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Guide to the Pittsburgh Locomotive and Car Works Collection

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PITTSBURGH LOCOMOTIVE WORKS,

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Collection Overview

Repository:	Archives Center, National Museum of American History
Title:	Pittsburgh Locomotive and Car Works Collection
Date:	1874-1910
Identifier:	NMAH.AC.0164
Creator:	Pittsburgh Locomotive and Car Works (Creator)
Source:	National Museum of American History (U.S.). Division of Transportation (Collector)
Extent:	1.5 Cubic feet (3 boxes)
Language:	English .
Summary:	Records of the Pittsburgh Locomotive Works and correspondence and personal papers of General Manager Daniel A. Wightman.
Digital Content:	Image(s): Pittsburgh Locomotive and Car Works Collection

Administrative Information

Acquisition Information

Immediate source of acquisition unknown.

Provenance

Transferred to the Archives Center from the Division of Transportation, now the Division of Work and Industry, July 3, 1985.

Processing Information

Collection processed by

Preferred Citation

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Biographical / Historical

Pittsburgh Locomotive and Car Works was founded by Andrew Carnegie and T.N. Miller in 1865. Like most other railway companies, Pittsburgh Locomotive and Car Works was involved in designing and building light locomotive engines. Its first locomotive was finished in April, 1867, two years after the Civil War.

An energetic new superintendent, Daniel A. Wightman of Allegheny, Allegheny County, joined the company soon after its founding. The date of his employment with the company is unknown, but Wightman's sketches of locomotives appear about 1874. In 1893, Wightman applied to the Commissioner of Patents for patent rights over his invention of an improvement in compound engines.

Wightman was the company's Superintendent and General Manager between 1895 and 1900. By the following year, 1901, the company had built a total of 2,400 locomotives. That same year, Pittsburgh Locomotive merged with a new corporation, the American Locomotive Company. The American Locomotive eventually closed the Pittsburgh plant after March, 1919.

Pittsburgh Locomotive Works was one of the first to produce really huge locomotives under Daniel A. Wightman. Many of these engines were sold to other Railway Companies throughout the United States.

Scope and Contents

This collection consists of business correspondence 1895-1901 of the company, including correspondence of the General Manager, D.A. Wightman; personal papers of Mr. Daniel A. Wightman including a sketch book, 1874-76; Specifications for locomotives and tenders; price lists; locomotive cost estimates; tests; hauling capacities of locomotives; and conditions of apprenticeship. There are also as 311 blueprints of the company's designs or drawings for various sizes of locomotives.

Arrangement

The collection is divided into ten series.

Series 1: Business Correspondence

Series 2: D.A. Wightman Personal Papers

Series 3: Specifications

Series 4: Price Lists

Series 5: Estimates for Locomotive Construction

Series 6: Locomotive Tests

Series 7: Hauling Capacities of Locomotives

Series 8: Apprenticeship

Series 9: Miscellaneous Notes

Series 10 : Locomotive Designs of the Company

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

Locomotives -- Design and construction -- 1874-1910
Railroads -- 1874-1910

Names:

National Museum of American History (U.S.). Division of Transportation
Wightman, D.A., fl. 1870s-1890s

Places:

Allegheny City (Pa.) -- 1874-1910

Container Listing

Series 1: Business Correspondence

Box 1, Folder 1	Official Correspondence of the Company, 1895-1897; 1898; 1900
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Box 1, Folder 2	Official Correspondence to Mr. D.A. Wightman, General Manager, Pittsburgh Locomotive Works, 1895-1897; 1899-1901
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Series 2: D.A. Wightman Personal Papers

Box 1, Folder 8	Sketch Book, 1874-1876
Box 1, Folder 9	Application for patent rights, 1893
Box 1, Folder 10	Journal article- Intercepting and Reducing Valves, 1893

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Series 3: Specifications

Box 1, Folder 3	Stay Bolt Iron, 1892; Fire Box, Flange & Shell Steel Plates, 1896; Steel Blooms, 1899.
Box 1, Folder 4	American Type Compound Locomotive Engine with separate tender for The Kansei Railway Co., Japan, No. 3304, 1897.
Box 1, Folder 5	Consolidation Freight with separate tender for Union Railway Co., 1898
Box 1, Folder 6	Eight Wheel Connected "Forney" Locomotive engine for Dominion Coal Co. Ltd., No. 3680, 1899
Box 1, Folder 7	Six Wheel Switcher with photograph for Erie Railroad Co., No. 3722, 1899
Box 1, Folder 8	Consolidation Freight Locomotive engine for Erie Railroad Co., No. 3678, 1899
Box 1, Folder 9	Consolidation Freight Locomotive engine for Central New York & Western R.R. (with photograph), Nos. 3730 & 3770, 1899
Box 1, Folder 10	Mogul Freight Locomotive engine (with photo-graph) for Vandalia Line, No. 3784, 1899
Box 1, Folder 11	Kansei Railway Co. of Japan, Weights and General Dimensions of Eight Wheel Compound Locomotive, 1900
Box 1, Folder 12	St. Louis Southwestern Railway Co.-Eight Wheel Passenger Locomotive, 1900
Box 1, Folder 13	St. Louis Southwestern Railway Co.-Ten Wheel Freight Engines, 1900
Box 1, Folder 14	Consolidated Compound Locomotive engine for Baltimore & Ohio Railroad, No. 3992, 1900
Box 1, Folder 15	Six Wheel Switching Locomotive, with photo-graph, for (?) U.R.R. No. 3650, 1901
Box 1, Folder 16	Six Wheel Switching locomotive engine, with photograph, for (P.B. & L.E. ?) No. 4238, 1901
Box 1, Folder 17	Baldwin Locomotive Works: Specifications Nos. A-9844, B19, B18, for Mexico, Oaxaca, & Yucatan Railway, 1906
Box 1, Folder 18	Mexico, Oaxaca & Yucatan Railway, 1906
Box 1, Folder 19	Cincinnati-New Orleans & Texas Pacific Railway Co., one slack burning single expansion Consolidation Freight Locomotive, undated
Box 1, Folder 20	Pittsburgh Locomotive and Car Works., Locomotive engine & tender, Nos. 529-531, 534-535, 537-538, 1875

Box 1, Folder 21

Design of Four-wheel, Six-Wheel, Eight-Wheel, Ten-Wheel, Mogul; Consolidated; Forney; Eight-Wheel Double-ender; Ten-Wheel Double-ender Locomotives, with formulae for calculating data for tables, 83 pages., undated

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Series 4: Price Lists

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Box 1, Folder 23	Price Listing, 1891; 1896
Box 1, Folder 24	American Manufacturers' Association- Price List, 1891-1894; 1897

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Series 5: Estimates for Locomotive Construction

Box 1, Folder 25	Cost of Work, 1890-1896
Box 1, Folder 26	Cost of Works, 1896-1901
Box 1, Folder 27	Actual labor, all shops locomotives built, 1899 & 1900

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Series 6: Locomotive Tests

Subseries 6.1: Laboratory Tests

Box 2, Folder 1	Laboratory Tests and Analysis, 1899-1901
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Subseries 6.2: Field Tests

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Condition of Apprenticeship, 1899

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Series 10: Locomotive Designs of the Company

Box 3, Folder 1

Designs
Notes:

PLW-Design of 22" X 26" ATL Type Pass engine, Nos.1456-1465, Class; Design of 21" X 30"Consolidation engines, Nos.1955-1958; Design of 22" X 28"Consolidation engines, Nos.1706-1738; Richmond,1739-1753 Pittsburgh, Class 1-7; General dimensions of Std. Locomotives P.R.R.;Arrangement of Reducing Valve, Intercepting Valve, and Operating Device, PLW,Two Cylinder Compound. Figs.1-4; Test of Simple and Compound Locomotives on P. and L.E.R.R. under directions .of Mr.L.H.Turner, Master of Machinery (2 copies); Test of Simple and Compound Locomotives on T.H. and I.R.R. under directions of Messrs.G.H.Prescott, Supt.M.P.& M and E.G.Cleaver M.M.;-Test of Simple and Compound Locomotives on C.H.V. and T. Rail way under directions of Mr. S.S.Stiffey,Master Mechanic, (2 copies); Arrangement of Intercepting and Reducing Valves, Pittsburgh Compound (2 copies); Designs Figs. 1-2,& 5,inventor Dan. A. Wightman; Mallet French Patent No.105272, Vol.12, 3rd. Series, 1874; Design No. 6224, 1884 16200, 1889 8879, 1889 9295, 1890 9288, 1891 11429, 1893 11431, 1893; Compound Locomotive No. 1452, 1894 Vandalia Moguls-Pittsburgh Locomotive Works, 1896.

Design No. 13607, 1896; 13608, 1896; 13684, 1896; 13991. 1896; 13992. 1896; 14000. 1896; 14001. 1896; 14011, 1896; 14013, 1896; 16210, 1899; 16857, 1899

Boiler material, 1899

Design No. 17 435, 1900; 19046, 1901; 19047, 1901; 19079, 1901; 19095, 1901; 19103, 1901; 19131, 1901; 19153, 1901; 19154, 1901; 19155, 1901; 19156, 1901; 5894, undated

Designs
Notes:

Design No. 6234, 1884

Design No. 6418,1885

Design No. 8733, 1889

Design No. 5446,1890

Design No. 9368, 1890 (2 copies)

Design No. 9458,1890

Design No. 10981,1892

Design No. 12620,1894

Design No. 13603,1896

Design No. 13687,1896

Design No. 14390,1897

Design No. 14412,1897

Design No. 14427,1897

Design No. 14438, 1897
Design No. 14476, 1897
Design No. 14588, 1897
Design No. 14459, 1897
Design No. 14678, 1897
Design No. 14941, 1897
Design No. 15021, 1897
Design No. 15166, 1898
Design No. 15209, 1898
Design No. 15956, 1898
Design No. 16988, 1899
Design No. 17017, 1899
Design No. 17106, 1899
Design No. 17236, 1900
Design No. 17441, 1900

Box 3, Folder 3

Designs
Notes:

Design No. 6709, 1886
Design No. 6735, 1886
Design No. 9317, 1890
Design No. 9507, 1890
Design No. 9528, 1890
Design No. 9552, 890
Design No. 9603, 1890
Design No. 10107, 1891
Design No. 11214, 1892
Design No. 12064, 1893
Design No. 13563, 1896
Design No. 13593, 1896
Design No. 14472, 1897
Design No. 14842, 1897
Design No. 14978, 1897
Design No. 15021, 1897
Design No. 15533, 1898
Design No. 15624, 1898
Design No. 15671, 1898
Design No. 15785, 1898

Design No. 15859, 1898
Design No. 15979, 1898
Design No. 16278, 1899
Design No. 16308, 1899
Design No. 16312, 1899
Design No. 16973, 1899
Design No. 17157, 1899

Box 3, Folder 4

Designs
Notes:

5100, 1882
6238, 1884
9870, 1891
10292, 1891
10517, 1892
11225, 1892
11408, 1894
12676, 1894
13217, 1895
13382, 1895 & 1898
14120, 1896
15043, 1897
14349, 1897
14427, 1897
14439, 1897
14783, 1897
14846, 1897 (2 copies)
14906, 1897
15011, 1897
14960, 1898
15607, 1898
15696, 1898
15734, 1898
15748, 1898
15762, 1898
16144, 1898
16217, 1899
16250, 1900

Box 3, Folder 5

Designs
Notes:

8818, 1889
10480, 1892
11068, 1892
11191, 1892
13706, 1896
3444, 1899
16200, 1899
16210, 1899
16528, 1899
16867 & 16868, 1899
16869, 1899
16887, 1899
16891 & 16892, 1899
16896, 1899
17341, 1900
17345, 1900
17346, 1900
17435, 1900
17480, 1900
17585, 1900
17698, 1900
17706, 1900
17722, 1900
17723, 1900
17736, 1900
17829, 1900

Box 3, Folder 6

Designs
Notes:

5079, 1881
6250, 1884
6181, 1884
6454, 1885
6502, 1885
6569, 1886
6870, 1886
6702, 1886
7512, 1887

7556, 1887
7585, 1887
2568, 1889
9218, 1890
9271, 1890
11226, 1892
11324, 1892
11708, 1893
Specification of horizontal tubular boilers, 1894 (2 copies)
Design No. 12397, 1895
14448, 1897 (2 copies)
15166, 1898
15607, 1898 (2 copies)
13835, 1906

Box 3, Folder 7

Designs
Notes:

PLW-Jandim Compound Locomotive Design Nos.

3534, 1901
1841, 1901
18156, 1901
18157 & 18158, 1901
18160, 1901
18162, 1901
18163 & 18164, 1901
18170, 1901
18178, 1901
8179, 1901
18351 & 18352, 1901
18354, 1901
18356 & 18357, 1901
18361 & 18362, 1901
18373, 1901
18374, 1901
18394, 1901
18414, 1901
18446, 1901

Box 3, Folder 8

Designs

Notes: 2084, 1880 boiler for James Rees" South American steam boat, 1880; Drawing No 2189, 1883; Design for Patent Nos. 428892 & 463856, 1890-1891; Arrangement of Reducing Valve, Intercepting Valve, and Operating device (5 copies) 1890-1894; American Steel Wheel Co. Drawing No. 36, 1892 ; Design of Pittsburgh No. 1370 on P & W Railway, 1892; Card No. 7696, 1892; PLW-Competitive Fuel Test between Compound engine No. 115 & Simple engine No. 161, Alabama Great Southern Railway, 1894; Design Nos. 14635 & 14636, 1897; Drawing No. 3306, 1897 Drawing No. 3362, 1898; Design for patent No. 614641, 1898 (3 copies); Drawing No. 3418, 1899; Design No. 17130, 1899 Diagram showing clearances for proposed Compound Locomotive for B. & O.R.R., 1900; Design No. 3452, 1900; Design No. 17128, 1900; Design No. 17131, 1900; Design No. 17237, 1900; Design No. 3633, 1901 Design No. 19258, 1902; Diagram No. N-318B, 1910; Cylinder drawings for N.N. Railway of India, undated; -ndia State Railways- Cylinders, undated.

Box 3, Folder 9

Designs, 1883 - 1901

Notes: PLW- Design No. 5516, 1883
 No. 5520, 1883
 No. 5445, 1883
 No. 6888, 1886
 No. 471, 1888?
 No. 8726, 1889
 No. 9603, 1890
 No. 12726, 1894
 No. 12983, 1895
 No. 13399, 1895
 No. 13516, 1896
 No. 13942, 1896
 No. 13999, 1896
 No. 14349, 1897
 No. 14373, 1897
 No. 14438, 1897
 No. 14459, 1897
 No. 14587, 1897
 No. 14838, 1897
 No. 15086, 1897
 No. 15171, 1898
 No. 15348, 1898
 No. B-234, 1899
 No. 16978, 1898

	No. 17300, 1900
	No. 17539, 1900
	No. 19106, 1901

Box 3, Folder 10

Designs

Notes:

No. 11224, 1892
No. 11459, 1893
No. 11597, 1893
No. 11862, 1893
No. 11360, 1895 (2 copies)
No. 13295, 1895
No. 13533, 1896
No. 13592, 1896
No. 14373, 1897
No. 14476, 1897
No. 14541, 1897
No. 14678, 1897
No. 14713, 1897
No. 14838, 1897
No. 14916, 1897
No. 15034, 1897 (2 copies)
No. 15171, 1898
No. 15209, 1898
No. 15748, 1898
No. 15785, 1898
No. 15911, 1898
No. 15956, 1898
No. 16148, 1898
No. 15436, 1899
No. 16912, 1899
No. 17061, 1899

Box 3, Folder 11

Designs

Notes:

Cyls. and intercepting Valve designed for P.R.R. Mogul; -Compound Design of Intercepting Valve, no number, 1891 -Design No.3201, 1895; Design of Intercepting Valve, No.3201, 1895; Design No.3202, 1895; Design of Intercepting Valve: Schenectady, Richmond, and Pittsburgh, 1898.

Box 3, Folder 12

Designs

Notes: No.5174, 1882
No.6606, 1886
No.7588, 1887
No.7606, 1888
No.8726, 1889
No.2727, 1891
No.2754, 1891
No.11083, 1892
No.11501, 1893
No.12999, 1895
No.13295, 1895 (3 copies)
No.14916, 1897
No.15748, 1898
No.3448, 1899
No.16953, 1899
No.16990, 1899
No.17439, 1900
No.3534, 1901 (5 copies)
No.19105, 1901
Design of Ten Wheel passenger locomotive for Terre Haute & Indianapolis Railroad, undated

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Pittsburg [sic] Locomotive Works: [document], undated
1 Item (Ink on paper.; 4.2" x 7.3".)
[Image\(s\): Pittsburgh Locomotive and Car Works Collection](#)
Creator: Pittsburgh Locomotive and Car Works
Language: English.
Notes: AC0164-0000001 (AC scan no.)
In series ?, box ?, folder ?.
Illustrated with bird's-eye view of the factory.
Topic: Locomotives
Railroad equipment industry
Genre/Form: Documents