

11/5/15  
Engineering  
Civil Engineering  
Railway Engineering Photographs

Box 1: Plates 1-105

1 - 5; 11 - 15 Railway Engineering buildings, labs and facilities at the University of Illinois  
6 - 10 Missing  
16 - 26 Steam locomotive testing at the Locomotive Testing Lab, I.C. 2-8-0  
27 - 41 Construction of Locomotive Testing Laboratory  
42 - 59 Boiler Testing  
60 - 62 Locomotive drive-wheel testing  
63 Locomotive Lab with students  
64 - 99 Missing  
100 - 105 Wheel testing

Box 2: Plates 106 - 219

106 - 107 Wheel testing  
108  
109 - 119 Missing  
120 - 150, 155 Electric Railway Testing Car, operation, equipment, and test results  
151-154 Missing  
156 - 159 Missing  
160 - 169 Electric Railway circuit diagrams  
170 - 172 Testing devices  
173 - 199 Missing  
200 Big Four Railroad Locomotive and caboose  
201 - 203 Missing  
204 - 207  
208 - 210 Missing  
211 - 219 Truck and bogie testing

Box 3: Plates 220 - 313

220 - 227 Truck and bogie testing  
228 - 250 I.C. Railroad Dynamometer Car, design, equipment and methods of testing  
251 - 254 Piston rod diagrams  
255 - 274 Missing  
275 - 313 Track maintenance, with emphasis on cross-tie treatment and installation, with views  
of the C.V. & Q.R.R. timber treating plant

Box 4: Plates 320 - 460

314 - 319 Missing

320 - 379 Signal diagrams and circuits  
 380 - 399 Missing  
 400 - 444 Railway water towers, design, examples, refinements  
 445 - 449 Missing  
 450 - 460 Peoria and Eastern Railway (Big Four) Shops, Urbana, views

Box 5: Plates 461 - 541

461 - 506 Peoria and Eastern Railway Shops, Urbana, views, diagrams, operations. Photos appear to be ca. early 1920's.  
 507 - 509 Missing  
 510 - 541 I.C. locomotives (steam) and locomotive shops (operations, design)

Box 6: (legal size) Plates 550 - 652

542 - 549 Missing  
 550; 553 - 652 Rail joint testing (pressure, strength, durability)  
 551 - 552 Missing

Box 7: Plates 653 - 728

653 - 659 (1 - 20) Rail joint testing  
 660 - 722; 724-728 Wheel strength, wheel testing  
 723 Missing

Box 8: Plates 729 - 834

729 - 740 Wheel strength testing  
 741 - 749 Missing  
 750 - 764 Historic steam locomotives (Rocket, Best Friend of Charleston)  
 765 - 769 Missing  
 770 - 774 Early track and roadbed, one Florida East Coast Railway steam locomotive, ca. 1910  
 775 - 777; 779 - 789 Air and handbrake design diagrams and examples  
 790 - 799 Missing  
 800 - 812 Steam locomotive boiler design (missing 806 – brittle and unusable)  
 813 - 814 Wreck, passenger train, wooden equipment, may be Wabash R.R.  
 815  
 816 - 819 Missing  
 820 - 834 Coupler design and testing

Box 9: (legal size) Plates 835 - 933 and lantern slides

835 - 836; 838 - 848 Truck testing, load capacity, endurance, design (841 Big Four R.R. wooden

box car)

849 - 853 Traction locomotives and cars, Illinois Traction Systems  
 854 - 868 Rail and machine testing, testing processes and diagrams  
 869 - 874 Missing  
 875 - 890 Coal, types, testing as locomotive fuel  
 891 - 894 Missing  
 895 - 899 I.C. 2-8-0 Steam locomotive  
 900 - 908 Momentum, weight/speed tests  
 909 Missing  
 910 - 916 Rail bonds and electrical connections  
 917 - 922 Track location and curvature, abutments (missing 919 and 921 – cracked and unusable)  
 923 View of IR Engine #431 in Locomotive Testing Lab  
 924 - 928 Interior of University of Illinois electric test car  
 929 Students on line survey, Illinois Traction System Lines  
 930 - 933  
 47 lantern slides of the design, operations and results of tests made by an I.C. R.R. dynamometer car (may be as late as 1940)

Box 10:

Illinois Central Railroad Engines, 1900- (6 prints)  
 Troy, Ohio derailment, April 1900 (2 prints)  
 Test car instrumentation in CB& QRR dynamometer car, May 1902  
 Railway testing laboratory construction and fittings (later Aeronautical Engineering Lab A), ca. 1905 (8 prints)  
 Electrical engineering test car, ca. 1910 (8 prints)  
 Dynamometer car #3, manufacturer's metal plate, 1914  
 Interiors and recording instruments test mechanisms, 8 8 x 10 plates, ca. 1914  
 Japanese test car paper test mechanisms 13, 6 x 8 plates, 1914  
 Illinois Central test car 17, 1 plate (3 prints)  
 Locomotive Testing apparatus and crew (7 prints)  
 Brake shoe testing, 1 illustration  
 Test car exteriors, 6 x 8 plate  
 Draw bar pull apparatus, 2, 2 x 3 plates  
 Test apparatus, 2, 6 x 8 plates  
 Gear box, 8 x 10 plate  
 NYNH&M railroad locomotive # 3500, 25 prints, blueprints, datasheets, August 1926  
 Baldwin locomotive works engine # 6000, 8 prints  
 Delaware and Hudson locomotive # 1400, 2 prints, September - December 1926  
 Recording machines and sketch of Dudley Dynagraph, 7 mounted prints