 424  
 Test Clip, Universal ..... \*36  
 Testing, Short Circuit ..... 3  
 Thermometer Readings, Interchanging Centigrade and Fahrenheit ..... 302  
 The Signal Engineer:  
 Special Train ..... \*323, 358  
 Transportation Bureau ..... \*74  
 Thomas, E. A., Lightning and Lightning Arresters ..... \*450  
 Thompson, L. C., Supply News ..... 123  
 Thorowgood, W. J., Simplified Circuit Plans ..... \*366  
 Ties, Insulator ..... \*74  
 Timetable or Signal ..... 430  
 Toledo & Ohio Central, Train Dispatch- ing by Telephone ..... \*357, 390  
 Tommy-Bar and Pin Lifter, Combination ..... \*475  
 Top-Post Gln Pole, A ..... \*423  
 Top Post Signal, The Union Style "E" ..... 203  
 Track Circuit:  
 Calculations, Alternating Current ..... \*245, \*268  
 Characteristics ..... \*185  
 Closed ..... \*104  
 Cost per Section ..... 272  
 Description of Direct Current ..... \*4  
 Installation and Care of Batteries, by C. G. Stecher ..... \*189  
 Insulation and Protective Wiring ..... \*56  
 Maintenance, by C. G. Stecher ..... \*308  
 Relays and Battery Connections ..... \*149  
 Storage Batteries ..... \*139  
 Tests ..... \*216  
 Treated Ties ..... 19  
 Track Section Length, Conditions Gov- erning ..... \*100  
 Track Trip Control, Signaling with ..... 408  
 Train Dispatching on Interurban Rail- ways, by C. E. Lewis ..... 46  
 Train Orders on the Albany Southern ..... \*315  
 Train Order Signals ..... \*295  
 Train Rules in Great Britain ..... 374  
 Train Staff System on the Great North- ern ..... \*444  
 Transportation Bureau, The Signal Engi- neer ..... \*137  
 Trap Circuit for Crossing Bells ..... \*99  
 Treated Ties, Trouble on Track Circuits ..... 19  
 Trucking:  
 Expansion Joints, by D. R. Morris ..... \*421  
 Suggested Method of Laying ..... \*76  
 Supporting ..... \*26  
 Two-Crossing Bell Circuit, by H. W. Cooper ..... \*153  
 Two-Day Meeting, R. S. A. ..... \*209  
 U  
 Underground Electric Distribution, by William D. Ligon ..... 448  
 Uniform Signaling ..... \*138, 169, 241  
 Union Pacific:  
 Construction ..... 30  
 Educational Bureau ..... 240  
 Night at Meritt ..... 77  
 Signal Repair Shop, by Charles F. Smith ..... 231  
 Union Switch & Signal Co.:  
 Plan for Sale of Stock to Employees ..... 391  
 Purchase of General Electric Co., Signal Department ..... 380  
 Style "E" Top Post Signal ..... 208  
 Universal Switch Circuit Controllers ..... 163  
 United Electric Apparatus Co., Supply News ..... 392  
 United Railways & Electric Co.:  
 Construction ..... 30  
 Signaling ..... \*342  
 United States Electric Co.:  
 Supply News ..... \*84, 168, 285, 325  
 United States Electric Signal Co., Supply News ..... \*181, 426  
 United States Light & Heating Co.:  
 New Plant ..... \*227  
 Sult ..... 244  
 Universal Pipe Line Carrier Base ..... \*286  
 Upper Left-Hand Quadrant for Electric Lines ..... 248  
 V  
 Vacuum Lightning Arrester ..... \*328  
 Vandalla, Construction ..... \*319  
 Van Zandt, J. G.:  
 Comparison of the Interlocking Laws of the Various States ..... 8  
 For a Board of Signaling Experts ..... 88  
 Space Interval and Speed-Time Curves ..... \*133  
 Variable Resistance for Instruments ..... 239  
 Velocipede Engine, Test ..... 86  
 W  
 Wabash, Construction ..... 454  
 Wabash, Chester & Western, Construc- tion ..... 390  
 Waldron, J. M., Automatic Train Stop on the Interborough Rapid Transit ..... 224d  
 Ware, H. C., Supply News ..... 248  
 Washington Public Service Commission, Organization of ..... 320  
 Washington Terminal Co., Construction ..... 379  
 Washington Water Power, Signal Instal- lation ..... \*32  
 Water Heating Plant, by Sam Miskelly ..... \*159  
 Water-Tight Joint for Built-Up Iron Posts ..... 387  
 Watson, J. L., A Stray Current Problem ..... 88  
 Weld, Harold K., Railway Conduit Sys- tems ..... 265

Generated for Jon R Roma (University of Illinois at Urbana-Champaign) on 2016-03-12 01:18 GMT / http://hdl.handle.net/2027/chi.103590176  
Public Domain, Google-digitized / http://www.hathitrust.org/access\_use#pd-goo

Western Electric Co.:		Willard Storage Battery Company:		Wisconsin Block Signal Law.....	205, 280
Exhibit .....	*164	Supply News.....	35, 163, 244	Wood Trunking for Railway Signal Con-	
Improved Buffalo Grip.....	*285	Trade Publication .....	123	ducts, Substitutes for.....	227
Portable Telephones .....	244	Winans, E., Simplified Circuit Plans....	211	Wrench: .....	
Selectively Operated Semaphore.....	*229	Wire Measuring Device.....	*27	Adjustable Reamer .....	*27
Supply News .....	225	Wire Shearer .....	*27	Standard Proportions .....	*28
Trade Publication.....	35, 244, 325	Wiring:			
Western Maryland, Construction.....	320, 357	Bootleg and Elevator.....	40		
Western Pacific, Construction.....	77, 119, 454	Mechanism Case .....	*19		
Wight, S. N., and F. L. Dodgson, Symbols		Protective and Track Circuit Insula-			
and Nomenclature for Written Cir-		tion .....	*56		
cuits .....	*178	Tower .....	*7		

## Y

Yellow Distant Signal Lights in England	443
---	-----

## PERSONAL MENTION

[Photographs are indicated thus \*. Obituaries are indicated thus †]

Ambach, E. T. ....	162	Gallagher, F. H. ....	80	Phillis, George K. ....	122
Anderson, Burt .....	456	Garrity, Phil .....	122	Piggott, F. H. ....	35
Annear, R. F. ....	162	Gruntler, G. ....	80	Post, H. B. ....	162
Arnold, C. E. ....	79	Guthier, John .....	135	Prout, Hedley .....	79
Austin, C. ....	80	Guy, H. ....	456	Prout, Col. Henry G. ....	283
Ayers, E. A. ....	242			Pugh, O. ....	181
		Hatton, E. M. ....	208		
Baird, M. A. ....	391	Hermance, M. J. ....	80	Rinker, C. C. ....	242
Bartholomew, D. B. ....	206	Hickey, J. W. ....	359	Rizer, Fred W. ....	34
Bean, William E. ....	206	Hill, G. E. ....	122	Roberts, John .....	79
Benedict, Lemuel .....	35	Hinton, Bernard .....	79	Rogers, E. O. ....	162
Bradley, E. E. ....	*324	Hinton, K. A. ....	79	Roome, R. E. ....	206
Brady, Arthur W. ....	282	Hodgdon, C. R. ....	456	Rycraft, H. S. ....	35
Brashares, H. E. ....	456	Inwood, T. G. ....	*80		
Brizey, William Richard.....	*1284			Schultz, E. E. ....	242, 284
Brown, Sears .....	35	Kalk, C. N. ....	206	Sconce, E. M. ....	283
Brown, Walter De Forest.....	135	Kane, Edward .....	35	Scott, John M. ....	34
Brundage, M. J. ....	456	Kellenberger, K. E. ....	*34	Shadwick, J. J. ....	391
		Kinkade, H. S. ....	*79	Shannahan, J. N. ....	*206, 242
Caddy, C. F., Jr. ....	79	Kirkpatrick, T. E. ....	*80	Shannon, H. H. ....	35
Cade, Harry .....	180	Knickbocker, C. E. ....	162	Shatwell, E. V. ....	34
Caley, Glen H. ....	122	Kramer, H. T. ....	80	Shea, J. F. ....	80
Call, Anthony .....	35			Shearburn, Roy .....	324
Carleton, C. C. ....	*79	Langan, John .....	162	Simmons, H. F. ....	80
Carpenter, H. C. ....	122	Lavarack, F. C. ....	162	Simonson, Millard .....	35
Christian, C. J. ....	162	Lelsenring, John .....	242, 284	Sloat, N. A. ....	242
Christianson, C. E. ....	324			Smith, Hal .....	162
Cloud, W. D. ....	206	Mack, Michael .....	†162	Smith, L. W. ....	426
Coleman, F. H. ....	80	Mahar, N. W. ....	242	Smith, Milton E. ....	*162
Coon, M. P. ....	80	Maple, L. H. ....	162	Stecher, C. G. ....	242
Cooney, J. ....	79	Martin, J. J. ....	80	Stevenson, J. W. ....	162, 224
Cotton, C. A. ....	359	McCartney, J. R. ....	162	Stewart, A. W. ....	34
Cramer, L. B. ....	34	McMillen, F. R. ....	35	Stoll, T. George .....	284
		McWain, W. J. ....	†81	Stradling, E. G. ....	*206
Dawson, William .....	*80	Millard, C. S. ....	162	Stuart, Fred C. ....	*162
Dellemont, A. ....	*79, 242	Minert, A. A. ....	359		
Dewey, W. H. ....	122	Mock, H. F. ....	34	Taylor, H. B. ....	80
Dodd, E. B. ....	242	Moore, A. G. ....	*391	Thomas, George K. ....	359
Doxsee, C. F. ....	122	Moore, Edwin .....	35	Tideman, H. L. ....	34
Drake, Caleb .....	34	Morris, Marion .....	426	Tillotson, George E. ....	122
Dressel, Dr. Charles H. ....	†208	Ness, Edward .....	35	Trout, G. W. ....	122
Dryden, W. L. ....	†284	Nicholson, L. A. ....	35		
		Nicoll, W. B. ....	283	Weaver, E. M. ....	359
Edwards, B. ....	*79	Norton, M. ....	80	Whalen, L. E. ....	80
Ensel, Theodore .....	242	O'Brien, J. ....	*79, 242	White, F. ....	*79
Eversett, E. A. ....	283	Oswald, A. E. ....	162	Whitcomb, F. E. ....	284
		Overholtz, James .....	†162	White, R. H. ....	34
Fenley, W. H. ....	359			Willey, H. F. ....	181
Fernon, T. W. ....	162	Parle, L. V. ....	*426	Williamson, A. G. ....	359
Fitzgerald, J. M. ....	206	Pasco, E. ....	80	Wilson, H. A. ....	324
Foale, John .....	181	Peabody, J. A. ....	359	Winans, Edgar .....	456
Fugina, A. R. ....	*34				