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WILLSON, Thomas Leopold "Carbide"

MG 30, A 85

Finding Aid No.1102 / Instrument de recherche no 1102

Prepared by N. Forsyth and
C. Christy of the Economic and
Scientific Archives in 1979

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C. Christy des Archives économiques et
scientifiques en 1979

MG 30 WILLSON, Thomas Leopold "Carbide" (1860-1915). Businessman,
A 85 Inventor.

Originals, 1882-1915, 1975-1977. 39 cm. Photocopies,
1889-1899, 1916. 1 cm. Finding Aid No. 1102.

T.L. "Carbide" Willson was born in 1860 at Princeton, Ontario, and was apprenticed at the age of 19 to a Hamilton blacksmith. After patenting an electric dynamo, he moved in 1882 to the United States where he invented an electric furnace; in the course of experiments with it he discovered (1892) a means of producing calcium carbide, a substance which gives off acetylene gas when placed in water. Willson patented the process and several devices using acetylene gas, including lamps and marine buoys; he sold the U.S. patents to Union Carbide and others and returned in 1896 to Ontario. There he established a number of plants for the manufacture of calcium carbide and acetylene before turning his carbide interests over to Canadian Carbide in 1911. In 1906 he established the International Marine Signal Company in Ottawa, selling out to American interests in 1909. From 1910-1913 he worked at developing a cheap process for producing superphosphate fertilizer. Wishing to obtain capital to construct a hydroelectric project on the Saguenay which would have permitted large-scale fertilizer manufacture, he mortgaged all his holdings to James Buchanan Duke, the American industrialist; unable to meet the mortgage payments, he was ruined and his property passed to Duke in 1913. He died in 1915, while trying to arrange financing for a hydroelectric development in Newfoundland.

Presented in 1976 by Mrs. M.S. Roberts of Wakefield, Quebec.

Photographs relating to Willson were received by the National Photography Collection (N.P.C. Acc. No. 1973-140).

The finding aid No. 1102 is a file list with item-by-item lists of agreements, assignments and loose correspondence.

Biographical and personal, 1905-1915, 1975-1977. Originals, 2 cm (volume 1).

Pamphlet, articles and clippings concerning Willson's life and work. Correspondence concerning the Willson home.

Legal and technical, 1887-1915. Originals, 8 cm (volume 1).

Legal agreements, assignments of patents, documents relating to patent litigation with L.M. Bullier, documents on invention of method of manufacturing double superphosphates, memoranda on properties of calcium carbide, miscellaneous notes on experiments.

Correspondence, 1882-1916. Originals, 19 cm. Photocopies, 1 cm (volumes 2-3).

Copies of personal and business letters, including a note from Lord Kelvin. Letterbooks containing an incomplete series of Willson's business correspondence, 1882-1913, and including a section of personal correspondence, 1882-1893. A number of the

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letters are illegible because of fading of ink.
The letterbooks are also available on microfilm,
reels C-9262 and C-9263.

Published material, 1891-1915. Originals, 10 cm (volume 4).
Books, pamphlets and articles relating to acetylene,
electricity, the International Marine Signal Company,
the Newfoundland Products Corporation and related topics.

June 1979
N. Forsyth

7-8529
Economic/Scientific

Thomas Leopold "Carbide" Willson

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<u>Vol.</u>	<u>Subject File</u>	<u>Dates</u>
	<u>Biographical and Personal</u>	
1	Biographical material on T.L. Willson	1975, 1976, n.d.
	Home of T.L. Willson	1977
	- Correspondence and photographs	
	News clippings	1905, 1915, n.d.
	Photographs of acid bottle with poem by W.B. Chisholm	1913
	<u>Legal and Technical</u>	
	<u>Agreements</u>	
	- T.L. Willson and Electro Gas Company	14 Aug. 1894
	- T.L. Willson and Willson Laboratory Company	16 Oct. 1895
	- James H. Benedict, George H. Church, Frederick C. Meacham and unnamed parties	Feb. 1903
	- W.B. Chisholm, T.L. Willson and the Interstate Chemical Corporation	12 Oct. 1912
	- Interstate Chemical Corporation and W.B. Chisholm, Chas. S. Bryan, Bred B. Tilghman, Sidell Tilghman and J.B. Duke	12 Oct. 1912
	- T.L. Willson and J.B. Duke	1 Nov. 1913
	- T.L. Willson, M.M. Haff, Willson Carbide Co., Willson Laboratory Co., Henry A. Little and J.B. Duke	15 Nov. 1913
	- Newfoundland Products Corporation Ltd. and the Government of Newfoundland	16 Apr. 1918

<u>Vol.</u>	<u>Subject</u>	<u>Dates</u>
	<u>Legal and Technical (cont'd)</u>	
1 (cont'd)	Assignments of patents	
	- Isaiah L. Roberts to T.L. Willson for metallic carbide process and apparatus (U.S.)	19 May 1898
	- Isaiah L. Roberts to T.L. Willson for metallic carbide process and apparatus	25 Jan. 1899
	- Frank Creelman to Willson Carbide Works Co. for process for manufacture of carbide blocks	21 Oct. 1899
	- A.C. Fraser and A.M. Scott to T.L. Willson for process for generating acetylene gas	19 Dec. 1902
	- F. Creelman to T.L. Willson for fog signal timing devices	23 Sept. 1905
	- Max M. Haff to T.L. Willson for improvements in treating ores of alkalies (U.S.).	4 July 1906
	- Max M. Haff to T.L. Willson for improvements in treating ores of alkalies	9 July 1906
	- Max M. Haff to T.L. Willson for processes for producing calcium silicide	10 Apr. 1909
	- Max M. Haff to T.L. Willson for process for producing calcium silicide (U.S.)	31 Mar. 1909
	- Max M. Haff to T.L. Willson for metallurgical processes and products (U.S.).	23 Apr. 1909
	- Max M. Haff to T.L. Willson for metallurgical process and products	30 Apr. 1909
	- Max M. Haff to T.L. Willson for method of obtaining nitrogen and making compounds therefrom.	25 Mar. 1910
	- Max M. Haff to T.L. Willson for method of making nitrogen for nitrogen compounds	6 Apr. 1910
	- Max M. Haff to T.L. Willson for process for separating phosphoric acid from natural phosphates (U.S.).	1 Apr. 1912

<u>Vol.</u>	<u>Subject</u>	<u>Dates</u>
	<u>Legal and Technical (cont'd)</u>	
1 (cont'd)	Calcium carbide - Memorandum of properties	26 Apr. 1893
	Electrical precipitation - Blueprints	n.d.
	Invention of method of manufacturing double superphosphates - Specification and claims, T.L. Willson and M.M. Haff.	n.d. 1913
	Notebook - Brooklyn, N.Y.	1887
	Notes - Spray, N.C. etc.	1892-1893, 1901
	Patent litigation concerning rival claims of T.L. Willson and L.M. Bullier to the patent for the commercial production of calcium carbide.	1895-1901, 1906
2	<u>Correspondence, general (copies)</u>	
	- Willson to his mother	24 Oct. 1889
	- T.A.B. Carver, Secretary to Lord Kelvin, to Willson	3 Oct. 1892
	- Lord Kelvin to Willson	3 Oct. 1892
	- Willson to Mary Parks	7 Feb. 1895
	- Willson to Mary Parks	28 Feb. 1895
	- Willson to Mary Parks	5 Mar. 1895
	- Willson to his mother and sister	24 May 1895
	- Sabina B. Willson to Mary Parks	30 May 1895
	- Bessie Scott to Mary Parks	30 May 1895
	- Willson to Mrs. Willson	5 Jan. 1889
	- Willson to Wm. Prescott, American Agricultural Chemical Co.	15 Jan. 1912

<u>Vol.</u>	<u>Reel No.</u>	<u>Subject File</u>	<u>Dates</u>
2 (cont'd)		<u>Correspondence, general (copies) - (cont'd)</u>	
		- Charles M. Higgins to Mrs. Willson	19 Dec. 1916
		Correspondence - Notes found in letterbooks	n.d.
	C-9262	Letterbook I - Business (in front)	27 Nov. 1882- 28 Mar. 1889
		- Personal (in back)	4 Dec. 1882- 8 July 1893
	C-9262	Letterbook II - Business correspondence	26 Oct. 1893- 10 Nov. 1894
	C-9262	Lettbook III - Business correspondence	6 Jan. 1902- 14 Mar. 1905
3	C-9262, C-9263	Letterbook IV - Business correspondence by Willson's associates (to Willson and others)	12 Sept. 1901 28 Sept. 1907
	C-9263	Letterbook V - Business correspondence	21 Jan. 1910 19 Dec. 1913
<u>Published Material</u>			
4		Brown, Alexander S. "Electricity in the production of Aluminium" - Article	1891
		Gray, Andrew. <u>Absolute Measurements in Electricity and Magnetism</u> - Book	1884
		International Marine Signal Company. <u>Automatic Gas Buoys and Beacons</u> - Pamphlets	n.d. (ca.1907)
		International Marine Signal Company. <u>Automatic Gas Buoys</u> - Brochure	n.d. (ca.1907)
		International Marine Signal Company. <u>"As Others See Us!" Testimony of Mariners Regarding the Efficiency of the Automatic Acetylene Gas Buoys and Beacons</u> - Pamphlets	1908

<u>Vol.</u>	<u>Subject File</u>	<u>Dates</u>
	<u>Published Material (cont'd)</u>	
4 (cont'd)	<u>Journal of Acetylene Gas Lighting.</u> London vol. IV, no. 6	Dec. 1901
	<u>Journal of the Franklin Institute.</u> Philadelphia, vol. CXXXIX, no. 5, containing article: Willson, T.L. and J.J. Suckert. "The Carbides and Acetylene Commercially Considered"	May 1895
	<u>Journal of the Society of Arts.</u> London, vol. XLIII no. 2,2000	18 Jan. 1895
	<u>Newfoundland Products Corporation Limited.</u> <u>Memorandum and Articles</u>	1915
	<u>Ontario Legislative Assembly. Fourth</u> <u>Report of the Bureau of Mines</u>	1894
	<u>Pellisier, Georges. L'Eclairage à l'acétylène -</u> <u>Book</u>	1897
	<u>Ross, Albert. Report on Use of Acetylene</u> <u>Gas by the Canadian Government as an</u> <u>Illuminant for Aids to Navigation - Pamphlet</u>	1907