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EIC's Historical Notes and Papers Collection

(Compilation of Articles, Notes and Papers originally published as EIC Articles, Cedar Grove Series, and EIC Working Papers)

"EIC History Reading List [3]"

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This is the third (and final) part of the list of books compiled with a view to guiding the reader interested in the history of engineering in Canada towards material that is, at the same time, relevant and understandable to non-specialists. The list is not a bibliography. Those who wish to consult one should refer to Arnold Roos, *A BIBLIOGRAPHY OF THE HISTORY OF CANADIAN SCIENCE AND TECHNOLOGY* (Ottawa: Canadian Science and Technology Historical Association, 1995)

The material in this part includes: the engineer and iron; several specific projects; consulting companies; universities; building; R&D; innovation; and military engineering.

Eric Arthur and Thomas Ritchie, *CAST AND WROUGHT IRON IN CANADA FROM THE SEVENTEENTH CENTURY TO THE PRESENT* (Toronto/Buffalo/London: University of Toronto Press, 1982)

William and Evelyn M. James, *THE STORY OF HAMILTON'S OLD PUMPHOUSE* (London, Ontario: Phelps Publishing Company, 1978) The pumping machinery, when erected by Gartshore and McFarlane, was among the finest of its day (the early 1960s). It is now part of the Hamilton Museum of Steam and Technology.

Clare Gilbert, *ST. CLAIR TUNNEL: RAILS BENEATH THE RIVER* (Erin, Ontario: The Boston Mills Press, 1991) This tunnel was constructed in the late 19th century and is associated with Joseph Hobson, the chief engineer. It was a landmark project when built, and has since been 'landmarked' by the Historic Sites and Monuments Board of Canada.

Pierre Berton, *NIAGARA:* A *HISTORY OF THE FALLS* (Toronto: McClelland & Stewart Limited, 1992) Berton's book is really a social history of Niagara Falls, but it puts in perspective the development of hydro-electric power based on the Niagara River. For a technical account of the same (engineering) ground covered by Berton, the reader should refer to the paper by Dr. R.L. Hearn, "*Canadian Hydro Electric Developments on the Niagara River*," which was included in the August 1954 issue of the *ENGINEERING JOURNAL*.

Philip Smith, *BRINCO: THE STORY OF CHURCHILL FALLS* (Toronto: McClelland & Stewart Limited, 1975)

Jack Sexton, *MONENCO: THE FIRST 75 YEARS* (Montreal: Monenco Limited, 1982) In this book, the author tells the story of the growth and development of Montreal Engineering Company, whose evolution involved people such as Maxwell Aitken (later Lord Beaverbrook), John F. Stairs, Dennis Stairs and G.A. Gaherty and, more recently, J.K.C. Mulherin.

Susanne Lalande, *SNC: ENGINEERING BEYOND FRONTIERS* (Montreal: Editions Libre Expression, 1992) This book tells the story of the firm of consulting engineers founded by Arthur Surveyer, Emil Neninger and Georges Chenevert.

Robert Gagnon (et Armand J. Ross), *HISTOIRE DE L'ÉCOLE POLYTECHNIQUE 1873-1990* (Montréal: Les Éditions du Boréal, 1991)

W. George Richardson, *QUEEN'S ENGINEERS: A CENTURY OF APPLIED SCIENCE 1893-1993* (Kingston: Faculty of Applied Science, Queen's University, 1992)

Peter G. Glockner, A PLACE OF INGENUITY: THE FACULTY OF ENGINEERING - UNIVERSITY OF CALGARY (Calgary: University of Calgary Printing Service, 1994)

Peter N. Moogk, BUILDING A HOUSE IN NEW FRANCE (Toronto: McClelland & Stewart, 1977)

THE FIRST 25 YEARS: DIVISION OF BUILDING RESEARCH, NRC (Ottawa: National Research Council NRCC 13240, 1973)

W.E. Knowles Middleton, *RADAR DEVELOPMENT IN CANADA: THE RADIO RESEARCH BRANCH OF THE NATIONAL RESEARCH COUNCIL OF CANADA 1939-1946* (Waterloo, Ontario: Wilfred Laurier University Press, 1981)

W.E. Knowles Middleton, *MECHANICAL ENGINEERING AT THE NATIONAL RESEARCH COUNCIL OF CANADA 1929-1951* (Waterloo, Ontario: Wilfred Laurier University Press, 1984)

Thomas Carpenter, *INVENTORS: PROFILES IN CANADIAN GENIUS* (Camden East, Ontario: Camden Publishing House, 1990)

Roy Mayer, *INVENTING CANADA: 100 YEARS OF INNOVATION* (Vancouver: Raincoast Books, 1997)

George R. Lindsey, Editor, *NO DAY LONG ENOUGH: CANADIAN SCIENCE IN WORLD WAR II* (Ottawa: Canadian Institute of Strategic Studies, 1997) This book tells the story of the wartime research organized and performed at the National Research Council and in other institutions.

Robert Collins: *A VOICE FROM AFAR: THE HISTORY OF CANADIAN COMMUNICATIONS* (Scarborough: McGraw-Hill Ryerson Limited, 1977)

Alan W. Bell, *LOOKING BACK: UMA GROUP - THE FIRST 75 YEARS* (Winnipeg: The UMA Group, 1998)

Mike Hand, *IRON, STEAM AND WOOD: 150 YEARS WITH THE WATEROUS ENGINE WORKS COMPANY* (Brucefield, Ontario: Haugholm Books, 2000)

Lastly, two military engineering histories ...

The history of civil engineering in a Canadian military context has been written up in a three-volume series, the first two dealing with the army, and the third with all three service branches. Volume 1 appeared in 1962 and covers the period from 1749 to 1939. Called *THE HISTORY OF THE CORPS OF ROYAL CANADIAN ENGINEERS*, it was written by Colonel A.J. Kerry and Major W.A. McDill and published by the Military Engineers Association of Canada. Volume 2 appeared in 1966 and covers the period 1939 to 1946. It was written by the same two authors and again published by MEAC. Volume 3 appeared in 1997 and brings the story up to 1971. It was written by Lieutenant-Colonel K.J. Holmes, edited by J.R. Newell and published by the Military Engineering Institute of Canada.

The Corps of Royal Canadian Electrical and Mechanical Engineers was formed in 1944. To help commemorate the 50th Anniversary of its formation, the EME Officers' Fund published (in 1997) *CANADA'S CRAFTSMEN AT 50 - THE STORY OF ELECTRICAL & MECHANICAL ENGINEERING IN THE CANADIAN FORCES*. Written by Colonel Murray C. Johnston and edited by Lieutenant-Colonel D.W. Clarke, this book also includes a brief description of electrical and mechanical engineering in the army prior to the formation of RCEME. Similarly, but in greater detail, it continues the story of the `Craftsmen' after the name `RCEME' was changed in 1968.