

Contents

INTRODUCTION	7	4 DIESEL, ELECTRIC	
1 EARLY RAILWAYS Bull-head to Flat-bottom The Start of Locomotive Power The Stockton & Darlington George Stephenson Rainhill Trials The First Main-line Locomotives The Lithographs of J. W. Carmichael	10 14 17 20 22 24 29	AND TURBINE LOCOMOTIVES Birth of Electric Traction Steam Turbine Locomotives The Birth of the Diesel Gas Turbine Locomotives The Turbotrain at Last Modern Electric Power	129 134 137 144 147 152
The Railway Mania The First Railways in Europe The First Railways in America	32 34 36	5 PASSENGER VEHICLES	
2 THE DEVELOPMENT OF THE LOCOMOTIVE IN THE NINETEENTH CENTURY British Steam Before World War I The British 0-6-0	41 47	Development of Passenger Services to 1900 Development of the Railway Carriage Royal Trains The North American Railway Carriage The Pullman Story Double Deck Trains Travelling Post Offices	173
British Single Drivers French Compounds The American 4-4-0	53 59 65	6 CHANGING PATTER IN FREIGHT OPERATIO	NS NS
3 PROGRESS AND EXPERIMENT IN THE TWENTIETH-CENTURY		Development of Freight Services to 1900 Twentieth Century Freight Services Coal by Rail Piggyback Operations of North	194 198 201
Steam Streamliners Austerity Locomotives	73 79 87 93 98 103 109 115 121	America Railways and the Container Revolution Automatic Wagon Identification	205209215
		Railway Signalling — Early Days to 1890 Signalling 1890-1940 The Big Power Box Planning the Timetable Inside a Diesel Locomotive Depot Railway Workshops	Y 221 229 233 237 243 247 251 256

8 THE RAILWAYS OF BRITAIN AND IRELAND The LMS The LNER The Southern Railway	261 267 273	12 THE RAILWAYS OF AUSTRALASIA Railways of Australia Railways of New Zealand	393 405
The Great Western Railway Railways of Scotland British Rail in Pictures The Railways of Ireland	277 281 291 293	13 THE RAILWAYS OF AMERICA Burlington Northern Union Pacific, Southern Pacific,	413
9 THE RAILWAYS OF EUROPE France – Fastest Inter-City French Railways in Pictures Minor French Railways	301 306 309	Santa Fe The Penn Central Railways of Canada South American Railways in Pictures Railways on the Roof of the World	417 422 427 432 435
Italian Railways in Pictures Spain – Europe's Last Stronghold of Steam The Narrow Gauge in Portugal Railways through the Alps Mountain Railways of Switzerland Railways of Austria North European Railways in Pictures German Railways in Pictures East European Railways in Pictures	314 318 325 329 334 339	14 RAILWAY ARCHITECTURE The World's Largest Tunnels The World's Great Bridges British Stations Italian Stations French Stations German Stations	441 447 451 456 460 463
10 THE RAILWAYS OF ASIA The Trans-Siberian Railway Turkish Railways in Pictures The Railways of India Asian Railways in Pictures Japan's New Tokkaido Line	358 362 365 370 373	15 THE GREAT EXPRESSES The Flying Scotsman The Brighton Belle The Settebello The Talgos The Orient Express Trans Europe Express The Twentieth Century Limited	469 474 479 484 489 493 498
THE RAILWAYS OF AFRICA Ig Steam in Southern Africa hodesian Railways in Pictures outh African Railways in Pictures	379 385 386	Zephyrs, Hiawathas and Florida Specials The CPR Canadian	501 506
		INDEX	510

INDEX

Abt, Dr Roman 335
Adams, William 274
Alps, Railways through the 329 et seq
ALCO locomotives 81, 98, 99
American Car & Foundry 180, 206, 484
AMTRAK 421, 502
Andrews, Captain James J. 223
Antofagasta & Bolivia Railway 437, 438
Ardrossan & Johnstone Railway 282
Argentina 432, 433
Arlberg tunnel 445
Arth-Rigi Railway 334
Articulated locomotives 87 et seq
Ashford works 251
Atchison, Topeka & Santa Fe RR 417 et seq
Automatic car identification 216
Container traffic 210
Coaching stock 179, 216
Colorado Springs station 419
Locomotives 84
Austerlitz, Gare d' 461
Australia, Railways of 393 et seq
Australia, Railways of 339 et seq,
Achenseebahn 341
Graz-Köflacher Railway 342
Linzer Lokalbahn 343
Montafonerbahn 343
Mortafonerbahn 343
Murtalbahn 343
Situbaitalbahn 340
Styrian Government Railways 343
Vorchdorf-Eggenberg 343
Wiener Lokalbahn 343
Zillertalbahn 343
Zillertalbahn 343
Steyrtalbahn 343
Avonside Engine Company 401, 404

Baghdad-Basrah Railway 224 Baghdad- Basrah Railway 224
Baikal, The 361
Bailey, Duncan 202
Balaclava military railway 221
Baldwin & Co 36, 395, 404
Ballochmyle viaduct 281, 447
Baltimore & Ohio RR
Electrification 130
Locomotives 36, 80
Piggyback trains 207
Pullman cars 177 Pullman cars 177 Pullman cars 177
Balt-Orient Express 490
Barassie works 251
Barclay, Andrew 281
Battle station 452
Bavarian State Railways 34, 186 Bavarian State Railways 34, 186
Beattie, A.L. 409
Beckenried-Klewenalp cable railway 336
Beighton accident 258
Belfast & County Down Railway 293
Belfast & Northern Counties Railway 293
Belgian National Railways 493
Berlin-Baghdad Railway 224
Berlin-Potsdam Railway 34, 194
Berlin Stations 466
Berne-Lötchburg-Simplon Rly 152, 379, 444
Bernese Oberland Railway 335
Beyer Peacock & Co Ltd 135, 269, 379, 402, 404
Big Boy locomotives 98 et seq Big Boy locomotives 98 et seq
Big Boy locomotives 98 et seq
Big Steam in Southern Africa 379 et seq
Billard railcars 311
Birmingham & Derby Railway 261
Birmingham & Gloucester Railway 36, 261
Birmingham stations 452, 453
Blackfriars station 452 Blauer Enzier Express 465 Block coal trains 202 Block coal trains 202 Bodmin & Wadebridge Railway 164 Bolivian National Railways 433, 436 Bombay, Baroda & Central India Rly 186 Borsig & Schwartzkopf locomotives 138, Boston & Albany RR 422 Bouch, Sir Thomas 283, 448 Box tunnel 251 Brassey, Thomas 221 Brienz-Rothorn Railway 335, 460 Brighton Belle 166, 170, 182, 474 et seq Brigue-Visp-Zermatt Railway 335 Brill railcars 396 Britannia bridge 447 British Electric Traction Ltd 185 British Railways (British Rail) Advanced Passenger Train 147 Coaching Stock 170 Coal traffic 221 Containers 209 Diesel locomotives 137 et seq, 247 et seq Electric locomotives 129 et seq, 152 et seq Euston station 455

Flying Scotsman 469 et seq
Freightliner depot 209
High Speed Train 251
Merry-go-round trains 203
Steam locomotives 47 et seq, 53 et seq,
73 et seq, 109 et seq, 116 et seq, 121 et seq
Woodhead tunnel 444
Workshops 251 et seq
British Rail Engineering Ltd 251, 255
British stations 451 et seq
British Steam before World War | 41 et seq
Brown Boveri Ltd 133, 144
Brunel, Isambard Kingdom 222, 277, 447
Brush Electrical Engineering Co Ltd 185
Budd Company 181, 421
Budweis-Linz Railway 34
Bugatti railcars 137
Bulgaria 490
Bulleid, O.V.S. 107, 274, 275, 295
Bull-head to Flat-bottom 10 et seq
Burgdorf-Thun Railway 133
Burlington Northern RR (see also Chicago,
Burlington & Quincy)
Coaching stock 415, 416
Double-deck trains 189
Locomotives 80, 414
Passenger services 501

Cairns Railway 401 Caledonian Railway 261, 281, 287 Glasgow Central station 452 Locomotives 45, 57, 263, 288 Pullman cars 184 Pullman cars 184
Ouintinshill accident 256
Cambrian Coast Express 280
Cambridge station 451
Camden & Atlantic RR 423
Camelback locomotives 79
Canadian Government Bailway Canadian Government Railways 427
Canadian National Railways 427 et seg
Coaching stock 147, 428
Diese Irailcars and locomotives 138, 426
Electrified lines 427
Experimental KarTrak 218
Gas tuylne trails 147, 151 Gas turbine trains 147, 151 Northern Alberta Railways 430 Piggyback trains 206 Quebec bridge 447
Super Continental 426
Steam locomotives 428
Canadian Northern Railways 427
Canadian Pacific Railway 430 et seg
Atlantic Limited 430
Canadian 508 et seg Atlantic Limited 430
Canadian 506 et seq
Diesel locomotives 426 et seq
Double-deck trains 187
Esquimalt & Nanaimo Railway 431
Northern Alberta Railways 430
Piggyback trains 206
Duebec container depot 213 Piggyback trains 206
Quebec container depot 213
Steamers 430
Canterbury & Whitstable Railway 273
Carlisle Citadel station 494
Carmichael, J.W. 29 et seq
Cascade tunnel 414, 444
Castle class 74, 75, 278, 279
Catalan Talgo 485, 494
Cavan & Leitrim Railway 293, 296
Central Australian Railway 402
Central Pacific RR 419 (see also Southern Pacific)
Central of Peru Railway 435
Chapelon, André 60
Chesapeake & Ohio RR 84, 90
Cheshire Lines Committee 269 Cheshire Lines Committee 269 Cheshire Lines Committee 269
Chester station 451
Chicago & North Western RR 79, 189, 417
Chicago & St Louis RR 421
Chicago, Burlington & Quincy RR 138, 189, 413
(see also Burlington Northern)
Chicago, Milwaukee, St Paul & Pacific RR 80, 502, 503
Chilean State Railways 433
Chilean Transandine Railways 434 Chilean Transandine Railway 434 Chinese Eastern Railway 359 Churchward, G. J. 73 et seq City & South London Railway 130 Clerestory-roofed coaches 167 Cleveland, Cincinnati, Chicago & St Louis RR 422 Clogher Valley Railway 297
Clyde Engineering Company 393
Coal by Rail 201 et seq
Coast Daylight Express 420
Coast Starlight Express 420
Collete, C.B. 74, 75, 278
College Haunthaphof 463 Cologne Hauptbahnhof 463 Commonwealth Railways 404, 405 Connecticut River RR 425 Coras Iompair Eireann 295, 297 Cork, Bandon & South Coast Railway 293 Coronation, The 293 Coronation class 269 Corrèze Tramway 313 Cotes du Nord, CF des 309, 313 County Donegal Railways 265, 293 Crewe works 251, 254, 263 Crimean War 221 Crosti boilers 125 Czechoslovakian State Railways 186, 358

D Danish State Railways 344 Darjeeling-Himalayan Railway 369, 370 Davidson, Robert 129 de Glehn, A. 59, 79
Deeley, R.M. 105
Delaware & Hudson Canal Co 36
Delaware & Hudson RR 137
Delaware & Hudson RR 137
Delaware, Lackwanna & Western RR 484
Denver & Rio Grande Western RR 421, 444
Denver Pacific RR 418
Denver Zephyr 502
Derby works 251 er seq. 263
Deutsche Bundesbahn (see German Federal Rlys)
Development of Freight Services to 1900 194, 195
Development of Freight Services to 1900 194, 195
Development of Passenger Services to 1900
158, 159
Direct Orient Express 489
Dominion Atlantic Railway 179, 430
Donicaster works 251, 253
Double- deck Trains 185 er seq
Drummond, Dugald 287
du Bousquet, G. 60, 88
Dublin & Kingstown Railway 293
Dudley, Earl of 203
Duke of Portland's Railway 281
Dundalk, Newry & Greenore Railway 261, 295
Dundee & Newtyle Railway 282
Dun Mountain Railway 405
Dusseldorf Hauptbahnhof 464

E
East African Railways 87, 89, 379 et seq
East European Railways in Pictures 354 et seq
Eastern Belle 184
East Germany 186, 466
Eastleigh works 251
Edinburgh & Berwick Railway 282
Edinburgh & Dalkeith Railway 282
Edinburgh, Leith & New Haven Railway 282, 283
Egypt 163
El Capitan Express 421
Flectric locomotives 129 et seq, 152 et seq
Emu Bay Railway 403
English Electric Ltd 144, 367
Esquimalt & Nanaimo Railway 431
Est. CF de 1'
Double-deck coach 185
In Franco-Prussian War 224
Inter-city trains 303
East, Gare de 1' 462, 489
Euston station 451, 455

Fades viaduct 449
Fairbairn locomotives 396
Fairlie locomotives 87, 88, 326, 404
Fell system 87
Fenchurch Street station 451
Festiniog Railway 87
Finland 35
Finnish State Railways 344
First Main-line Locomotives, The 24 et seq
Flat-bottom rail 12
Flèche d' Or 183, 198, 494
Florida East Coast RR 85
Flying Scotsman 469 et seq
Foreman, Charles 281
Forth bridge 447, 448
Foster & Rastrick Ltd 36
France (see also French National Railways)
Early railways 34
Electrification 129 et seq, 152 et seq
Inter-city trains 301 et seq
Lyon-St Etienne Railway 34
Minor railways 309 et seq
Hailcars 137
Stations 460 et seq
Wartime 222, 224
French National Railways (SNCF)
Container traffic 211
Flèche d'Or 183, 198, 494
Locomotives 59 et seq, 152, 304, 305, 306
Mistral 493
Piggyback trains 208
Trans Europ Express 493
Turbotrains 147, 246
French Railways in Pictures 306 et seq
Frisco Lines: Piggyback trains 207
Fuller, W.A. 223
Furka-Oberalp Railway 335
FWD-Wagner Piggy Packer 206

G
Garabit viaduct 450
Garnkirk & Glasgow Railway 282
Garratt locomotives 89 et seq
Gast turbine locomotives 144 et seq
Gattie, Warwick 210
Geelong & Melbourne Railway 394
General Motors 149
Geraldton-Northampton Railway 403
German Federal Railways (DB)
Cologne station 463
Container traffic 210
Dusseldorf station 464
Frankfurt station 466
Gas turbine trains 147
Hamburg-Hauptbahnhof 465
Intercity Netz 494
Locomotives 110, 113, 349 et seq
Ludwigshafen station 466

Munich station 465 South Eastern Railway 371 Indonesian State Railways 95, 370, 371, 372 Innisfail Tramway 403 Inside a Diesel Depot 247 Los Ángeles & Salt Lake RR 417 Lozère, Ligne de la 313 Luxembourg Railways 495 Lynton & Barnstaple Railway 273 Lyon, Gare de 462 Rheingold Express 494 Stuttgart station 467 Trans Europ Express 493 Wiesbaden station 466 German State Railways (DR) 186, 348 et seg Ghega, Karl 341 Intercity Netz 494 International Container Bureau 211 International Standards Organisation 211 Lyon & Etienne Railway 34 Gieslejector 125 Gillert ats La i Invalides, Gare des 460 Inverness & Nairn Railway 261, 284 Inverurie works 251 Gilbert ats 15.7 Giasgow & South March Railway 761, 282 Ballochmyle viaduct 447 Ireland 293 et seq
Iteland 293 et seq
Iteland State Railways
Cisalpin 494
Locomotives 314, 315, 316
Orient Express 490
Settebello 479 et seq
Trans Europ Express 494 St Enoch station 452 Coaching stock 167 Coaching stock 167
Glasgow, Paisley, Kilmarnock & Ayr Railway 282
Glasgow Central station 452
Glasgow works 251
Glenfinnan viaduct 283, 285
Glion funicular 336
Glocoecha, Lt-Col Alejandro 484
Golden Arrow 182, 494
Gölsdorf, Karl 340
Gooch, Daniel 278
Gorpergat Railway 335, 337 McCallum, David C 223 Madrid, Zaragoza & Alicante Railway 484 Mallet locomotives 59, 89, 93, 98 et seq Trans Europ Express 494 Vesuvius Arrow 483 Ivatt, H.A. 267, 270 Manchester & Bolton Railway 261 Manchester & Leeds Railway 261 Manchester Pullman 182 Manchester, Sheffield & Lincolnshire Rly 158
Manchester, South Junction & Altrincham Rly 270
Manchester stations 454 Manchester, South Junction & Altrincham Manchester stations 454
Manor class 76
Manson, James 288
Maria Pia bridge 449
Marseilles: Gare St Charles
Marsh, Sylvester 336
Maunsell, R.E.L. 170, 275
Mediolanum (TEE) 456, 465, 494
Melbourne & Hobsons Bay Railway 393
Mersey Railway 169
Metro-Cammell 170
Metropolitan Vickers 144, 396
Michelin, André 137
Michigan Central RR 422
Middleton Railway 154
Midl, CF du 304
Midland Counties Railway 261
Midland Great Western Railway 293, 297
Midland Railway (Britain)
Coaching stock 165, 167, 169, 183
Coal traffic 201
Derby works 251, 252
Locomotives 46, 262
Northern Counties Committee 261, 299 Gooch, Daniel 278
Gornergrat Railway 335, 337
Gornergrat-Stockholm cable railway 43
Gotthard tunnel 329, 445
Grand Central station 425, 500
Grand Junction Railway 190, 251, 261
Grand Rapids & Indiana RR 422
Grand Rayer RB 423 Japanese National Railways Gas turbine trains 147 Hokutiku tunnel 446 Tokaido line 573 et seq Jones, David 287 Jungfrau Railway 335, 337 Grand Hapids & Indiana RH -Grand River RR 430 Grand Trunk Pacific RR 427 Grand Trunk RR 423, 427 Great Central Railway 267 Coal traffic 201 Hotel Great Central 452 Locomotives 45, 270 Marylebone station 452 Nottingham Victoria station 454 Signalling 235 Great Eastern Railway 267 Locomotives 44, 59, 103, 207, 268 Kaganovich locomotives 357 Kansas Cityan 421 Kansas Pacific RR 418 Kilmarnock & Troon Railway 261, 281 King class 73, 76, 116 Pullman cars 184
Royal trains 175
Great Northern Railway (Britain) 261, 267 Abbots Ripton accident 230
Coal traffic 194, 201
Dining cars 166
Locomotives 44, 267
Signalling 230
Great Northern Railway (Ireland) 293, 296
Great Northern Railway (Ousperland) 401 Locomotives 46, 262 Northern Counties Committee 261, 295 Passenger services 158 Kings Cross station 25, 451 Kitson locomotives 402, 404 Hassenger services 158
Wellingborough accident 258
Midland Railway (Australia) 404
Milan station 456
Millbrook container depot 212
Milwaukee Road (see Chicago, Milwaukee, St Paul & Pacific RR)
Minor French Railways 309 at 252 Great Northern Railway (Queensland) 401
Great Northern Railway (USA) 413
(see also Burlington Northern)
Cascade tunnel 414, 444
Coaching stock 179 Lake Erie & Northern RR 430 Lake Shore & Michigan Southern RR 422, 498 Lamco (Liberia) 255 Lancashire & Yorkshire Railway 132, 169, 261 Langweis viaduct 443 Minor French Railways 309 et seq Mistral 494 Mitchell, Joseph 281 Empire Builder 413 Locomotives 413, 414
Great North of Scotland Railway 269, 284 Moffat tunnel 444 Monkland & Krkintilloch Railway 209, 282 Mont Cenis tunnel 442 Montparnasse, Gare 461 Great Southern & Western Railway 293 Great Southern Railway 295 Great Western Railway 277 et seq Automatic train control 237, 279 Launceston & Western Railway 403 Leader class 107 Leicester & Swannington Railway 25, 261 Montreux-Oberland Bernois Railway 333 Mount Lyell Mining & Railway Company 403 Mozambique State Railways 386 Leipzig & Dresden Railway 25, Leipzig & Dresden Railway 36 Lemano Express 456, 497 Lewisham accident 257 Liverpool & Manchester Railway 261 Coaching stock 163, Excavating cutting 33 Locomotives 24 Automatic rain control 237, 279
Cambrian Coast Express 280
Cheltenham Flyer 280
Coaching stock 164, 167
Conversion from broad gauge 32
Cornish Riviera Express 280 Mozart Express 465 Munich Hauptbahnhof 464 Murray, Matthew 14, 20, 34 Crest 33 Locomotives 24 Rainhill trials 22, 23 Signalling 229 Diesel railcars 167, 168
Freight services 198, 202, 203
Gas turbine locomotive 138 Stations 451 Passenger services 158 Royal trains 166, 173 Stations 451 Liverpool Overhead Railway 32, 234 Ljungström, Fredrik 135 Locher, Edouard 336 Lochgorm works 263 Locke, Joseph 34, 281 Saltash bridge 447
Signalling 230, 236
Steam locomotives 43, 48, 54, 73 et seg, 104, 277, 278
Greece 355, 489
Grenchenburg tunnel 444
Grenchle station, 461 Nagelmackers, George 182 Narrow gauge railways Asia 370 et seq Australia 393 et seq France 309 et seq Ireland 293 et seq Lockwood viaduct 450 London & Birmingham Railway 25, 261 Freight agent 94 Freight agent 94
Royal trains 165, 173
Stations 451
London & Croydon Railway 273
London & Greenwich Railway 273
London & North Eastern Railway 267 et seg
Coaching stock 170
Electrification 270
Flying Scotsman 469 et seg
Locomotives 109, 110, 269 Grenoble station 461 Gresley, Sir Nigel 104, 105, 269 Gulf, Colorado & Santa Fe RR 421 Györ-Sopron-Ebenfurthi Vasut 342 New Zealand 405 et seq Portugal 325 et seq South Africa et seq South America 432 et seq Switzerland 334 et seq National Limited 287 Neilson locomotives 401 Netherlands Railways Carriage interior 162 Locomotives 109, 110, 269 Electric locomotive 155 Rheingold Express 496 Newcastle & Carlisle Railway 26 et seg Signalling 238 London & North Western Railway 261 Hall class 77 Hall class //
Hamburg station 466
Harkort, Friedrick 224
Harrogate Pullman 269
Harrow accident 257
Harwich (Parkeston Quay) 213 Newcastle & Carlisle Railway 26 et seq
Newcastle Central 451
Newfoundland Railway 427
New South Wales Government Rly 189, 393 et seq
New York & Harlem RR 422
New York & Harlem RR 422
New York & New England RR 425
New York Central RR 78, 422, 498, 500
New York, New Haven & Hartford RR 424, 484
New York, Providence & Boston RR 424
New York, West Shore & Buffalo RR 424
New York, West Shore & Buffalo RR 424
New York West Shore & Buffalo RR 427 Britannia bridge 447 Coaching stock 165 Electric stock 169 Electric stock 169
Passenger services 158
Royal trains 164, 173
Signalling 232
Standedge accident 263
Weedon accident 257
London & Southampton Railway 221, 273 Harwich (Parkeston Quay) 2 Haupt, Herman C. 223 Le Havre terminus 462 Hawksworth, F.W. 278 Hellenic State Railways 355 Henschel locomotives 413 Hiawatha trains 501 et seq Highland Railway 261, 284 Coaching stock 165 Locomotives 290 London & South Western Railway 225, 273 Coaching stock 170 Electric stock 169 New York, Providence & boston HH 424 New York, West Shore & Buffalo RR 422 New Zealand 422 et seq Nice-Digne Railway 311, 313 Nice station 402 Nord CF du 302, 303 Locomotives 196 Pullman cars 184 Locomotives 290 Royal trains 173 Traffic in 1914-18 war 225 Nord, Gare du 460 Norfolk & Western RR m & Winans locomotive 36 Hokutiku tunnel 446 London, Brighton & South Coast Railway 273 Locomotives 80, 97 Coaching stock 170 Locomotives 44, 273 Pullman cars 165, 183 Horwich works 251 Housatonic system 425 Piggyback trains 206 Use by Union Pacific 418 North Australia Railway 404 Hudson, George 282 Hull Pullman 183 Royal trains 175 North British Locomotive Co Ltd 134, 135, 263 North British Railway 283 Flying Scotsman 469 London, Chatham & Dover Railway 201, 273 London, Chatham & Dover Railway 295 London, Midland & Scottish Railway 261 et seg Cheshire Lines Committee 269 Coaching stock 167, 168 Hungary 342, 489 Forth bridge 447 Locomotives 44 Tay bridge 447 Locomotives 72, 110, 135, 139, 265, 267 Northern Counties Committee 261, 295 North East Dundas Railway 403 North Eastern Railway 267 Royal trains 175 Illinois Central RR 189 Indian Government Railways 365 et seq Bombay, Baroda & Central India Railway 189 London, Tilbury & Southend Railway 261, 262 London Transport 184, 226 Coaching stock 166 Flying Scotsman 469 Locomotives 270 Long, Huey P. Long bridge 449 Long Island RR 181, 186 Chittaranjan works 367 Electrification 367 Passenger services 159 Railcar 137 Northern Alberta Railways 430 Northern Central RR 423 Lord Nelson class 263 Locomotives 366, 369, 370 et seq

Lorraine bridge 447