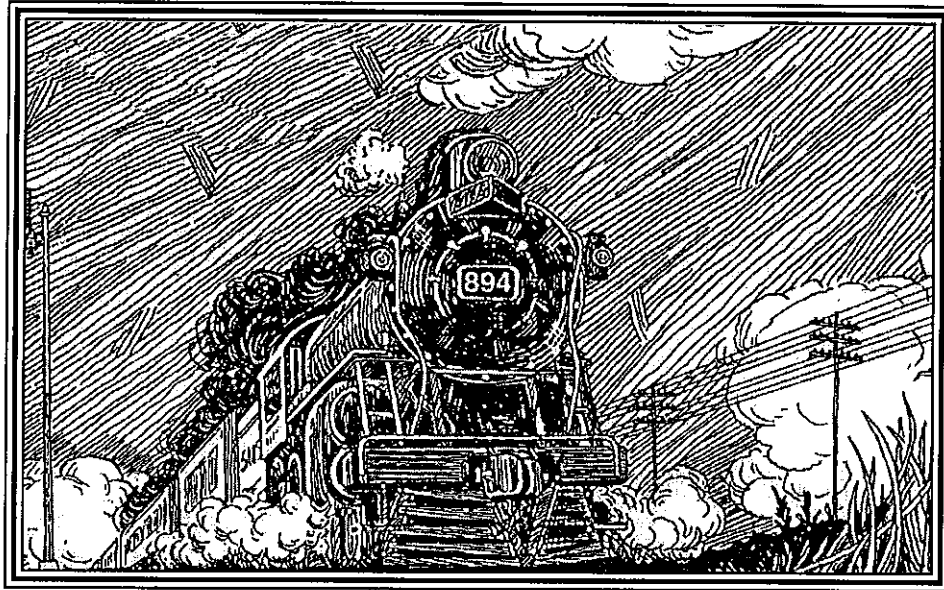


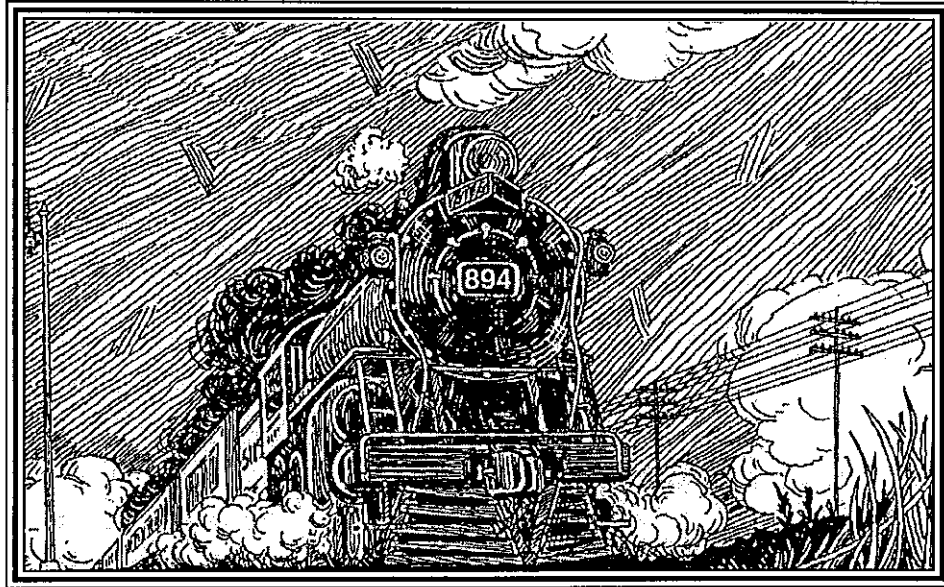
The Grand Trunk Railway System in Waterloo County



by Elizabeth Hardin

DOON HERITAGE CROSSROADS
Department of Planning and Culture
Regional Municipality of Waterloo

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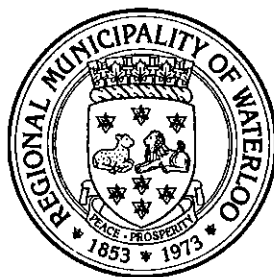


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Foreword

The restoration of the Petersburg Train Station and the D-10 locomotive at Doon Heritage Crossroads is part of an established process of continuous site improvement. The approach to the site from the Admissions Gate was improved after the demolition of an old museum building in 1995. The view of the locomotive and station then became more obvious as a point of introduction and welcome to the site, and to the interpretation of the site as a rural Waterloo County community in the early twentieth century.

It also became more obvious that as a picture of an early twentieth century railway station, the existing railway station presentation had some drawbacks. The 1856 building itself, probably one of the oldest railway stations of the Grand Trunk era in Ontario, was clad in insulbrick siding of the mid-twentieth century. Both the exterior and interior of the building were a mix of original objects from the Grand Trunk era and various other features from the post-1920s Canadian National Railway period. The D-10 locomotive, stood essentially unmoved and unchanged from the day it was hauled to the site in 1964. Despite some cosmetic upgrades and repainting, it continued to deteriorate.

Artifacts and other fixtures were removed from the train station building and its surroundings in the summer of 1998. Following that, paint colour analysis and photographic research into the look and appropriate colours for the train station resulted in the removal of the insulbrick cladding and the restoration of board and batten siding in the Grand Trunk colours of green and light grey, in the summer of 1999. A detailed study of the locomotive undertaken by Doon's conservator Richard Fuller and George Prytulak, Industrial Collections Conservator with the Canadian Conservation Institute, led to the engagement of TAC Services of Kitchener to stabilize and cosmetically restore the D-10.

In the fall of 1999, a staff project team began a series of weekly meetings to discuss curatorial and programming issues related to the projected completion of the site restoration in June 2000. Objectives for the restoration and interpretation were further defined. A smooth interpretive line for the station posed special challenges because of the co-existence of the Grand Trunk/Canadian National railway station with a Canadian Pacific Railways "workhorse" locomotive, on a former line of railway that was once used by much smaller, lighter engines than the D-10. Decisions were made to accommodate these conflicting realities, many of which are outlined in Liz Heinrich's 1997 cognate essay "Interpretation of Petersburg Railway Station, Waterloo County 1914". Many of the questions and issues that were raised during these meetings provided the fuel and the direction for the research process that evolved.

Introduction

This report was written to supplement earlier reports written about the Petersburg Grand Trunk Train Station and the railway steam era by Liz Heinrichs and Robert Bromley. There is much excellent information in both of those reports. The objective of Liz Heinrichs' cognate essay, *Interpretation of Petersburg Railway Station, Waterloo County, 1914*, was to provide the history of the Petersburg Grand Trunk Station and to put it into a context of early twentieth century railway history, while suggesting possibilities for interpretation by staff working in that building and general setting. Rob Bromley's report *Remembering the Railway Steam Era* captured the flavour of what it was like to work on the railways through oral history interviews with sixteen retired railway men.

This final report draws on a number of primary and other materials to detail the huge and complex organizational structure that directed the running of the railway and its related communication mediums (the telegraph, the mail). It also highlights key events in railway history, as well as the rise and fall of the Grand Trunk Railway through a chronological time line. This body of information will further support the interpretation objectives for the train station and locomotive that were developed by Doon staff over the last year. In addition, a large file of research resources continues to grow and will provide interpretive and programming staff with a wealth of further ideas.

The underlying theme in this trio of reports is the importance of the railway as a mechanism for transportation and communication, and its importance to the economic and personal lives of urban and rural people alike. While telegraphy has been called "the Victorian Internet", the railways of the Victorian and Edwardian eras were the single most dominant mode of mass transportation before the development of modern highways and motor transportation. Where telegraph operators and station agents of the railway steam era could be compared to today's airport traffic controllers, locomotive engineers were the Airbus captains of their era, entrusted with the safety of lives and goods on a single line of track where timing, accuracy and good management ensured safe passage in all directions.

A notice to the reader: there is discussion about and photographs of both the *Doon GTR Station* and the *Petersburg GTR Station* in this report. The Doon GTR Station I refer to was in the village of Doon, roughly equidistant between the present-day Homer Watson Gallery and Conestoga College, and which was closed in the 1930s. The Petersburg GTR Station described was in the village of Petersburg, Wilmot Township for over one hundred years, and was relocated to Doon Pioneer Village in 1968.

Acknowledgments

I must thank many people and institutions who contributed knowledge and expertise, and who shared their library and archival collections with me while I was researching railway history. Much of the primary information about the Grand Trunk Railway Company was found at the National Archives of Canada. Other useful research material was provided to me at the Canadian Railway Museum by Curator Jean-Paul Viaud. Ron Davis, Curator of the Komoka Railway Museum also helpfully shared resources from that collection. Retired railway men Harold Griffin and Norm Perrault were especially generous and kind in furthering my understanding of day-to-day railway work. Katrina Letson, Museum Studies intern from Sir Sandford Fleming College, assisted with the identification and assembly of research materials borrowed from the Guelph Civic Museum and the Fort Erie Railway Museum, researched relevant Web sites, and wrote much of an appendix to this report which listed small community businesses that connected to Grand Trunk Railway lines in Waterloo County. Robert Bromley critiqued major sections of this report during the time that he was preparing his oral history report *Remembering the Railway Steam Era*. Others I wish to thank specifically are Harold Kinzie, local railway historian, who provided information about the Galt to Elmira GTR line, and shared photographs from his personal collection; also, Susan Hoffman local history librarian at the Kitchener Public Library, who shared relevant resources from the Waterloo Historical Society Collection. Photographs in the report are credited with thanks to those who loaned them to us. Sincere thanks to Corporate Publishing Designer Hilary Geddy for her help with many of the illustrations; and finally, thanks to my colleagues at Doon Heritage Crossroads, especially Curator/Manager Tom Reitz for his continual patience, good advice and guidance.

Elizabeth Hardin
June, 2000

Objectives of the Petersburg Train Station restoration:

As the first historic tableau that visitors experience on the site, the train station site will be a place to greet them and introduce them to life in 1914, presenting the train station, the locomotive and the telegraph as a way of connecting the village and the rural community to the rest of the world.

☞To restore and furnish the building to reflect with authenticity its appearance and function in 1914.

☞To present landscaping and other site features consistent with their look and use in 1914.

☞To arrest the deterioration of the steam locomotive and restore it to authentically reflect its appearance and importance during its years of use.

☞To give visitors an appreciation of the network of different transportation systems that crossed Waterloo County in 1914.

☞To show the activity of the "main line" Petersburg Grand Trunk Railway station through sights, sounds and information.

☞To show as well how smaller lines like the Galt to Elmira Grand Trunk Railway line fed into the larger transcontinental Grand Trunk Railway System, and their roles in joining a rural community to urban marketplaces.

☞To create an interactive and educational environment for visitors, including children in education programs, giving them a feel for the role of a train station in the life of a rural community.

☞To give visitors an experience of tele-communications technology of a century ago.

☞To present a mix of original artifacts and reproductions, allowing hands-on experience of the train station environment, while ensuring the protection of sensitive objects and materials. Some original artifacts will be handled under special conditions.

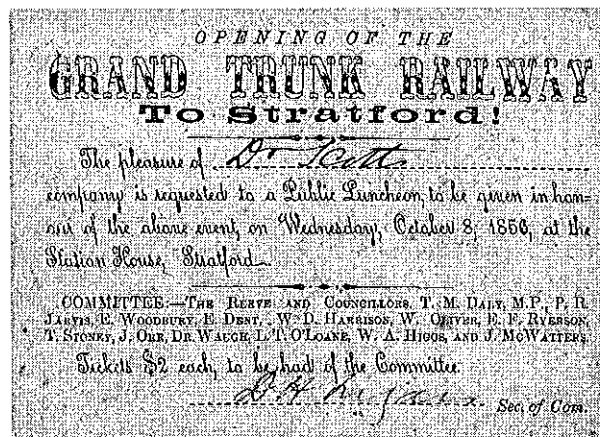
☞To create an active work experience for interpretive staff assigned to the train station, being responsible for the whole environment of station buildings, grounds (including gardens) and locomotive; also the broader role of introduction and greeting to the whole site.

☞To create a display area and interpretive/teaching space where the results of oral history research, photographs and other teaching tools will complement the historical setting of buildings and artifacts.

☞To provide preventive conservation measures, including appropriate cleaning and general housekeeping, to artifacts and buildings, respecting as well the fact that the locomotive and the buildings themselves are artifacts.

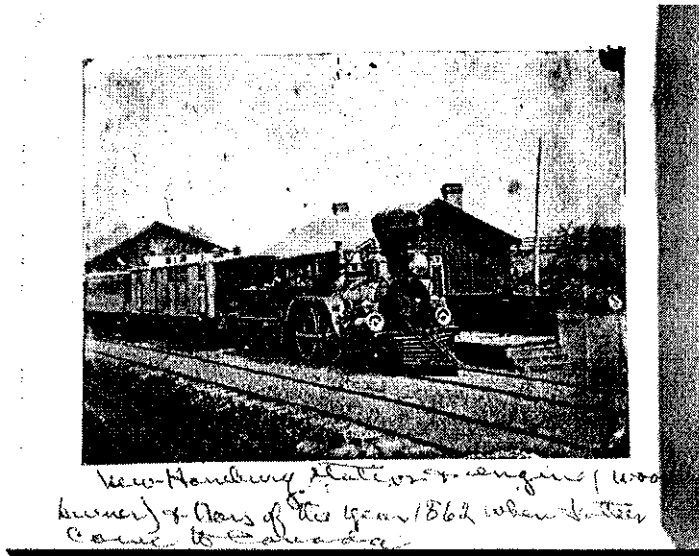
***Milestones of Railway History
with special events relating to
The Grand Trunk Railway and Waterloo County Railways***

- 1797 - The steam locomotive was invented in England.
- 1823 - First public railway in the world opened in England.
- 1827 - First railroad in North America, the Baltimore and Ohio (B&O).
- 1836 - First Canadian railroad, the Champlain and St. Lawrence Railway, operated 17.38 miles between La Prairie and St. Johns, P.Q.
- 1851 - The 5'6" broad gauge was adopted as the standard gauge for Canada West (Ontario and Quebec). The broad gauge was used until about 1870 after which time there was a gradual change to the now standard 4'8" gauge.
- 1852 - Grand Trunk Railway of Canada (GTR) incorporated (Toronto to Montreal line) in London, England, by the amalgamation of the following lines: Grand Trunk Railway of Canada; Grand Junction Railway; Grand Trunk Railway Company of Canada East; Quebec and Richmond Railway; St. Lawrence and Atlantic Railway; and the Toronto and Guelph Railway.
- 1853 - GTR lines extended to Portland, Maine (all-year Atlantic port).
- 1854 - First railway service in Waterloo County (not GTR).
- 1856 - GTR line built westward through Waterloo County from Toronto (reached Sarnia in 1859). July 1st, 1856 marked the first passenger and freight trains between the Toronto Station at Queen's Wharf, Guelph and Berlin.



*Invitation to Opening of
Grand Trunk Railway,
Stratford, 1856
Waterloo Historical Society*

1856 - Petersburg Station built. Other Waterloo County Stations are at Breslau, Berlin, Baden, New Hamburg.



*New Hamburg Grand Trunk Railway
Station, ca. 1865
Waterloo Historical Society*

1857 - Doon to Berlin line opened (as part of the *Preston and Berlin Railway*) and acquired by the GTR in 1865.

1857 - Grand Trunk Railway Literary and Scientific Institute founded; GTR employee libraries at London, Stratford, Belleville, etc.

1865 - Canadian Express Company incorporated for the "rapid transportation of merchandise, money and valuables" on the Grand Trunk Railway and also "on all Roads, Rivers and other modes of communication within our said Province (of Canada)."

1867 - At Confederation, the Grand Trunk Railway of Canada was the largest railway system in the world.

1867 - George Westinghouse, Jr. patented first air brake apparatus, leading to formation of the Westinghouse Air Brake Company in 1869. (Air brakes centralized braking controls in the hands of the locomotive engineer, using compressed air systems).

1870 - Stratford, Ontario chosen as a district repair facility for the Grand Trunk Railway.

1870s - Conversion from wood to coal as locomotive fuel began.

- 1873 - GTR line from Berlin to Doon extended south to Blair and Galt.
- 1873 - GTR conversion to Standard Gauge track (4 ft., 8.5 in.) Between Stratford and Montreal, compatible with U.S. track The entire track conversion was completed in twenty four hours and interrupted main line traffic for only sixteen hours.
- 1873 - County of Waterloo passes By-Law 218, granting the Credit Valley Railway Company (later acquired by the C.P.R.) \$110,000 "by way of bonus". Six years later the first locomotive of the CVR passed over the bridge at Galt.
- 1880 - Great North Western Telegraph Company incorporated with services in Manitoba, Ontario and Quebec.
- 1880 - The Grand Trunk Railway extended its line to Chicago.
- 1881 - George Westinghouse, Jr. perfected the first automatic electric block signal, a safety device designed to avoid train wrecks by keeping only one train in a "block" of track at one time.
- 1882 - GTR assumed ownership of its main competitor in Ontario, the Great Western Railway (Niagara Falls/Hamilton/London/Windsor).
- 1885 - Canadian Pacific Railways "last spike" driven at Eagle Pass, B.C., creating the first trans-Canadian route to the Pacific Ocean.
- 1885 - "Jumbo", the famous circus elephant, was killed by a GTR freight train at St. Thomas, Ontario.
- 1887 - Interstate Commerce Commission established, a U.S. agency to regulate transportation between states. It also regulated railway traffic between U.S. and Canada, e.g., lines of the GTR that ran into Maine and Michigan.
- 1889 - Line from Berlin to Waterloo built (*Waterloo Junction Railway*), and leased by the GTR in 1891.
- 1891 - GTR line extended from Waterloo to Heidelberg, St. Jacobs, Elmira.
- 1892 - GTR reorganization into six Divisions: Northern, Eastern, Southern, Western, Middle and Ottawa (Stratford area was in the Middle Division until 1913 and further reorganization).
- 1893 - Line from Berlin to Elmira (*Waterloo Junction Railway*) amalgamated with GTR.
- 1895 - Total passenger cars on GTR - 903; Total Freight Cars - 22,486.

1896 - First refrigerator freight cars acquired (2); 8 more in 1897; 250 in 1898.

1897 - Installation of air brakes on Grand Trunk freight cars began.

1898 - New GTR station built at Berlin.



*Berlin Grand Trunk Railway
Station, ca. 1910.
Doon Heritage Crossroads*

1900 - "The International Limited", a Grand Trunk express passenger train between Montreal, Toronto and Chicago introduced.

1902 - Replacement of iron rail with steel a growing trend; also a trend to "double tracking", (many doubled tracks were reduced to single during the First World War due to the demands of the armaments industry).

1903 - Introduction of the Railway Commission Bill in the House of Commons, in accordance with *The Railway Act*. Designed to regulate the operation of railways, freight and passenger rates, trains, equipment, protection of crossings, also to publicize rates, remove long and short haul discrimination, and provide uniform rates of classification. It created the Board of Railway Commissioners, a three man committee with broad authority.

1903 - Bill to incorporate "The Grand Trunk Pacific Railway Company" (GTP) passed.

1903 - New Hamburg GTR Station burned July 7, 1903 (1905?).

1906 - New GTR station opened at New Hamburg (many older stations were demolished during this period; Petersburg, as an "unimportant" station, escaped demolition).

1906 - The GTR changed from left to right hand running on double track sections, involving

considerable alteration in crossovers, switches and semaphore signals.

1909 - Berlin station freight shipments mentioned in station agent's letterbook: beer, horses (Miss Wilkes' of Blair), furniture, Lang Tanning products, Alpha Chemical products, bricks, meal, fruit, Berlin Felt Boots, T. Eaton Company products).

1907 - GTR Employee pension fund instituted "for the benefit of the whole of the employees of the Company".

1908 - Canadian Brotherhood of Railroad Employees organized at Moncton N.B.

1910 - New GTR station built at Waterloo

Railway strike

Total passenger cars on GTR - 917; Total Freight Cars - 30,433.

1912 - Charles M. Hays, President of the Grand Trunk Pacific and General Manager of the Grand Trunk Railway died in the sinking of the *Titanic* (April 15)
Chateau Laurier hotel formally opened in Ottawa (operated by the GTR).

1913 - Stratford became the headquarters of a GTR Division. Petersburg was in the Toronto Subdivision of the Stratford Division; the Galt to Elmira line was the Berlin Subdivision, later called the Waterloo Subdivision (of the Stratford Division). Accounting and payroll administered from Stratford (replacing the monthly "pay car").

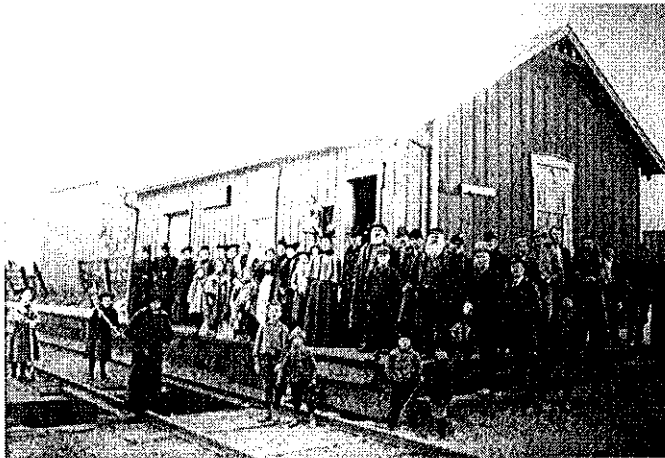
1914 - Grand Trunk Railway System launched its "Safety First" campaign.

1914 - Grand Trunk Pacific Railway completed with joining of rails at Nechako River, B.C.
"Thus making a continuous line from Winnipeg through the Rocky Mountains to Prince Rupert... (Applause.)" *GTR Annual report, December 1914.*
- Total miles of Grand Trunk track: 4,015.



*Unloading Salt Barrels, ca. 1912
Elmira Signet, Dec. 16, 1981*

- 1915 - Canadian Government Railways formed to operate the Intercolonial and National Transcontinental Railways.
- 1917 - The Drayton-Acworth Report (two members of a Royal Commission established in 1916) recommended that the Government take over the Grand Trunk, the Grand Trunk Pacific and the Canadian Northern railway companies and operate them as one system along with the Intercolonial and National Transcontinental Railway. The recommendations were accepted by the government.
- 1918 - The collective title Canadian National Railways was authorized by an Order in Council.
- 1919 - Grand Trunk and Grand Trunk Pacific railways declared bankrupt.
- 1923 - Canadian National Railway Company incorporated. The CNR was the biggest system in Canada and the largest in the world, apart from Russia, with 22,110 miles of track (compared to the CPR's 13,402 miles). After January 30, 1923, the Grand Trunk Railway ceased to exist and became part of the CNR.
- 1930s Passenger service discontinued on the Galt to Elmira line. Stations at Blair and Doon closed.



*Blair Station circa 1898
Harold Kinzie Collection*

- 1940s German Mills station renamed Parkway.
- 1950s - Conversion to diesel locomotives; end of the steam locomotive era.
- 1950s Materials for building Highway 401 brought down from Kitchener along the "Waterloo

Sub" CN line (after the opening of Highway 401, for a short time the line crossed the four-lane highway over a level crossing).

1960 - Last scheduled run of a steam locomotive on Canadian National Railways (in Manitoba).

1961- Rails from Galt to Doon Pioneer Village removed by Canadian National Railways.

1964 - Acquisition of CPR's D-10 locomotive by Doon Pioneer Village and removal of the rails between the Village and the Parkway station.

1964 - Closing of the Stratford Division and Stratford plant.

1967 - Petersburg station (CNR) closed.



*Petersburg CNR Station, ca. 1960.
Waterloo Historical Society*

1968 - Petersburg station moved to Doon Pioneer Village.

1969 - Official opening of Petersburg station at Doon Pioneer Village.

1974 - Waterloo Subdivision (remainder of the Galt to Elmira line) closed.

The Organizational Framework



Regulatory Bodies and Legislation in Canada and North America

Railway Committee of the Privy Council (previous to Board of Railway Commissioners for Canada which was struck in 1903)

Board of Railway Commissioners for Canada

The Railway Act (Canada)

The Grand Trunk Act (Canada)

Ontario Railway Act (applied to all railways other than railways authorized by the Government of Canada, i.e. it did not apply to the GTR, except in some instances)

The Telegraph Companies Act (Ontario)

Ontario Railway and Municipal Board

Various municipal by-laws

Interstate Commerce Commission (U.S., but also affecting traffic with adjacent countries)

Canadian Freight Association

Organizational Structure of the Grand Trunk Railway

By 1914, the Grand Trunk Railway System was the largest in Canada, and with the completion of the Grand Trunk Pacific in 1914, one of the largest in the world. A huge, complex network of rail lines and subsidiary companies, it included the original GTR lines through eastern Canada (from Montreal to the Maritimes, and from Montreal to Sarnia) and the eastern United States as well as several associated railways (principal of which was the Grand Trunk Pacific) from coast to coast and with connecting lines into the central United States. Organizationally, the GTR was a huge bureaucracy with a complex hierarchy of job roles. Until its bankruptcy in 1919, the GTR was governed by a Board of Directors, most of whom were British financiers and aristocracy.

Directors of the Grand Trunk Railway in 1914

Alfred W. Smithers, Esq.
Sir Henry Mather Jackson, Bt.
Edson J. Chamberlin, Esq.
George Von Chauvin, Esq.
John Alan Clutton-Brock, Esq.
Colonel Frederick Firebrace, R.E.
William Molson Macpherson, Esq.
Sir Felix Schuster, Bt.
Right Honble. Lord Welby of Allington, G.C.B.
Sir W. Lawrence Young, Bt.

Districts, Divisions, and Subdivisions of the Grand Trunk Railway in Central Canada (Quebec and Ontario) and the U.S.

As the Grand Trunk expanded its holdings and operating areas in the late nineteenth century, it was successively re-organized into different administrative districts, divisions and subdivisions, each with generally smaller geographical boundaries. In 1892, the GTR territory encompassed six Divisions: Northern, Eastern, Southern, Western, Middle, and Ottawa. Stratford was classified as a "District" within the Middle Division.

In 1913, a number of smaller Divisions were created, and Stratford became a Division Headquarters for these subdivisions:

Toronto Subdivision (Weston to Sarnia--the main line, including stations in Waterloo County: Breslau/Berlin/Petersburg/Baden/New Hamburg)
Berlin Subdivision (Galt/Blair/Doon/German Mills/Berlin/Waterloo/Heidelberg/St. Jacobs/Elmira)
St. Marys Subdivision (London to St. Marys Junction)
Southampton Subdivision (Harrisburg to Southampton--included stops at Branchton, Galt, Preston, Hespeler)
Durham Subdivision (Durham to Palmerston)
Owen Sound Subdivision (Harriston to Owen Sound)
Wiarton Subdivision (Parkhead Junction to Wiarton)
Palmerston Subdivision (Stratford to Palmerston)
Kincardine Subdivision (Listowel to Kincardine)

The Sub-Division Level (e.g. Toronto Subdivision, Berlin Subdivision)

The Sub-Division was a smaller administrative unit, containing up to 20 stations and sections and extending ninety to one hundred and twenty miles or more. Locomotives usually traveled within one Division. (Cars on the other hand traveled from one end of the continent to the other.)

Employees of the Grand Trunk Railway

The rank and file employees of the Grand Trunk Railway were members of a large, highly hierarchical bureaucracy. Employees were assigned their roles within a geographical area, within a General Division or District (e.g., Southern Ontario), a Division (e.g., Stratford) a Subdivision (e.g. Berlin, Palmerston) and on the most immediate level, within a section of track. Most jobs were managerial and support (clerical and equipment maintenance) compared to the numbers of men who actually worked on the railway engines and cars. By far the greater number of employees worked in the larger stations (e.g. Berlin) and in the offices, roundhouses and shops at Divisional Headquarters centres such as Stratford or London.

Within the prescribed job categories, there were often many sub-categories (for example, a clerk could be a Transfer Clerk, an Advising Clerk, an Assistant Clerk, a Ticket Clerk and so on). Where these positions were unionized, pay rates and scales were prescribed by the Canadian Brotherhood of Railway Employees, or the Canadian Union of Railway Telegraphers. Each position had its own manual of rules and rates of pay for different types of services. (E.g., locomotive engineers were paid according to whether they were running a passenger train, a freight train, and according to the size of the locomotive, or seniority.) Seniority lists show that the majority of GTR employees were men, although women were employed as clerks, stenographers, and occasionally as telegraph operators.

Total GTR employees in 1918: 25,342

Total GTR employees in 1922: 28,869

Chief Executives of the Grand Trunk Railway

- President of the Grand Trunk Railway
- Vice-President of the Grand Trunk Railway
- Chief Engineer
- Superintendent of Motive Power (locomotives, turn-tables)
- Superintendent of Car Department
- General Traffic Manager

Division Officers

- Division Superintendent
- Division Chief Despatcher
- Division Chief Engineer
- Division Master Mechanic

Grand Trunk Railway positions listed in 1922 Annual Report

- Agent-telegraphers (410)
- Road freight brakemen and flagmen (709)
- Road passenger brakemen and flagmen (156)

Road passenger engineers and motormen (179)
Road passenger firemen and helpers (183)
Road freight conductors (322)
Road freight firemen and helpers (523)
Road freight engineers and motor-men (498)
Road passenger conductors (131)
Road passenger baggagemen (129)
Section men (2,864)
Section foremen (2,864)
Station agents (non-telegraphers) (90)
Air-brake men
All other transportation employees
All other employees
Assistant engineers and draftsmen
Blacksmiths (146)
Boiler makers
Car repairers
Car inspectors
Carpenters (1,030)
Clerks (3,936)
Crossing flagmen and gatemen
Drawbridge operators
Electricians (125)
Employees in outside agencies
Enginehouse watchmen and labourers
Express service employees
Floating equipment employees
Foremen of construction gangs and work trains
Gang and other foremen (M.E. department)
General foremen M.E. department
Hostlers
Levermen (non-telegraphers)
M.W.&S. Foreman
Machinists
Masons and bricklayers
Mechanics helpers and apprentices
Messengers and attendants
Other skilled labour
Other unskilled labour
Other yard employees
Other men in construction gangs and work trains
Other traffic employees
Other road trainmen

Painters and upholsterers
Policemen and watchmen
Station masters and assistants
Station service
Structural iron workers
Telegrapher-clerks
Telegraphers and telephoners operating interlockers
Telegraphers, telephoners, and block operators
Train despatchers and directors
Travelling agents and solicitors
Yard engineers
Yard firemen and helpers
Yard conductors
Yard brakemen
Yard switch tenders
Yardmasters
Yardmasters assistants (not yard clerks)

Passenger Trains: Sequence of engines and cars

Locomotive (Crew: Engineer, Fireman and Front-End Brakeman)
Tender (Carrying coal and water)
Baggage Cars (158 in 1914)
Post Office Cars (95 in 1914)
Express Cars (43 in 1914)
1st Class Ordinary Passenger Car (552 in 1914)
1st Class Dining Car (12 in 1914)
1st Class Parlour Car (10 in 1914)
1st Class Parlour and Buffet Car (3 in 1914)
2nd Class Ordinary Passenger Car (236 in 1914)
2nd Class Colonist (formerly called Emigrant) Cars (8 in 1914)
Passenger Sleeper Cars

Note: the Conductor and the Rear-end Brakeman are in charge of the passenger cars.

Total GTR Passenger Cars in 1914: 1086

Freight Trains: Sequence of engines and cars

Locomotive (Crew: Engineer, Fireman, Front-end Brakeman)
Tender (Carrying coal and water)
Freight or Box Cars (Including Brake Vans, Goods Cars, Cattle Cars, Platform Cars, and Coal Cars)

Total GTR Freight cars in 1914: 40,056

"Not Used for Traffic" Cars (549 in 1914)

Auxiliary Cars

Boarding Cars

Dump Cars

Cinder Cars

Snow Ploughs and Ice Scrapers

Brief History of the Stratford Shops and the Stratford Administrative Division

Beginning in 1870 Stratford, Ontario was the site of a major repair and maintenance facility for the Grand Trunk Railway. When originally built, its shops had 30,000 square feet of working area. Over the next forty years, the shops grew to ten times this original size, in large part because of Stratford's success in drawing and consolidating most of the important functions there, squeezing out smaller, older facilities in rival cities and towns such as Hamilton, Brantford, St. Marys and London. Repair and maintenance work centred in the Stratford shops included blacksmithing, woodworking, brass foundry, tire-setting, boiler work, tinsmithing, painting and machining. The plant generated its own power for operating pneumatic equipment and producing electric light. The facilities were furnished with hoists and cranes that were capable of lifting entire locomotives; these handled weights of up to 200 tons by the late 1920s. (By comparison, the 4-6-0 locomotive at Doon Heritage Crossroads weighs approximately 100 tons; the 8-wheeler "Flying Dutchman" that typically worked on the Galt to Elmira line weighed about 50 tons.)

Over the years, the Stratford facility grew partly because of the political and promotional success of the town in attracting the favour of the company and partly, also, because of the growing size of the Grand Trunk as it acquired new systems and broadened its operations, especially with the building of the Grand Trunk Pacific. In the Stratford shops, larger, longer and more powerful locomotives were being maintained for travelling longer distances and drawing heavier loads.

When Stratford became an administrative division of the Grand Trunk in 1913, telegraph despatching, monitoring and coordinating the movement of passenger trains and way-freight, and enforcement of the company's rules and regulations Division-wide were centred in offices above the Stratford railway station, along with some of the administrative offices for the repair facility. In its heyday, over fifty people were employed in these offices.

By the 1950s, diesel technology was replacing steam technology, rendering much of the Stratford works obsolete. In 1960, Canadian National Railways (successor to the Grand Trunk) announced a major corporate reorganization with fewer administrative levels and large staff cutbacks, resulting in the closing of the Stratford plant in 1964. The Stratford administrative territory was relocated to Kitchener, and the Stratford railway terminal was officially closed in 1980.

Duties of Senior Officials at the Division Level (e.g., Stratford Division)

The ***Superintendent***: coordinated and directed the work of the Resident Engineer, the Master Mechanic and the Chief Despatcher.

The ***Chief Despatcher*** of the Division: the major administrative authority responsible for the organization and movement of "his constantly changing family of cars—freight and passenger" coming in and going out to the next Division. He kept track of passenger trains (passengers, mail, luggage and express). On his *train sheet* forms, he coordinated and tracked "way freight" being loaded, unloaded from freight cars so that cars were utilized efficiently.

In 1914, most of the Chief Despatcher's communication with Sub-Division Despatchers and station agent/telegraphers was by telegraph. His train orders were passed down to Subdivision or District Despatchers, who transmitted them to Station Agents who in turn passed them to the trainmen as they passed through stations along their designated routes.

Train orders could also be telephoned, with strict rules about what was to be spelled (order numbers, engine numbers, train numbers, all stations, all directions). Eventually telephone despatching took over from telegraph despatching (1920s and beyond).

The ***Resident Engineer***: responsible for the condition and upkeep of the roadbed, its bridges and buildings. Reporting to him were the Roadmaster and the Master of Bridges and Buildings.

The ***Master Mechanic***: responsible for the supply and maintenance of locomotives and railway cars. Reporting to him were the Locomotive Foreman and Car Foreman.

Duties of Station Agents

The Station Agent reported to and received his instructions from the Division Superintendent or Train Master (e.g., the Petersburg Station Agent reported to officials in Stratford).

He obeyed instructions issued by the Superintendent of Telegraph, and by the officials of the Passenger, Freight, Accounting and Treasury Departments.

He had charge of the Company's books and papers and of the buildings, sidings and grounds at his station.

He sold tickets and handled freight billed inward and outward, together with the collecting of the freight charges on the same (including filling out all of the required forms for all of these, and assisting with loading and unloading of freight).



*Station Agent, ca. 1910
Doon Heritage Crossroads*

He was required to post tariff notices, time-table and other notices and *"take pains to give passengers all the information they can..."*

He gave orders to Conductors for placing and loading of cars. He was responsible for safe loading and storage of flammable materials. He was responsible for putting car seals on freight cars.

He was required to keep stock yards in good order.

He was required to see that cars were properly loaded or unloaded and forwarded, kept the accounts and made up his daily and monthly reports, and sent in his remittances in the proper manner.

He was responsible for the *"proper position and security of switches and safety appliances... Agents must know that their tracks are clear and unobstructed, and stop approaching trains unless all is right."*

The Agent had charge of all the employees at the stations, such as the Operators, Freight Clerks, Ticket Clerks and Baggage Men, and was required to see that they performed their duties properly. (The agent/operator at the Petersburg station filled all these roles.)

He regulated *"the places where hacks, omnibuses and other vehicles shall be allowed to stand"* and removed *"all loiterers, or disorderly and riotous persons interfering with the comfort of convenience of passengers..."*

He was expected to advise the Division Superintendent of all matters that might affect the

interests of the Company, to advise the Passenger Department of business that might be secured through their assistance.

In general, he was required to work to the interests of the Company.

The agent/operator was required to keep a record in the Train Register book of the arrival and departure of all trains, also passing trains, reporting same to Despatcher in the prescribed way.

He was expected to be courteous to passengers, and to endeavor to make the road he was working on, as well as himself, popular with the public. He had to be ready at all times to aid feeble or old persons on and off trains.

He was expected to sell the Tickets, and have his wicket open half an hour before the arrival of passenger trains.

Duties of Telegraph Operators

The Station Agent and Telegraph Operator were, in a small station, one and the same person.

He could not receive telegraph messages to be transmitted free, unless signed by, or addressed to an officer, agent or employee, in which case, he would send it in the same way that he would send a regular message.

The telegraph operator reported to and received instructions from the Division Superintendent, Train Master, Chief Despatcher or Train Despatcher, and was under the authority of the Agent (in Petersburg, he was an Agent/Operator).

The operator was required to be constantly on duty during the hours assigned to him, and could not leave his office for any length of time without permission from the Train Despatcher on duty.

"(Station Agent/Telegraph) Operators who lived in the stations under House Fuel and Lights (HFL), had to be in their stations or offices whenever the company's interests demanded it. One hour was allowed for each meal, but rarely without interruption. An HFL agent (who also doubled as telegraph operator) was generally on duty twenty-four hours. The Grand Trunk often provided a house next to or as part of the actual station. Normal hours for the station required that it be open thirty minutes before the first train arrival and thirty minutes after the last expected one left. The agent was required for duty even if an extra train was due before or after closing time. ... In short, an operator's job could be subtitled, 'Eternal Vigilance.' Burnet, Canadian Railway Telegraph History, p. 158.

The telegraph provided unique services to rural areas and small towns. In emergencies, station operators could be relied on for help. They also learned of eventful news, gossip... and sent messages about important people, dangerous cargo, or the arrival of the circus train. Because a telegraph message was faster than the mail, the railway station took an unofficial role as an information centre. It, too, was a place for rural gatherings, to learn of news or wait for a train.", Burnet, p. 164.

Duties of Conductors

"The train is entirely under the control of the Conductor..."

The conductor was the administrator (or manager)of the train.

The conductor was responsible for the safety of the train while it was standing in a station.

On a freight train the conductor's "office" was the caboose.

Ensured accurate time-keeping.

Signed train orders.

Boarded passengers and punched their tickets.

Collected ticket stubs and other forms and forwarded them to the Audit Office.

Attended to the comfort of passengers, directed them to connecting trains, answered questions etc.

Preserved order, protected passengers from being subjected to "abusive and obscene language".

Telegraphed to Refreshment Room proprietors along the line the number of passengers on the train requiring refreshments.

Checked passenger cars for lost/left behind items.

Advised engineer when to start up the train.

Kept a "train journal" of each trip.

Acted as a station agent at (flag) stops where there was no Agent; made out Way Bill of milk cans, other freight, etc.

Ensured that proper signals were on the train.

Reported unnecessary delays.

Kept seats etc. in good repair.

Duties of Engineman

Reported to the Master Mechanic of his Division, also to other superior officials (the Conductor, Station Masters, Train Masters as required).

Acted as Conductor on trains running without one.

Obedied all signals, noted position of switches, semaphore signals, other signals.

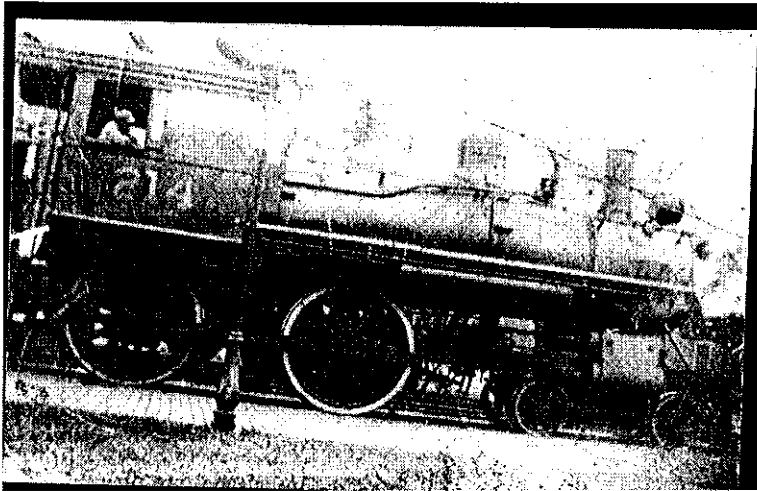
Started, stopped trains with caution; coupled and switched cars safely.

Handled and used economically oil, coal, sand, water, waste and stores.

Responsible for fire prevention, fire safety.

Stayed with train during entire journey.

Reported condition of engines to the Master Mechanic and assisted with necessary repairs.



*Galt to Elmira Last Run,
Grand Trunk Locomotive 214,
1927
Doon Heritage Crossroads*

Duties of Brakemen

"Brakemen must always be on the alert, and ready to apply the brakes immediately upon a signal being given by the Engineman; when approaching signals, stations, railway crossings, and swing bridges, they must keep their trains completely under control...Brakemen must stop their trains at stations, and control them when descending heavy grades, without waiting for signal from the Engineman."

Responsible for brakes being in proper working order.

Rear brakeman stayed on rear car of excursion trains.

Responsible for keeping signal lamps trimmed and fuelled.

Rear brakeman assisted the conductor with seating passengers.

Announced names of stations, swept out passenger cars.

Duties of Fireman

Received orders from the Engineman.

Kept the locomotive stoked as required.

Checked water and coal levels before a trip.

Duties of Flagman

Installed flags and light signals to indicate the motion of the train (see diagrams).

Duties of Section Workers

*"The Section is the basic unit of railway operation for maintenance work. It is about four to six miles long. Their work is called **Maintenance of Way.**"*

Section Foreman.

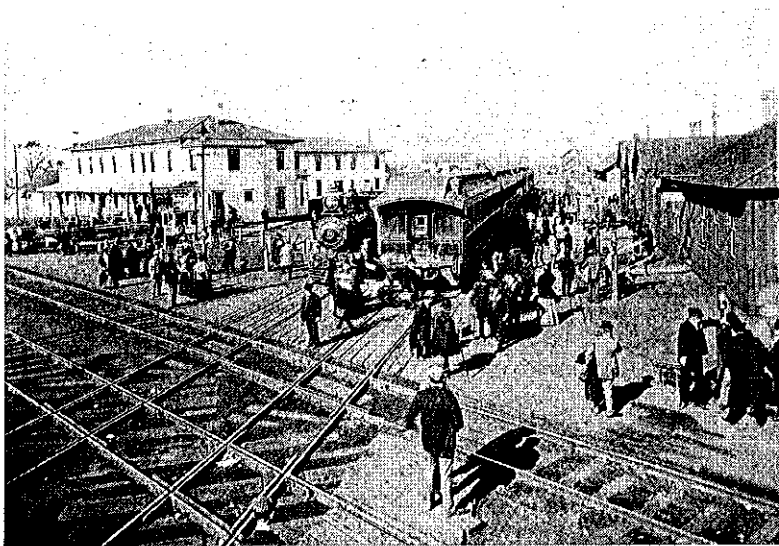
Watched the track for major defects, weak or broken rails and obstructions on the right of way.

Responsible for observing the condition of telegraph wires and making temporary repairs when needed.

Section Foreman and his *section gang* (four to seven sectionmen in summer), replaced worn ties and rails, shouldered up the ballast, kept grass and weeds down, and maintained culverts and ditches to carry off rain or overflowing streams.

Checked and corrected the precise spread between the rails and maintained the alignment of rails around curves.

The Railway Station



*Railway Station, ca. 1900
National Archives of Canada*

The station is "less significant as a building than as a sign that here two trains on a single track line may pass one another, and that here the trainmen receive their orders." At some stations, engines could take on water and coal (not Petersburg).

A station is place designated on the time-table, or by a sign board, by name, at which a train may stop for orders, freight or passengers; or to enter or leave the main track; or from which fixed signals are operated.

The Grand Trunk maintained a hierarchy of station types, prescribing numbers of buildings, their size and types of services that each was authorized to deliver. These regulations ensured a uniform company look, as did regulations about signage (station signs, railway crossing signs, whistle posts etc.) all along the railways and at stations. What is remarkable about the "smaller" (or so-called "unimportant") stations in Waterloo County, for example Doon and St. Jacobs, was their large size. Both the Doon and St. Jacobs stations were two-storey board and batten structures (living quarters were on the second floor), with freight and baggage shed and at the Doon station, a drive-through weigh shed.

Services at the Petersburg Station in 1914

Telegraph (day only)

Railway telegraphs (also called messages)

Commercial telegraphs (also called messages)

Telephone

Canadian Express Company (There was no express agent at the station: "shipments put off train at owner's risk and must be prepaid. Money and valuables not accepted for delivery to these points.")

Side track (for passing trains)

Closet (Privy)

Passenger Tickets (office open ½ hr. before train time)

Check baggage

Processed freight shipments

Loading point for livestock

Relay point for train orders (Despatcher to station agent to trainmen)

Relay point for mail to Petersburg P.O.

Bulletin board on platform (train timetables)

Lost and Found

(See also *Duties of the Station Agent and Duties of the Telegraph Operator*)

Passenger service from Petersburg

Daily (Monday to Saturday): 6 **Eastbound** (two regular stops and one flag stop at Petersburg) and 6 **Westbound** (three regular stops at Petersburg)

Sunday: 2 Eastbound (one stop at Petersburg) and 2 Westbound (one stop at Petersburg).

Way-Freight service at Petersburg

Stock yards

Scheduled Daily trains (Monday to Saturday):

2 Eastbound (one to Toronto, one to Elmira)

2 Westbound (one to Stratford, one from Elmira)

Petersburg Station Agent/Operator in 1914

Irving Lashinger

Monthly salary: \$75.00

Housing provided (House/Fuel/Light)

Services at the Doon GTR Station, 1914

Telegraph (Day only)

Two southbound passenger trains to Galt daily (passenger, baggage, mail, express)

Two northbound passenger trains through Berlin to Elmira daily (passenger, baggage, mail, express)

Canadian Express Company (No Canadian Express company agent at station: "shipments put off train at owner's risk, and must be prepaid. Money and valuables not accepted for

delivery to these points.")

A photograph of the Doon station shows a weighing platform/shed, where freight, including livestock, was weighed before being shipped out. The Doon Twine and Cordage mill was one of the GTR station's principal freight shippers until it burned around 1915, later relocating to Kitchener. From a newspaper article (around 1940): *The village had eight trains a day and freight galore was sent to Doon and carloads of manufactured goods left the village.*



*Doon GTR Station
Waterloo Historical Society*

Tracking the Movement of Passengers, Goods and Information on the Grand Trunk Railway



*Station Agent in Northern Ontario
Provincial Archives of Manitoba*

Forms and Tickets

As with any bureaucracy, paper trails tracked and controlled every motion and procedure along the Grand Trunk Railway. The railway companies indeed seemed to run on an excessive amount of paperwork. Small railway stations like Petersburg would be no exception to the requirement for paperwork; it was estimated that in the course of his daily routines, a station agent/telegraph operator would deal with upwards of thirty different forms. These reflected the enormous complexity of the railway business, and perhaps reflected as well the motto of the Grand Trunk, "Safety First." By exacting accountability from its employees every mile of the way, the likelihood of rail disasters with great loss of property and life, was lessened. (*Appendix I* provides an itemized list of forms and other papers that were used in the railway business.)

The agent completed pay roll forms for himself and any other station staff. Extra Pay Roll forms were "when extra men are employed, causing an increase in the general expenses of the station..." A host of other forms surrounded the appointment and discharge of staff. Requisition forms for stores, stationery and other supplies were completed periodically "*and in no instance must a larger quantity of any article be applied for than is required to supply the wants of the station to the date when the next requisition is due.*" "*Petty accounts must be rendered on Form No. 396, unless they are of a personal character, when Form No. 394 must be used.*" A book of record was kept for mail bags received from or handed to Mail Clerks in the postal cars, and receipts were issued for mail bags.

Forms governed the shipping of freight (Bills of Lading, Way-Bills); baggage tickets were issued for checked baggage. Baggage was tagged and way-billed, as were milk and cream cans that travelled in the baggage car. Freight cars were sealed shut after they were loaded; records were kept of seals used, by whom, etc. Train order forms were filled out as they were telegraphed in; copies were kept in a Manifold book. Circulars advertising special excursions or special rates were posted in the office or waiting room. Circulars reminded station agents and cautioned passengers of various company regulations and penalties. A Black Board for chalking train time notices was required to be hung up outside the station. Other seasonal timetables and special excursion flyers were posted inside the station.

The Station agent maintained a journal recording the daily business. A Train Book was kept at each station, recording both the arrival and departure times of trains (Rule 298). On the trains, conductors also kept Train Books, documenting activities on each run.

Train orders that altered or supplemented the basic schedule information were telegraphed from the Division Despatcher to station agent/operators along his lines. Although the order itself was transmitted electronically, it was recorded on paper forms that were distributed to trains in transit. Train order forms were possibly the most critical documents for maintaining the safe passage of trains. There were two kinds of Train Orders (see examples):

19 Train Order - This was one which did not restrict the "right" of a train and did not require the signature of the Conductor or Engineer of the train. If there was a "19" Train Order for a station like Petersburg, the Despatcher would telegraph it to Petersburg, the agent would put the order board in the "stop" position, then would go out on the platform, holding up one copy of the order, the piece of paper tucked into the crotch of the "order hoop" pole. The Engineer would understand to slow down, reach out and catch the hoop on his arm. The piece of paper would be taken off the hoop, and the hoop thrown on the ground beside the tracks. A *Clearance Form* would also be handed off to the Conductor who was leaning out further down the train.

31 Train Order - This was one which required the signature of all parties (Conductors, Engineers, operators), and meant that the train had to stop at the station, whether it was scheduled to or not, so that the "31" Train Order could be signed.

Selling Passenger Tickets

The station master's ticket wicket sold many different kinds of passenger tickets (one-way, return, first class, second class, special excursion tickets, inter-line tickets etc. etc.) and the agent was required to keep forms that tracked ticket sales, refunds, requests for tickets etc. etc.

Five key steps that the ticket seller needed to take:

1. Location of destination (need *Employees TimeTable* for Southern Ontario, or *Official Guide* for destinations beyond)
2. Look up the route according to the map (usually the purchaser advises route desired,

or the ticket agent advises)

3. Find the rate (ticket price) in the Tariff Book applicable to the territory
4. Stamp the ticket, issue it to the passenger and collect the money
5. Give train connections, if necessary, and the time of arrival.

Ticket terminology:

Local ticket is one used to travel between stations on your division (e.g., Stratford Division)

Interline ticket is one used in ticketing over foreign railways and steamship lines.

Coupon ticket is the part of a ticket covering the fare over one part of the railroad.

Time-table is a folder showing the schedule of all trains or boats.

Official Guide is a book that contains all the time-tables for the various North American railroads. Issued yearly.

Junction Point is a point on the railroad that connects with another branch or another railroad.

Refund is money back to the passenger on an unused ticket; a form is used to record all refunds issued.

Tariff is a rate sheet or book with various rates for transportation of people and goods

Stock book is a book that records all tickets on hand in a station

Excess baggage refers to baggage in excess of the regular allowance of 150 lbs.

Kinds of tickets:

Card tickets are used where there are frequent calls for tickets to certain destinations. They are made of paste-board and are colour coded and printed with the names of the stations they apply to (e.g. Berlin). They are sold as is, stamped or indented with a ticket dater. They can be handled very rapidly. They can be return tickets, second class, commercial, excursion or special holiday tickets.

Local book tickets are printed on paper, and all railroads used the same system. "Form 1" tickets are for single or one-way travel, first class, to a local point (within your Division); Form 1S would be used for single or one-way tickets, second class.... and so on (return ticket; first class local, good for one month, commercial, half fares for children, special excursions...) Note: children under five "when accompanied by parent or guardian are free". Between 5 and 12 half-fare tickets are issued.

General: All tickets should be kept "under lock and key" and the ticket case and ticket wicket opened 30 minutes before the train arrives.
All tickets must be stamped (\$1.00 penalty if not).
Children's tickets are punched with the ½ punch, or the word half-fare written across each coupon (each part of the ticket)

Dominion School of Telegraphy and Railroading, *Ticket Traffic Course, Book 1 Covering Selling Local and Interline Tickets....*, Toronto:1925. (999.093.001.9)

Ticket Prices

"For Tickets, Rates, Folders and other information, apply at Company's Ticket Office..."

Buying a ticket on the Grand Trunk Railway in 1914 was akin to buying an airline ticket today on a major carrier such as Air Canada. GTR fares varied with any of the following and in combination: one-way fare; return fare; first, second or "emigrant" class fare; adult's or child's fare; local travel fare; commercial traveller's fare; express travel fare; Pullman berth or sleeper car fare; and a host of special excursion fares. Then as now, a prospective traveler could read the newspaper for special advertisements; or as posted above on GTR waiting room tariff bulletins, "apply at Company's Ticket Office" for a quote. According to oral history accounts, for the ticket agent keeping up with changing tariffs and special rates was something of a headache. Selling "Inter-Line" Tickets posed another challenge for the Station Agent, requiring more far reaching railway line schedules (from the *Official Guide...*) and tariff books.

A selection of Grand Trunk Railway ticket fares from local newspapers suggests prevailing tariff rates in 1913 and 1914.

Excursion to Hamilton on Civic Holiday, Friday Aug. 15th, 1913

Special Train via GTR... Fare for Round Trip \$1.00. Children 50 cents.

Prestonian, Aug. 14, 1913, p. 6

Berlin, Ont. to London, Ont., Return Trip

(Special Excursion Rate to London "Western Fair")

Sept. 9, 11, 12, 1913 ... \$1.45

"Full particulars and tickets at all Grand Trunk Ticket Offices."

Berlin, Ont. to London, Ont., Return Trip

Sept. 5, 6, 7, 8, 10, 13 ... \$1.75

Annual Western Excursions from Berlin, Ont., Sept 11, 12, 13, 1913 (Round Trip)

To Port Huron, Mich. ... \$3.40

To Detroit, Mich. ... \$4.80

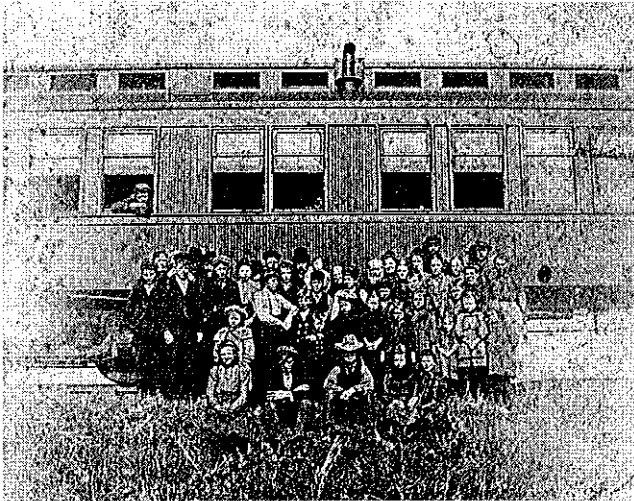
To Chicago, Ill. ... \$10.60

To Minneapolis/St. Paul "All Rail" ... \$28.40

To Minneapolis/St. Paul "Rail and Steamship" ... \$32.40



*First Class Grand Trunk Ticket Stub
Doon Heritage Crossroads*



*Excursion Train, ca. 1900
Doon Heritage Crossroads*

Rates were posted in the August 4, 1914 *Berlin News Record* for the inter-urban Berlin-Waterloo Street Railway, operated by the Berlin Light Commission. These rates would be analogous to present-day inter-urban transit rates.

Cash Fares

Cash fares ... 5¢

Children under 12 ... Half fare

Night fares (after midnight) ... 10¢ (cash only)

Ticket Fares

Regular ... 6 for 25¢

School children's ... 10 for 25¢

Book Tickets (Not Transferable) ... 100 for \$3.80

For tourists and immigrants, the railway was often the first step in a trans-oceanic voyage. Both the Grand Trunk Railway and the Canadian Pacific Railway went to Montreal; Portland, Maine was also a terminus of the Grand Trunk Railway. A local newspaper advertisement for the White Star Dominion Line directed customers to agents for either railway line. Again, transAtlantic rates varied with the type of service desired. The White Star Dominion Line steamships sailed from Montreal, advertising "Palatial Steamers and Excellent Service" with (for nervous travelers frightened by the 1912 sinking of the White Star's *Titanic* on its maiden voyage) "only four short days at sea". (*Berlin News Record*, July 31, 1914).

White Star Dominion rates

From \$92.50 - 1st class

From \$50.00 - 2nd class

The Cunard Line also sailed from Montreal. A small advertisement in the *Berlin News Record* of July 31, 1914 posted rates for the lower classes.

Cunard Line Rates

Cabin - \$26.25

Third Class from Canada - \$30.25 and up

Westbound from Britain - \$30.00 and up.

The Movement of Goods: Baggage, Freight, Express Freight and Mail

Baggage

"The value of (baggage) records depends upon completeness and correctness; incomplete and incorrect records are frequently worse than useless... Records must be taken from the checks, not by copying from waybills or transfer bills. All reports must be sent to General Baggage Department of the Division, by first available train." (CN Baggage Book of Instructions, p. 58.)

Baggage was for the most part what passengers carried or checked for transportation on the Baggage Car (included in the price of their ticket). This included trunks, suitcases, valises, and canvas bags. "Baggage" also included corpses, cream and milk (with their own rate schedule), dogs and domestic pets, egg cases, mail, newspapers, personal baggage, "supplies for one-day excursions and picnics" and so on. The first 150 lbs. of baggage were free with an adult ticket; 75 lbs. was the limit with a child's ticket. The total baggage weight limit was 250 lbs. Bicycles and baby carriages were defined as "excess baggage" and charged accordingly, with a minimum charge of 25 cents. (Large lots of personal belongings like furniture or household goods were defined as freight.)

The Grand Trunk Railway owned 95 post office cars in 1914. Railway mail clerks were in the employ of the Post Office Department and processed mail on the railway cars. Smaller volumes of mail travelled on baggage cars and when dropped off the train, were picked up and taken to a local post office for sorting and delivery. As mentioned above, the station agent also maintained record books for mail bags received from or handed to postal cars, and issued receipts for mail bags too. With the introduction of Parcel Post, the volume of mail increased dramatically (see below). The GTR's income from its mail service also increased dramatically. In 1911 receipts from mail and express business was £162,248; in 1914 receipts totalled £396,246, more than double the amount from three years earlier.

As with all other areas of the GTR's business activity, another clutch of forms regulated and tracked the movement of baggage, including these: Agents' Records, Waybills, Record of Checks issued and exchanged, Station Waybill and check Exchange Record, Daily and Periodical Baggage Report, Daily Report of Baggage Received from all Trains and Stock Report, Station Waybill, Value Receipt Book. On a train, still another slate of forms kept track, principal of which was the Train Baggageman and Pursers' Trip Report Form, a *"complete and correct history of all the baggage car traffic handled... In other words, ... a complete diary of anything that happens..."* (P. 62)

Milk and cream cans (called railroad cans) were shipped full to creameries, usually to be made into butter and cheese. They were classified as baggage. Likely because they were a large and frequent commodity, they had a set of rates, forms and procedures unto themselves. Shippers (farmers) were required to seal and label each can. Labels (checks) were attached to the can with a string. Cans were listed on milk and cream way-bills by the station agent; if more than one farmer was shipping to the same destination (consignee), all of the cans being shipped at the same time were listed on the same way-bill. Shippers were required to load their cans onto the baggage cars, and the consignee to unload at the receiving end, unless there were under twenty cans being sent out, in which case the station agent would do the loading (or unloading of empty cans). If cans were being picked up at a flag stop, the baggage man would do the paper work and loading/unloading.

(Note: Milk was shipped by rail less frequently to dairies for sale as fresh milk. Until pasteurization was common, fresh milk was usually obtained from local suppliers by a town or city dairy. Milk in cans was also shipped to factories for conversion into powdered skim milk and other milk products like condensed milk and milk chocolate.)

Freight

"The Freight Department is charged with the duty of securing commodities for transportation in freight cars and prescribing rates thereon..."

The Freight Department of the GTR shipped the following commodities: livestock, poultry, grain, lumber, furniture, seed, minerals and chemicals (iron, coal etc.), goods in barrels such as apples, flour, oil, and more. Freight traffic exceeded by far passenger traffic on all rail lines. In 1910 there was a total of 907 passenger cars on the GTR, and 30,433 freight cars, with freight revenues accounting for 64% of the company's total revenues. All freight shipments leaving a train station were meticulously itemized on way-bills with copies for the "consignor", the station agent, and the destination station. A host of other forms accompanied the shipment of freight including indemnity forms, valuable animals forms, livestock special contract, release forms and customs forms (for export shipments). Freight rates were less than express shipment rates, the trade-off being that there were fewer guarantees of special treatment or undamaged goods at the delivery end.

FREIGHT CLASSIFICATION LIST

A partial list showing how the railway Companies classify freight.

1st CLASS—Blankets, Boots and Shoes; Baby Carriages (K.D.) cased, Bureaus, Candy, Carpet, Chairs (K.D.), Churns, Common Mattress, Clothing, Cream Separators, Dry Goods, Folding Beds, Graniteware, Agate-ware, Groceries (light Groceries only), see 2nd, 3rd, 4th and 5th class rates for heavy groceries; Harness, Hat Racks, Matting, Pictures Screens and Screen Doors, Sewing Machines, Sideboards, Toilet Soaps, Springs (iron frame), Tables (K.D.) Tea, Tinware (nested), Tobacco, Toys, Traps (game), Wash Stands, Wheelbarrows, Wines and Liquors, Woodenware.

2nd CLASS—Bacon, Biscuits, Dog Biscuits, Coal Oil in cases, Crockery, Domestic Cotton, Dried Fruits, Gasoline in Cases, Hardware, Iron Beds, Mangles, Metal Polish, Nuts, Pork in Sacks, Pumps (wooden or iron), Stoves, Sugar in boxes, Washing Machines (crated).

3rd CLASS—Bacon, Canned Goods; Coffee, Feed Cookers, Fish (dried); Flat Irons, Fresh Fruit in Barrels, Fruit Jars, Lard, Oilcloths, Paints, Pork in barrels, Rice, Soap, Powder, Stove parts, Weighing Scales, Wall Paper.

Salt in barrels or bags, Laundry Soap.

4th CLASS—Sugar in barrels or bags.

5th CLASS—Flour in bags or barrels. Meal in bags or barrels.

1½ TIMES FIRST CLASS—Trunks, Desks, Lounges, Hair Mattresses, Springs.

DOUBLE FIRST CLASS—Chairs (crated), Chairs (wrapped), Chairs (set up), Rockers (set up).

*Freight Classifications
Hudson's Bay Catalogue,
1910-1911*

Express

Goods shipped "express" included, generally, items of greater value: money, gold or silver articles, jewels, watches, deeds and other valuable papers. On the Grand Trunk Railways, express goods were handled by the Canadian Express Company, incorporated in 1865. The goal of the company was "the rapid transportation of Merchandise, Money and Valuables." The GTR owned 43 cars for express service in 1914, but as with mail service, smaller amounts of express shipments travelled on the baggage car. The GTR realized a portion of its income from the provision of express service. At smaller stations such as Doon or Petersburg, the station agent handled the work of the express company. At the Petersburg Train Station in the 1940s, the Express Shed was adjacent to the Waiting Room and Office on the north side of the tracks.

Parcel Post

Free rural mail delivery service in Canada was implemented in 1908. This relieved farmers and their families of the need to travel to the nearest post office to pick up routine mail. However, freight or express deliveries would still require a trip to the railway station. If a nearby railway station did not have an express office, a person would have to travel, often at some inconvenience, to the nearest agency. The introduction of Parcel Post in 1914 meant that goods (under the weight limit of 11 lbs.), previously shipped by freight or express, could now be sent quickly, cheaply and directly through the mails. Depending on the size of the parcel, it could be delivered directly to the home (or the mail box at the end of the lane).

Parcel Post was the government's response to the phenomenon of mail order catalogues. When introduced in the United States in 1913, "Its success was instantaneous. In January the number of parcels mailed was 38,000,000. In April it was 60,000,000. In September it was near 80,000,000." Parcel Post ended the virtual monopoly of the railroad companies and their express companies for the shipment of goods. The upper weight limit for Parcel Post was eleven pounds, so railway freight and express were still the only means of transportation for goods above the Parcel Post limit.

Telegraphic Communication And the Railway

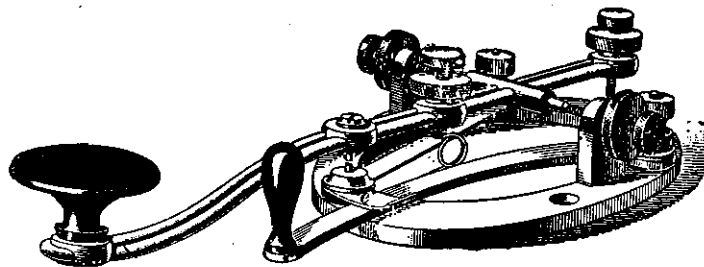
Telegraphy was invented by Samuel Morse and his assistant Alfred Vail in the late 1830s, who demonstrated that information could be communicated through codes created through the opening and closing of electric circuits and sent via long distance transmission lines. (The basic principle is similar to the transmission of computer data.) Telegraph lines followed railway lines from the very beginning. The first demonstration of a commercial telegraph installation was along the Baltimore and Ohio Railway in the 1840s.

The Great North Western Telegraph Company was created in 1880 linking Quebec, Ontario and Manitoba, primarily along Grand Trunk Railway lines. On the edge of bankruptcy in 1915 (as telephone despatching was taking over from telegraphic despatching), it was acquired by the Canadian Northern Telegraph Company, which itself was taken over by the Dominion government in 1918, and eventually becoming a component of Canadian National Railways.

Every train station was given its own code name. Messages travelling along the telegraph wire sounded continuously on the relay apparatus in the station-agent/operator's office. When he heard the station's codename, he would stop what he was doing, turn on his sounder (to amplify the sound), indicate to the sender that he was ready to transcribe, and then would pick up the message. It could be a train message or a commercial (personal) message. Because every letter had its own telegraphic code, and had to be transmitted (and received) by hand, telegraph operators learned a great number of short forms (e.g. Good Bye was transmitted as G.B.).

When a telegraph message was received, the operator transcribed it by hand or typewriter. How it was actually delivered depended on where the person lived. If nearby, the message was often delivered by the telegraph operator or by a messenger, directly to the recipient, or possibly to a designated "establishment or institution" (possibly a general store or post office). The message could be telephoned from the telegraph office if the recipient had a telephone. If the recipient lived further afield, the telegram could have been sent with the mail delivery "at the sender's risk of error, delay or non-delivery". The Great North Western Telegraph Company tariff book listed all of these possibilities.

In Ontario a commercial telegram cost 25¢ for the first ten words; each additional word cost 1¢. Short range messages sent in Ontario within a twelve mile radius were cheaper; 15¢ for the first ten words and 1¢ for each additional word. The Great North Western Telegraph Company's tariff book set out a complex schedule for messages to other destinations. Special rates also were set down for press dispatches, government messages, bank messages and so on. By 1914, it was possible to send a telegram or cable message not just in North America but to every country in the world.



“Safety First”

Railway Rules and Signals

"Obedience to the rules is essential to the safety of passengers and employees, and to the protection of property."

Communication along railway lines demanded precision timing, adherence to the rules, and clear, unambiguous signals. *The main reason for precise timing was to prevent accidents.* The majority railway lines were single tracks, and so eastbound trains and westbound trains were constantly on collision courses, and two trains heading in the same direction were at risk of rear-end collision, were it not for an elaborate system of time-checks, scheduling, routing and switching.

The basic unit of railway tracking was the "block", a length of track as small as the area immediately around an individual railway station, or up to as long as ten miles. Once within a block, a train had right of way up to the end of it. The block was marked by signals at either end. Once within your block, your train had right-of-way. This was a guarantee of safety on single-track systems. There are complex rules for determining which trains have right-of-way ("superior trains", trains of "superior right", trains of "superior class", trains of "superior direction", "extra trains"); these are laid out by the train schedule (in advance), and also by train orders from the Despatcher to an agent/operator (Train Orders could modify the basic rights according to changing circumstances).

In 1914, most communication to and from the Division Despatcher in Stratford to stations in the Division was telegraphic. Telephone despatching could be more error-prone or ambiguous, and telegraphy was the preferred method, although telephone despatching was made safer as more rules were applied, and it was used more and more as time went on.

If the pre-ordained schedule needed amending due to circumstances beyond the schedule's control, the Despatcher would contact a station agent by telegraph, and the station agent would in turn communicate with the train by the "order board" signal.

Communication from station agent to passing trains was three-fold:

- by fixed signals (order board signals, station protection signals, and block signals);
- by orders written on paper (train orders);
- and by hand-held signals such as lights, semaphore flags, flares (fusees).

Visible Signals

Red = Stop

Green = Proceed

Yellow = Proceed with caution

Green and White = Flag stop

Blue = Men at work under or about an engine, car or train. Indicates that cars etc. must not be coupled to or moved, etc. Only workmen may remove the blue signals.

White = Safety; a signal to go on.

Flags and lights on trains

During the day, white or green locomotive flags were flown to indicate "extra" trains running (beyond those regularly scheduled).. At night, "combination lights" were used (lamp with green glasses facing toward the engine and sides; red glasses facing to the rear-one lamp on either side of the train).

See *Appendix III, Visible Signals, Audible Signals and Train Signals.*

Hand signals

See Appendix III.

Fixed Signals

Disc Signal type of Train Order Board

Over the roof of a station was a signal that communicated to an approaching train whether or not there were train orders to be picked up by a train passing through.

On the Grand Trunk Railroad, a Disc Signal, or "Train Order Board" was used. On other railroads (e.g. C.P.R.), a semaphore type of train order board was used (see below).

The GTR train order signal was an oval board installed underneath an arm that projects out over the train platform in front of the agent's office. Above the oval board was a stand for a light unit with a pair of red lights and a pair of green lights. The oval board and light unit was controlled from the agent/telegrapher's office by a chain so that it could be turned as soon as the dispatcher called in (telegraphed) the order.

When the train was to stop to pick up an order, the broad side of the oval faced the train, along with the red light (at night). When the board was parallel to the station and the track, it indicated "proceed", and at night the green light was also shown.

Station Protection Signal

A movable blade or arm supported on a pole. Used to protect trains on the main track when stopped at a station. The same concept as the Block Protection Signal.

Horizontal position = Stop at station (-at night, with a red light). The train may then proceed with extreme caution, sending a Flagman ahead if necessary for complete protection against other moving trains.

60 degree angle = Proceed (plus, at night, with green light)

Located at the approach to the station.

Audible Signals

Engine bell

Must be rung before an engine is moved

Must be rung 1/4 mile before reaching every public road crossing at grade and until it is passed

Air Whistle

The air whistle allows the conductor to communicate with the cab. It is an internal means of communication. It is a small brass whistle that the conductor activates by pulling a cord that pulls air into the whistle from the train's air supply. One blast = Start. Two blasts (when the train is running) = Stop. Three blasts (when the train is running) = stop at the next station. Three blasts (when the train is standing) = back the train. Four blasts (when the train is running) = reduce speed.

Steam Whistle

The steam whistle is driven by steam from the locomotive.

See chart, Appendix III, for sounds and meanings.

Torpedo

Small detonating cartridge or shell placed on a rail by one of the train's crew, which is exploded when crushed by the locomotive's wheels. Used as an alarm.

Fusee

A flare used as a night warning signal along a track. A red fusee must not be passed until burned out. A yellow fusee signals caution.

Remote Control Switch Signal

The remote control switch control allowed the station agent or yard worker to set track switches that let trains enter sidings or go off onto another set of tracks more efficiently (i.e., without having to slow or stop). These could be manually operated (by means of cables leading into the station office, where hand cranks would be used), or electrically controlled.

This type of switch signal reduced the number of times that a train would have to stop to pick up train orders within one "block" of track (a block was a length of track of anywhere up to 10 miles long).

Keeping Time

The smooth functioning of an entire railroad system demanded accurate time keeping. Schedules were made to ensure that trains left and arrived safely on time. Adherence to the schedules was achieved by trainmen and station operators, directed by their superior officers in Divisional Headquarters (e.g. Stratford) and above.

Timing within a Division was coordinated from the Division Despatcher's office. Trains ran on Standard Railway Time time, taken from the Dominion Observatory (Observatory Standard

Time), and telegraphed to all points from designated offices at 11:55 a.m. daily. Station clocks were set to Standard Time. Employees were required to set their watches to Standard time. When embarking on a trip, the precise time was obtained from the Train Despatcher, or by all the trainmen comparing their times with someone who has had access to a clock set to the railway Standard.

Initiated in 1883, the system of Standard Railway Time became common to all North American railroads. At that time, five hour-difference time zones were created, indexed to Greenwich Meridian time, superseding 49 operating times previously used in North America. Most of the rest of North America followed suit, adopting the five standard time zones. The periodic inspection of watches became a North American railway standard as well.

Ian R. Bartky, "*Railroad Timekeepers*," NAWCC Bulletin, October 1989, pp. 399-411.

Railway workers' clocks and watches were made by different manufacturers (e.g., Hamilton watches and Waltham watches were among the most reliable; Pequegnat clocks made in Berlin, Ontario). Watches that passed inspection were certified to be "correct and reliable and in [the inspector's] judgment, will with proper care, run within a variation of thirty seconds per week".

Pequegnat made its Moncton model of wall clock ("specially adapted for Railroad Stations, Public Buildings and Offices, where accurate time is required") for the Canadian National Railways (formerly Grand Trunk). The Moncton clock had a fifteen day movement and a separate dial for the second hand.

Railway employees who were required to use Standard Watches that were examined and certified by a designated Inspector every six months:

- Train Master
- Road Foremen of Locomotive
- Locomotive Foremen
- Road Masters
- Bridge and Building Masters
- Conductors
- Engineers
- Firemen
- Motormen
- Train Baggage-men
- Brakemen
- Yard Masters
- Yard Foremen

Watches were compared before starting on each trip against a designated Standard Clock (and duly recorded on a form). More frequent watch inspections (not the official certification) took place twice monthly.

Fire Prevention

Fire protection has a three-fold significance and embraces: first the means of safeguarding or abolishing causes which originate fire; second, the provision of means which may confine fire to the space in which it originates; and third, the necessary means of adequate fire extinguishment.

Instructions and Information Regarding Fire Protection and Fire Prevention, Canadian Northern Railway.

In the steam era, potential fire hazards at train stations were many; however there are few records of total destruction by fire, probably because of the awareness of the sources of danger. The New Hamburg train station, a wooden structure, burned to the ground in 1905 and was replaced by the next year. Annual Reports of the Grand Trunk Railway listed other many other stations in Ontario that were also rebuilt in the early twentieth century; some of the larger urban stations were brick or brick and stone, as at Berlin (1898) and Waterloo (1910); but the majority of rural stations were wooden structures, mostly board and batten and most of them endured unscathed well into the twentieth century.

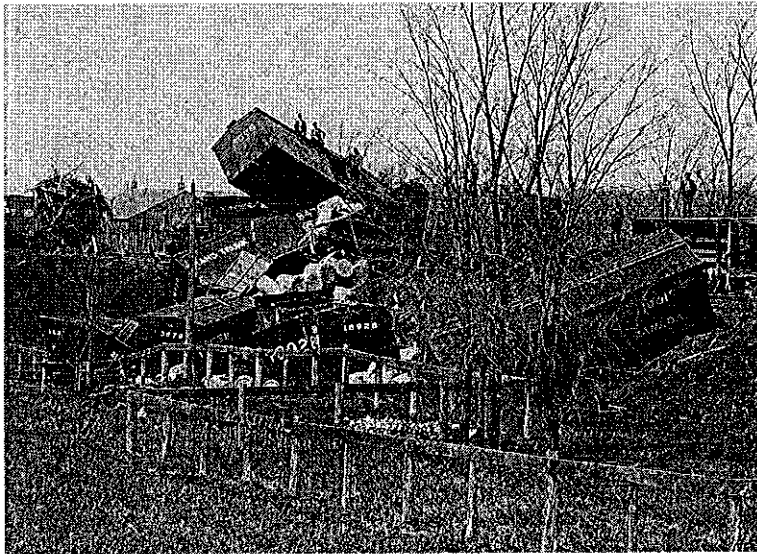
Fire prevention was accomplished by the posting and observing standard fire prevention rules that included the following:

- smoking prohibited around inflammable materials
- clean and neat surroundings
- flammable wastes (rags etc.) disposed of daily
- sawdust not allowed on floors or in spittoons
- stoves protected by sheet metal and proper air spaces (at least 18 inches from all sides)
- regular inspection of stovepipes
- ashes collected in metal receptacles
- coal oil lamps maintained with care
- open (coal oil) lights forbidden in work areas
- electric wiring installed in accordance with National Electrical Code
- flammable products carefully restricted (many station plans indicate a Lamp Room where such flammable liquids would be kept)
- water barrels (covered) and fire pails kept full ("*two barrels with at least two buckets for each ... should be provided and so located that the roof leaders may empty into them*")
- chemical fire extinguishers kept in working order
- rolling equipment (cars, locomotives) not allowed to stand near flammable structures
- safety matches to be used
- explosives (fusees, flares) stored with all other flammable products
- old paper records and files stored with care
- lumber, wood, empty oil barrels not stored within fifty feet of any buildings
- tracks outside buildings kept free from rubbish and weeds
- regular weekly inspections of the station property
- oil lamps carefully filled, placed and maintained
- fireproof or fire resistant roof materials recommended (shingle roofs not recommended)
- ladder for reaching the roof attached to the station building's side.

Fire resistant or fire retardant materials, including paints, were recommended as building materials for decks and buildings. Various recipes for paints were published in the nineteenth and early twentieth century; the common ingredient that produced fire resistance was limestone (slaked lime, quicklime).

If a fire incident took place, the Station Agent was required to complete Form 355, *Fire Report to Treasurer*.

Train Wrecks



*Freight Train Wreck near
Breslau, ca. 1900
Doon Heritage Crossroads*

Despite safety regulations, level crossing collisions, train wrecks and derailments did happen, caused by the failure of equipment, by human error, or a combination of both. Railway employees working in shops and railway yards were constantly at risk crossing tracks and working in and under engines and cars. Injuries on the job caused financial hardship or disability to the worker. Accidental loss of life was tragic, whether passenger, crew, careless motorist or pedestrian; as well, economic losses could be considerable, but the overall benefits of the railway to the lives and businesses of the community resulted in even greater attention to safeguards. The "Safety First" campaign of the Grand Trunk Railway was launched in 1914, aimed at raising awareness of causes of accidents and their prevention.

The occasion of a train wreck caused quite a stir in the surrounding area, especially with children and photographers. Large crowds gathered to have their pictures taken beside or perched on the roofs of the toppled, mangled wrecks of engines and cars, and the local newspapers published lengthy melodramatic accounts.

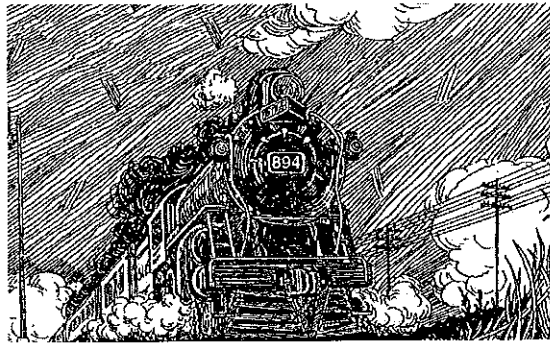
A notable railway accident took place on the Berlin to Elmira Grand Trunk Railway line in 1902 when Engine 133, returning over thirty passengers from the Toronto Industrial Fair, derailed just north of Waterloo, rounding a curve. Fireman Walter Jones of Elmira was killed, and over thirty passengers sustained bruises, broken bones and dislocations.

After the Waterloo quota of passengers had been taken on, every seat in the coach was occupied. The train sped on to St. Jacobs at a somewhat faster rate of speed than usual, according to the statement of some of the passengers, although Engineer Mitchell and the train employees assert that the usual rate of speed—25 miles an hour—was being run...

All went smoothly and the passengers were chatting one with the other, when, suddenly there was an awful jolt, when the car overturned and the passengers were all thrown from their seats and piled upon a heap on the side nearest the ground. There was a general panic, women were screaming, children were crying and men were groaning, but it was not long before an opening was made and a rescuing party of the passengers was organized and all were taken out of their perilous positions...

Mr. Clemmer, the farmer, who lives close by, was notified of the wreck and immediately hitched up his horses and drove to Waterloo and spread the news. The physicians were all summoned, as well as the B.&W. Hospital Ambulance, which was telephoned for. Notwithstanding the heavy rain which fell about this time, a large number of Waterlooites went up on bicycles, in rigs and many walked, and rendered all the aid they could... Berlin Daily Telegraph, Sept. 8, 1902.

The Canadian Pacific Railway D-10 Locomotive and the Grand Trunk "Dutch Mail"



"They Were Good Machines" - The D-10 Locomotive "894"

The D-10 Locomotive at Doon is just one of a handful of remaining ten-wheel steam locomotives built by the Canadian Pacific Railways. Originally, 502 of these locomotives were built in the years between 1905 and 1913. The D-10s were general purpose freight engines, known as the "workhorse" of the C.P.R. There were several types of D-10 locomotives, all basically the same, but with various modifications within the basic superstructure. Ours is the D-10g type. The D-10 locomotive type was a 4-6-0, meaning that there were two sets of smaller front wheels (total of 4), behind which were three sets of larger back wheels (total of 6). The "0" meant that no trailing truck (smaller wheels behind the 6) was used.

Each railway had a letter classification (among other classifications) for each type of locomotive. The CPR used "D" to represent the 4-6-0 type ("A" designated a 4-4-0 type; "G" was used for a 4-6-2, etc.). The "10" represented the model of the locomotive. That is, the series of 4-6-0s built prior to the D-10 would have been the D-9. The suffix "g" represents a subsequent order from the builder for this additional group of D-10s to be built. (Thanks to Ted Wakeford of the Simcoe Railway for this information.)

The D-10 burned bituminous coal. While parts of some other locomotives were painted with CPR's Tuscan red, the D-10s were painted all-black in keeping with its utilitarian purpose. All of the D-10s had open cabs. "If you were out on a snow plow or even running along in snow higher than the pilot, you got lots of it in the cab, and you got wet." Together, the engine and tender weighed 354,000 lbs. The tender carried 5,000 Imperial gallons of water and 14 tons of coal.

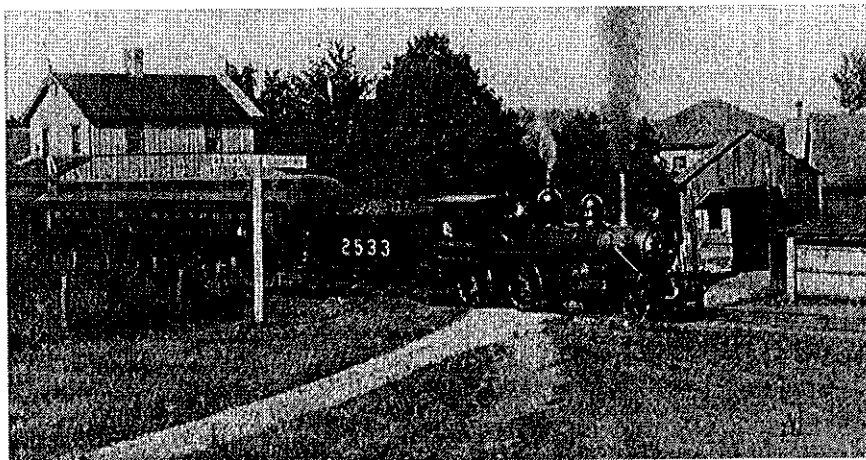
...I always considered them to be good engines. They steamed and ran well and they were lively engines, quick to respond... They were tough little engines and miles ahead of the other C.P.R. ten wheeler of my day, the D4g class...

Duncan Du Fresne, "The C.P.R. D10 Class 4-6-0 (Part 2)", Branchline, February 1997, p.12.

"Some News About the 894". This steam engine was built in 1911 at the Montreal Locomotive Works. At that time she was numbered 2694. This number was painted in large figures on the sides of the tender. She was the 294th one of 512 engines of this class built between 1905 and 1913. They were a highly successful general purpose freight engine, known as the work horses of the C.P.R. The first two hundred built were numbered 600 to 799. These engines had the old inside Stephenson valve gear. The remaining 312 engines were built with the improved 'Walschaert' or 'Monkey Motion' as we called it valve gear seen on this 894 engine. When new she had her head lamp up on top, in front of the smoke stack, which was a smaller diameter then. Over the years, improvements such as new style superheater units and draft appliances, air operated automatic tire door, rosebud grates, compound air pump etc. have improved her performance by 25 per cent since along with her sisters, she was renumbered in 1913. Engine 894 was hauled dead from storage at Montreal via C.P.R. lines to Kitchener and is now standing on a portion of the abandoned main line of the Galt and Elmira branch of the Canadian National Railways (formerly Grand Trunk Railways). She is fully equipped and with a supply of soft coal, some water in the tender and two experienced men to handle her, and of course some track, could give a good account of herself. They were good machines. ...By One Who Knows. Ed Reeve, Toronto, Ontario.

Light-Weight Grand Trunk Railway Locomotives (the 2-6-0 "Mogul" and the 4-4-0 "8-Wheel")

The "Dutch Mail " and "The Flying Dutchman" were nick-names for the local train that traveled from Galt to Elmira on the Grand Trunk line, passing through Blair and Doon. It was headed by a light-weight locomotive, in an entirely different class from the heavier D-10 "workhorse" that plied the main freight and passenger lines of the C.P.R. "440" indicates that it had two sets of small front wheels (total of 4), backed by two sets of larger wheels (total of 4), with no (0) trailer wheels. The 8-Wheel locomotive is similar to the "Mogul" or "260" type of light locomotive that also had 8 wheels, however, with only one set of small front wheels, backed by three sets of larger wheels. Other photographs suggest that the Mogul type of locomotive also did the "Dutch Mail" run from Galt to Elmira. Photographs also show that the Dutch Mail 8-wheeler was followed by a coal tender, a baggage and freight box car and last, by a single passenger car.



*The Dutch Mail at Doon
Harold Kinzie Collection*

During July and August, that summer of 1901, we camped near Doon in Mr. Kinsey's sugar bush. Doon was only a few miles north of Galt but to get there we travelled on a train. The train was known locally as "The Flying Dutchman". It belonged to the Galt and Elmira railroad. The Flying Dutchman was made up of one antiquated day coach with arched windows and V-joint wooden sides, one combined baggage, express, mail, way-freight car, a locomotive and its coal car. The locomotive was a two-wheeler (probably a 440). It had an outsized flaring cowcatcher and a tall smokestack which post-dated the wood burning era of Canadian railroading though not by much. Whereas the whistles of locomotives on the C.P.R. mail line and, to a lesser degree, on the Grand Trunk branch line at the south end of town were full-throated and masculine, the Flying Dutchman's whistle frequently broke into an adolescent quaver....

So what with folding camp chairs, a knock down table and benches, bed slats with head and side boards to support them, packing case cupboards, the cooler-apple barrel, cookstove, pipes, tents and bedding, one of Uncle George Taylor's drays was required to get our outfit to the station....

Except for a bearded man wearing black clothes and a broad-brimmed black hat (Mother explained after we got off that he was a Mennonite), we were the only ones in the passenger car. After taking us under the C.P.R. bridge and past the old lime kiln, the train put on steam and chugged above the limestone cliff where a small stream had cut steps down to the river. Beyond was pastureland, with tall, umbrella shaped elms in whose shade horses stood.

At the little Doon station, the farmer, Mr. Kinsey, was waiting for us with his team and wagon....

From "Doon" by Hubert Evans (973.113.001)

The 1914 Grand Trunk Employees' Train Schedule indicates that an "Extra" Way Freight train (a "milk run") traveled from Stratford to Elmira and back each day, passing through Petersburg. "Extra" trains were not listed in the regular train schedule, except as a footnote. Extra trains were shunted aside in deference to the regularly scheduled passenger and freight trains, thus they were very slow with frequent stops and starts. The expression "milk run" became just another way of saying "slow". It is quite likely that one of the lighter classes of locomotive like the Mogul or the "440" made the milk run over the short distance from Stratford to Elmira.

One of the special *Orders of the Board of Railway Commissioners* in the 1914 *Employees' Schedule* that stipulated that "No engine and tender, or car, the gross weight of which exceeds 120,000 lbs. must be allowed to pass over bridges between ... Galt and Elmira. This would certainly eliminate the D-10 locomotives and tender (together, over 350,000 lbs.) from any run terminating in Elmira. A light-weight Mogul or a similar light-weight "440", however, had engine weights in the required range.



*St. Jacobs Grand Trunk Station
Woolwich Historical Society*

The daily passenger service proved very popular with the residents of St. Jacobs, Elmira, and the surrounding area. An additional (flag stop) station was built about one and one-half miles south of St. Jacobs, and was known as the Heidelberg Station. It was not unusual for twenty or more passengers, mostly bound for schools or factories in Berlin, to board the morning train there. Virgil Martin, The Early History of Jakobstettel.

Appendix I

Telephones at Waterloo County GTR Train Stations

Although all Waterloo County train stations had telegraph service in 1914, not all train stations had telephones. Most railway business was transmitted by telegraph, although the telephone gradually replaced the telegraph as a way of sending train orders.

Three stations on the "Berlin Subdivision" line from Galt to Elmira did not have telephones. The **Doon** Station did not have a telephone (there was a public telephone station at the Doon Twine & Cordage Company). The **Blair** Station likewise did not have a telephone (there was a public telephone at the Township Clerk's office). Heidelberg Station, just a flag stop, did not have a telephone. The **New Germany** station did not have telephone service (a public telephone station was at the A. W. Zinger residence).

Waterloo County GTR stations with telephones

Baden (telephone in GTR station)

Berlin:

Freight Office

Passenger Depot

City Ticket Office at 9 King St. W.

GN-W Telegraph Co. Office at 9 King St. W.

Canadian Express Company Office at 55 King St. W.

Branchton - Telephone at GTR Station

Breslau - Telephone at GTR Station

Elmira - Telephone at GTR Station

Galt:

GTR Ticket Office (Concession Street)

Freight Office

Galt & Elmira Line Ticket Office (George St.)

Galt & Elmira Line Freight Office (George St.)

GTR Ticket & Express Office (Main St.)

GN-W Telegraph Co. Office (Main St.)

Hespeler - Telephone at GTR Station (Guelph St.)

New Hamburg - Telephone at GTR Station (Arnold St.)

Petersburg - Telephone at GTR Station (New Dundee Rural Telephone Company line)

Preston:

Telephone at GTR Station (Guelph St.)

Telephone at Canadian Express Co. and GN-W Telegraph Co. Office (King St.)

Waterloo:

Telephone at GTR Station (Queen St. - now Regina St.?)

GTR Freight Office (Herbert St.)

GN-W Telegraph Office (King St.)

Appendix II

Waterloo County Villages and Selected Industries Connecting to Grand Trunk Railway Lines

Baden

Baden Lumber and Manufacturing Company
Dominion Linseed Oil Co.
Shirk & Snyder Grist Mill
H.J. Stefelmeyer Flour and Feed
Noah Steinman Flour, Feed, Furniture and Undertaker

Blair

Joseph Hilborn Grist Mill

Breslau

A. Bender Coal Merchant
J.H. Detel Grist Mill
Fred. Schaefer Bricks and Tiles
L.H. Stauffer Coal Merchant

Doon

Cluthe & Co. Shoddy Mill
Doon Brick Works
Doon Twine & Cordage Co.
J.T. Huber & Co. Wool Stock

Elmira

G. Auman & Son Livestock Dealer
A.M. Bowman & Co. Planing Mill
Wm. Brose Livestock Dealer
I. Brubacher Flour & Feed Mill
Canadian Consolidated Felt Co.
H.H. Dahmer, Brick Manufacturer
A. Eby Lumber Dealer
Elmira Felt Co. (Felt boots and shoes)
Elmira Furniture Company
Elmira Interior Woodwork
Elmira Machinery & Transmission Co.
Elmira Milling Company (Saw and grist mills and electric light)
Great West Felt Co.
Heimbecker and Jung Furniture Manufacturers
Star Shoe Company

M. Weichel and Son, Hardware and Coal Merchants

German Mills

Shirk and Lehman Flour Mill

Heidelberg

Levi M. Bowman Saw Mill

Edward Hartung Chopping Mill

Henry Koelher Wagons

O.J. Steiss Cheese Maker

John Weis Wagons

Hespeler

Canada Machinery Corporation

J.F. Coles & Son Flour Mill

R. Forbes Company, Woolens Manufacturers

Hall-Zyrd Foundry Co.

Hespeler Furniture Co.

A.B.Jardine Machinery Manufacturers

W.A. Kribs Planing Mills

Universal Lightning Rod Co.

New Hamburg

Robert E. Berher, Carriages

Jos. J. Berger & Co. Planing Mill

Electric Meter and Stamping Company (Sheet metal)

Hahn Brass Co.

Hamburg Felt Boot Co.

Fred Hartman Tanner

Aloysious Haunn Coal and Wood Merchant

Jonas D. Jantzi Agricultural Implements

B.B. Krupp Livestock Merchant

David Meyer Windmill Manufacturer

New Hamburg Manufacturing Co (Agricultural machinery)

Schierholtz Furniture Co.

Stuart Bros. Flour Mill

Petersburg

Jacob Heimpel Blacksmith

Jacob Huether, Painter

J.S. Schaefer Tailor

Charles Knipfel Turnip Waxing Plant (1920 onward)

Tend-R-Flesh Turkeys (1949 onward)

St. Jacobs

Peter Bergers Coal Merchant
Canada Felting Company
E.W.B. Snider Grist Mill
J.H. Thomas Woolens

...It was probably the area farmers who benefitted most from the new railway connection. They could now ship their cattle and hogs directly to market, without having to drive them along the roads to Waterloo or Berlin. While livestock provided the main source of income, the farms also shipped produce such as grain, potatoes, turnips, apples, sugar beets, butter, cheese, timber, [fire]wood, and lumber...

*...The St. Jacobs Pioneer Roller Flour Mills also profited from the railway. It was no coincidence that E.W.B. Snider had been the chief proponent of the endeavour to bring the railway to St. Jacobs. ... The flour mill in St. Jacobs was building a reputation for producing the finest quality flour. This enabled E.W.B. Snider to develop an export market. He began shipping considerable quantities of flour to ... British ports.. .Virgil Martin, *The Early History of Jakobstetel*, p. 78-79.*

...in 1891 the GTR opened its branch line from Waterloo to Elmira. Soon an enormous quantity of freight such as livestock, apples (13,786 barrels in 1893), grain, wool, sugar, beets, butter, flour, lumber and manufactured goods were being shipped from Elmira...

...the Elmira station also shipped lumber from Absalom Eby's saw mill in Floradale, as well as cheese and butter from neighbouring factories. Elmira Old Boys & Girls Reunion, 1973

...special spurs and sidings of the Grand Trunk Railway connected the [Berlin sugar beet] factory to the main line.

*...Dan and Darky belonged to the Doon Twines... For many years this faithful pair transported materials to the from the Grand Trunk Station for them...The burning of the (Doon) flax mill took away the source of supply (for) Doon Twines... Then the trains on the Grand Trunk line diminished to two a day...(Florence Hammond, *Little Apples Will Grow Again*)*

GTR Book 29 (Elmira Grand Trunk Station Way-Bills 1914-1915). Products being transported included furniture, agricultural implements and parts, military goods, grain, felt, leather, shoes and food products.

Appendix III

Visible Signals, Audible Signals and Train Signals

(Reproduced from Dominion School of Telegraphy and Railroading, Instruction Book IV, copyright 1911.)

SIGNALS

7. Employees whose duties may require them to give signals, must provide themselves with the proper appliances, keep them in good order and ready for immediate use.

8. Flags of the prescribed color and torpedoes, must be used by day, and lamps of the prescribed color, torpedoes, fusees and matches by night.

9. Night signals are to be displayed from sunset to sunrise. When weather or other conditions obscure day signals, night signals must be used in addition.

VISIBLE SIGNALS

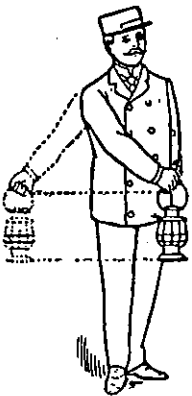
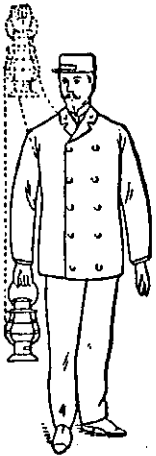
10. Color Signals

Color	Indication
(a) Red	Stop.
(b) Green	Proceed, and for other uses prescribed by the rules.
(c) Yellow	Proceed with caution, and for other used prescribed by the rules.
(d) Green and white	Flag stop, see Rule 28.
(e) Blue	See Rule 26.

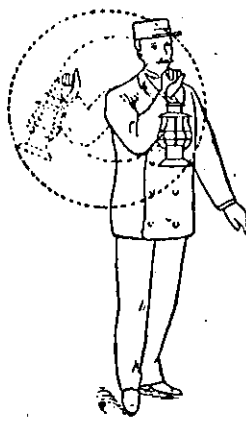
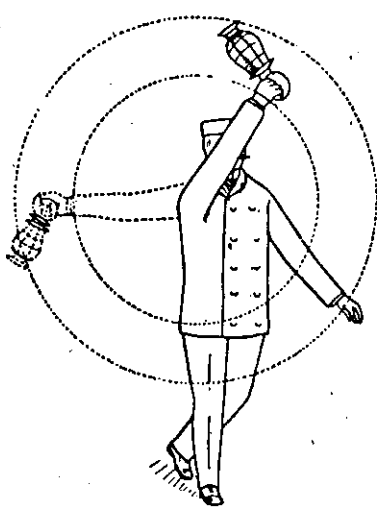
11. A fusee on or near the track burning red must not be passed until burned out. When burning yellow it is a caution signal.

HAND, FLAG AND LAMP SIGNALS

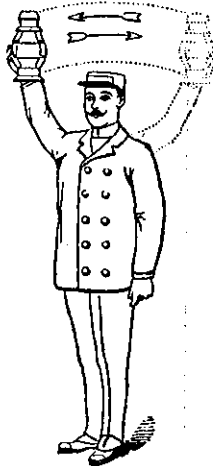
(Illustrated by diagram)

MANNER OF USING	INDICATION
 Fig. 1 (a) Swung across the track.	Stop
 Fig. 2 (b) Raised and lowered vertically.	Proceed

HAND, FLAG AND LAMP SIGNALS—Continued

MANNER OF USING	INDICATION
 (c) Swung vertically in a circle at half arm's length across the track when the train is standing. Fig. 3	Back
 (d) Swung vertically in a circle at arm's length across the track when the train is running. Fig. 4	Train has parted

HAND, FLAG AND LAMP SIGNALS—Continued

MANNER OF USING	INDICATION
 (e) Swung horizontally above the head when the train is standing. Fig. 5	Apply air brakes
 (f) Held at arm's length above the head when the train is standing. Fig. 6 Note:—Fig. 5 and 6 do not apply to operators.	Release air brakes

13. Any object waved violently by any one on or near the track is a signal to stop.

AUDIBLE SIGNALS

Engine Whistle Signals

NOTE.—The signals prescribed are illustrated by “o” for short sounds, “—” for longer sounds. The sound of the whistle should be distinct, with intensity and duration proportionate to the distance signal is to be conveyed.

Sound	Indication
(a) o	Stop. Apply brakes.
(b) — —	Release brakes, or ready to proceed.
(c) — o o o	Flagman go out to protect rear of train.
(d) — — — —	Flagman return from west or south.
(e) — — — — —	Flagman return from east or north.
(f) — — —	When running, train parted; to be repeated until answered by the signal prescribed by Rule 12 (d). Answer to 12 (d).
(g) o o	Answer to any signal not otherwise provided for.
(h) o o o	When train is standing, back. Answer to 12 (c) and 16 (c). When train is running, answer to 16 (d).
(j) o o o o	Call for signals.

AUDIBLE SIGNALS—*Continued*

Sound	Indication
(k) — o o	To call attention of extra trains and of trains of the same or inferior class or inferior right to signals displayed for a following section.
(l) — — o o	Approaching public road crossings at grade and at whistle posts.
(m) —————	Approaching stations, and as prescribed by Rule 31.
(n) o —	When double heading, air brakes have failed on leading engine and second engine is to take control of them. Answer to 14 (n); to be given by second engine as soon as it has control of air brakes.
(o) o o —	Answer to 14 (k).

A succession of short sounds of the whistle is an alarm for persons or animals on the track.

TORPEDO SIGNALS

15. The explosion of one torpedo is a signal to stop; the explosion of two not more than 200 and not less than 100 feet apart is a signal to reduce speed, and look out for a stop signal.

Torpedoes must not be placed near stations or public crossings, nor where persons are liable to be injured by them.

COMMUNICATING SIGNALS

Sound	Indication
(a) Two	When train is standing, start.
(b) Two	When train is running, stop at once.
(c) Three	When train is standing, back.
(d) Three	When train is running, stop at next station.
(e) Four	When train is standing, apply or release air brakes.
(f) Four	When train is running, reduce speed.
(g) Five	When train is standing, call in flagman.
(h) Five	When train is running, increase speed.
(i) Six	When train is running, increase steam heat.
(j) Seven	When train is running, release air brakes, or sticking brake.

TRAIN SIGNALS

19. The following signals will be displayed, one on each side of the rear of every train, as markers to indicate the rear of the train; by day, green flags; by night, green lights to the front and side and red lights to the rear, except when the train is clear of the main track, when green lights must be displayed to the front, side and rear. (See Figs. 2, 3, 4, 5 and 6.)

20. All sections except the last will display two green flags, and in addition, two green lights by night, in the places provided for that purpose on the front of the engine. (See Figs. 8, 9, 10, 11.)

21. Extra trains will display two white flags, and in addition, two white lights by night, in the places provided for that purpose on the front of the engine. (See Figs. 12, 13, 14, 15.)

26. A blue flag by day and a blue light by night, displayed at one or both ends of an engine, car or train, indicates that workmen are under or about it; when thus protected, it must not be coupled to or moved, and other cars must not be placed on the same track so as to intercept the view of the blue signals, without first notifying the workmen.

Workmen will display the blue signals and the same workmen are alone authorized to remove them.

Appendix IV

Paper, Books, Forms, Tickets, Posters, Schedules, Etc.

This list includes many forms and other papers that were used in the railway business; The ones listed here are general enough to use in a small station, or they are specified in GTR or CN publications for small stations or all stations.

(* indicates where there are examples in the Doon Heritage Crossroads collection)

Freight Forms

- *large tissue Freight way bill book (original copypress book, 1914)
- *Local freight Way-Bill (Form 1802) (have tissue copy in 1914 freight way-bill copypress book)
- *Interline Freight Way-Bill (have tissue copy in 1914 freight way-bill copypress book--printed in red ink)
- *Local Livestock and Perishable Freight Way-Bill (example in Freight Instruction Manual)
- *Indemnity form for carrying horses without an attendant (in Canada only) (example in Freight Instruction Manual)
- *Special Contract for the Carriage of Racehorses, Stallions and other valuable Animals of all kinds (Form 70A) (example in Freight Instruction Manual)
- *Livestock Special Contract (Form 77) (example in Freight Instruction Manual)
- *Grand Trunk Railway System Release and Guarantee (Form 264) (photocopy)
- large tissue Freight Delivery book (same as above, in chronological order) (1)
- Freight cash ledger
- G.T.R. shipping bill (Form 149)
- Book of car seal records
- *Furniture Release (Form 229?) Have original
- *Freight Account Invoice (have GTR 1894 Form 34A)
- *Freight transportation invoice (have GTR 1906 example, with 2-ring punch holes)
- *Metal baggage/freight check (have brass GTR System)

Baggage Forms

(List from 1927 CNR *Book of Instructions Governing Baggage Car Traffic.*)

Baggage Report (Daily and Periodical)

*Baggage and Supply Waybill-Station (have CNR/Grand Trunk Pacific form 1920s - called Waybill of Baggage, Value Packages, Stores and Mail Sacks, Form 1162A)

Forwarding Advice Sheet-Baggage

Lost and Mismatched Check Receipt

Corpse Permit

Envelope-Forwarding Advice Sheet

Milk-Receipt Book

*Requisition for Baggage Checks (have photocopy)

*Metal Baggage Check (have brass GTR check)

*Local Baggage Checks
Interline Baggage Checks

Train-Movement Related Forms

Manifold book for agent's copy of train orders
*Number 19 Train Order
*Number 31 Train Order
*Clearance Form A.
Train register book
Report of Arrival and Departure of Trains book
Official Guide for 1914
**Employees' Schedule for 1914* (photocopy and reproductions)
*GTR system Local Time Tables (have 1897, original and photocopied)
GTR system employee travel passes (several photocopy examples, also one original 999.225.001)

Miscellaneous Forms

*miscellaneous circulars and posters for Waiting Room and Office (rules, schedules, announcements, special rates flyer) (have CN "rules" posters, 1919 and 1925) (have 1894 GTR special rates flyer)
School Vacation Certificate
*Requisition for Stationery booklet (photocopy)
Cash book (large, small)
*Agency balance sheet (have CNR form, c. 1940s)
*Statement of remittances (have CNR form, c. 1940s)
Letter register book (carbon copies of general station correspondence)
*GTR System notepad (Form 5)
*GTR Christmas card 1898-9 (have NAC photocopy and colour slide)
Map of Grand Trunk Railway System and Connections (have NAC photocopy of leatherette cover)
*Grand Trunk Railway System postal card "The International Limited" (original)

Tickets

Report of Tickets, Through (form)
Report of Tickets, Local (form)
Postal advice booklet
Balance sheet
Coupon Ticket Sales (form)
Season Ticket Sales (form)
Daily passenger ticket sales book
Agency ticket sales book
Card tickets (colour coded): return/second class/commercial/excursion/special holiday
*Local book tickets (photocopy and reproductions)

*Interline tickets (have one--1938)

Telegraph Forms

*Grand Trunk Railway System Telegram (Form 104)

*Great North-West Telegraph Company Telegram (Form 1) Have NAC photocopy

*Great North-West Telegraph Company telegram envelope (Form 51B) Have NAC photocopy, front and back

*Grand Trunk Railway System Telegraphic Train Order (have printout from a Web site, Train Order 31 type)

Other telegraph business forms:

Telegraph Message Receipt book

*Telegraph blanks (in pads)

Received Message (Form 1)

Sent Message (Form 2)

Monthly Statement (Form 15)

Messenger's Delivery Book (Form 27)

Check Ledger (Form 23)

Messenger's Delivery Book (Form 27)

Operator's Number Sheet (Form 31)

Check Report (Form 41)

Cash Remittance Note (Form 43)

Repairer's Trip Report (Form 49)

Free Message Report (Form 56)

Sent Cable Report (Form 64)

Check Error Enquiry (Form 66)

Uncollectible Message, list of (Form 70)

Message Order (Form 71)

Message Correction Slip (Form 74)

Receipt for Supplies (Form 82)

Requisition for Supplies (Form 83)

Check Error Sheet (Form 94)

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