

GLOSSARY OF RAILWAY TERMS

Excerpted from *Hamilton's Other Railway* by Charles Cooper, with assistance and additions from Don Grove and Art Clowes.

agent – an employee of the railway appointed to be in charge of a station. The agent was responsible for conveying train orders to train crews, and for staffing and operating the station. This included ticket sales, freight way bills, dispatch and receipt of express parcels and LCL (less than a car load of) merchandise, the operation of the station telegraph, maintenance of the station area, provision for the well-being and direction of passengers, and the safety and accuracy of freight shipments. A person of standing in the local community along with the banker, priest, postmaster and head teacher.

baggage – a passenger's luggage, carried with the passenger or conveyed in the baggage compartment and (where required) stored in the baggage room at the station.

baggage man – an employee of the railway whose duty it was to handle baggage, mail and express on and off a train.

ballast – crushed stone or slag put down to form a level bed for the track and to facilitate drainage of the roadbed.

brakeman/trainman – an employee of the railway. These terms are interchangeable. The word brakeman dates from the days before air brakes when the brakes had to be applied by hand to stop the train. When the engineer wanted to stop the train he blew one short blast of the engine whistle. This was the signal for the brakemen to climb on top of the cars and apply the hand brakes. To apply the brakes a long brake club was used. A brake club was the size and shape of a pick handle and this gave the leverage to apply the brake.

bridge – see **GLOSSARY OF BRIDGE, TRESTLE and CULVERT TERMS**

caboose – see **conductor's van**.

car – any piece of rollingstock (qv) that can form part of a consist.

class – see under **engines** and **trains**.

B&B – Building and Bridge (Department).

clearance (clearance form) - In addition to a train order, train crews need a **clearance** when leaving their initial station and at any station where they receive a train order. A clearance is a verification that the crew has received all the orders it is supposed to receive.

coal chute – a structure next to, or over a railway track, used to place coal into the locomotive tender.

conductor – an employee of the railway in charge of a train.

conductor's van – a car at the rear of a freight train that acted as the conductor's office and crew accommodation, and as a look-out to ensure that nothing untoward was occurring to the train, of which the head-end crew might be unaware.

consist – the rollingstock assigned to an engine at any particular time on any particular run.

controlling gradient – see **gradient**.

(to) couple up – to couple up cars or cuts of cars to each other; or onto a train.

crossing – a track formation where two tracks cross at grade.

crossover – where a pair of switches allows a train to move over from one (parallel) track to another.

culvert – see **GLOSSARY OF BRIDGE, TRESTLE and CULVERT TERMS**

cut of cars – a number of cars coupled together (in the UK, a rake)

cut off (to) – to separate any car or cut of cars from each other or from the train (note – not to uncouple).

cutting – the excavation of a hill not high enough for a tunnel to provide a level trench for the track.

diamond (crossing) – a track formation where two tracks cross at grade.

dispatcher – an employee of the railway responsible for coordinating and controlling train movements and issuing train orders.

district – The Grand Trunk Railway subdivided operating sections of railway into districts for ready identification, e.g. the line from Beeton to Collingwood was the 14th district. By 1920, the GTR also started to refer to Subdivisions, e.g., the 13th district also became known as the Burlington Junction Subdivision. See also **Subdivision**.

diversion – a temporary or permanent track re-alignment. A temporary track by-pass or siding is usually laid during nearby construction or after an accident, in order to maintain railway service. A permanent diversion is one that is laid to a new destination. A temporary diversion is also known informally as a "shoo-fly".

double-header – a train pulled by two engines.

(to) double a hill – take a train over a hill in two parts.

doubling track – a siding or spur at the top of a gradient where cars could be set off temporarily.

(a) drop – switching a car onto another track where the car is uncoupled while the engine and car are in motion. Also referred to as “switching on the fly” or as “a running switch.” This is a very dangerous practice, and many men have been hurt performing the task. A running switch is now banned on most railways.

elevator – grain storage tower with ability to load grain direct into railway cars.

embankment – a raised continuous mound of earth shaped to support a railway track, usually in preference to building a trestle or bridge; or sometimes created when a trestle or bridge is filled in.

engine – a unit propelled by any form of energy, or a combination of such units operated from a single control, used in train or yard service.

engine house – a rectangular building for stabling locomotives; consisting of one or more tracks, connected by switches outside the engine house. Most smaller engine houses can only be entered from one end. See also **roundhouse**.

engines, class of – a series of locomotives manufactured to the same specifications, not necessarily by the same builder. Sub-classes of a series of locomotives were created when changes or modifications were made to the original design, either when being built new or when being modified during a rebuild.

engineman – a railway employee in charge of and responsible for the operation of an engine. (In the 19th century, also “engine driver”.) Commonly referred to as an “engineer”, or less elegantly as a “hogger” (derived from an early slang name for an engine as a “hog”).

engineer – a person employed or retained by the railway who is trained in engineering applications (e.g. civil, mechanical, signal engineering). See also **engineman**.

express – merchandise moved on passenger trains.

flag stop – a station building, small shelter or platform, where intending passengers may board a train upon waving a flag on its approach, or where they may request the conductor to drop them off.

flanger – used in territories where there is a lot of snow. In appearance like a caboose, but equipped with retractable blades that are lowered to clean out the snow between the rails. The blades have to be lifted on approaching a road crossing or a switch.

freight – all manner of merchandise carried by the railway in freight cars of various kinds, including box, stock, gondola, flat and tank cars. (Early pioneer railway freight rolling stock usually consisted of box and flat cars.)

gauge – the distance between the inside edges of two rails forming a track.

“Standard gauge” is a worldwide gauge of 4' 8 (and ½)” or 1,435 mm.

In 1851, the Province of Canada legislated the “Provincial (or broad) gauge” of 5' 6” for any railway eligible for and desirous of applying for government financial assistance under the 1849 Railway Guarantee Act. This legislation was repealed in 1870, whereupon conversions to the “standard gauge” took place during that decade.

“Narrow gauge” refers to any gauge of less than 4' 8½”. (It should however be noted that the Great Western Railway, in their Provincial Gauge days, referred to the standard gauge as the “narrow gauge”.)

grade or gradient – slope, rate of ascent or descent. “At grade” – at the same level, i.e., a road crossing “at grade” would constitute a grade or level crossing. A “ruling (or “controlling) gradient” is the severest gradient on any given route.

grade crossing – where a road crosses a track.

hand brake – used during switching operations to slow or stop cars. Also, used to hold cars that are spotted on a yard track, or a string of cars set off in a siding.

hostler – a railway employee responsible for moving engines in and around the roundhouse, readying incoming engines for the next day by topping them up with coal and water and then dumping their fires.

jigger – a small, four-wheeled, platform car easily set on or taken off the track; used by a section gang to inspect their section of track. Usually hand-pumped, but sometimes motorized.

lead track – a track connecting a yard or facility with a main line or running track.

line switches (to) – to set one or a succession of switches to permit a train to travel over a designated route.

live load – the force exerted by a train on a structure such as a bridge or turntable.

loading – see **live load**.

mail – Mail carried by the railways under contract with the Canadian Post Office. It was carried in sealed canvas bags, on passenger and mixed trains, all across Canada. “Closed” mail was mail ready-sorted by

destination post offices on trains not having an RPO car, where the bags would be handled, but not opened, by the train baggageman. See also **RPO (Railway Post Office)**.

mailcatcher – a vertical pole and hook-type device mounted at the edge of a platform, enabling a passing RPO car to pick up a mail bag without requiring the train to stop.

marker – large lamp, with three green and one red lens used to indicate the end of a train.

operator – an employee of the railway engaged full-time (usually at major stations and junctions, in the transmission of messages and train orders by the Morse telegraph or by telephone. (At smaller stations, the station agent received and sent messages himself [or trained his wife and daughters to do so].)

order board(s) – in the Grand Trunk era, a rotatable oval disk, coloured red on one side and green on the other, visible above the roof overhang and operated by means of a rod from the telegrapher's bay at a station. If the train was required to stop to pick up a train order, the red aspect would be displayed to the oncoming train. If not, the aspect would show green. Most of the GTR disks were replaced in the CNR era by a pair of signal-type arms (one for each direction) visible above the roof line, again worked by levers from the telegrapher's bay. If a train was required to stop for orders, the arm would be extended in the horizontal (red) position.

pushpole – a long pole carried by a yard engine that would allow it to move a car on an adjacent track.

RPO (Railway Post Office) – Railway Post Office mail was carried in a special car or compartment. The outward appearance of an RPO car was very similar to that of a regular baggage car. It was specially equipped for sorting mail, and the mail clerks (employees of the Post Office) sorted the mail en route. On some branch lines the RPO facility was a compartment in a baggage car. Mail thus sorted would bear a distinctive RPO cancellation mark.

rail stop – see **stop block**.

right-of-way – the track and its roadbed. Legally, the land occupied by a railway, shown in a land deed as having a centre line, with a defined amount of land on either side.

road – a term dependent on its context. It may refer to an entire railway company, or specifically to the track and the right-of-way.

roadbed – the earth and gravel that supports the track. After a track is removed, what is left is the roadbed.

rollingstock – any passenger, mail, baggage or freight car or caboose. The term does not include engines or auxiliary (wrecking crew) equipment. (It should however be noted that in the late 19th century, it was usual for references to "rollingstock" to include engines.)

roundhouse – a building for servicing and repairing locomotives, strictly speaking of a semi-circular design; with a turntable at its mouth, for the purpose of assigning a locomotive to a particular roundhouse track. Often used interchangeably, although not accurately, with the term **engine house** (qv).

ruling gradient – see **gradient**.

section – formerly a stretch of track about seven miles long, that was inspected daily by a section gang (consisting of one or two section men or hands, with a section foreman in charge. They would use a jigger (qv) to ride up and down their assigned section. They would store their tools and jigger in a section hut. The foreman was at one time provided with accommodation by the railway, known as a sectionman's house or dwelling. Also used as a general term to describe a stretch of line.

Also, a timetable train that has been divided into "sections" because of its length, to accommodate travel demand.

section gang, duties – daily track inspection, gauging (checking the correct distance between the rails), weeding, tie replacing (25-50 per day as required), repairing bridges and fences, straightening posts after frosts, painting signboards, putting in new cattle guards, putting in snow fences, loading water barrels for bridges, snow shoveling, unloading iron and pilings for track and bridge repair.

set off (to) – see **cut off (to)**.

shoo-fly – see **diversion**.

shove (to) – to switch cars into a siding or spur track.

siding – a track adjacent to and connecting with switches to the main track at both ends ("a passing loop"), to permit trains to pass. See also **team track**.

spot (to) – to set off a car into a designated siding or spur.

spur – a track ending in a rail stop for "spotting" (setting off) cars at a plant, etc. Also a remainder of a portion of main line after partial abandonment.

station – a place designated in the timetable by name. A station is usually a building with an agent (qv) in charge, that handles passenger and freight traffic, but it could also be just a sign board by the side of the track, denoting the former location of a station building or flag stop shelter or platform).

stop block – a pile of ties, a “half moon”-shaped metal block clamped to a rail, or a large metal frame bolted to both rails with a transverse wooden or metal bar at the same height as the coupler. (In the UK, a bufferstop). A track with a stop block is a spur, a doubling track or a yard track.

string of cars – see **cut of cars**.

Subdivision – As noted under **district**, the GTR identified operating sections of railway as districts. Towards the end of the GTR era, their districts were also identified as Subdivisions. The Canadian National Railways continued with the term “Subdivision”, e.g. the GTR Northern Division’s 14th district (Beeton to Collingwood) became the Alliston Subdivision.

switch (to) – to move cars around in a yard, or into a siding or spur.

switch – a track configuration that allows a train to pass from one track to another.

The early design was a “**stub switch**”, whereby a bending pair of rails was lined up with the “stubs” of the diverging tracks. Stub switches were also used to go from a single track to any one of three tracks, i.e. a main track and two sidings. Stub switches were replaced in the 1890s by **moveable point switches** still in use today, where moveable connecting rails coming to a fine point close against the stock (outer) rail to line up for the desired track. A variant of the switch in use today is a **spring switch (sometimes called a self-restoring switch)**. It allows a train from a trailing direction (see below) to enter a main line without the switch having to be thrown, in that the spring action lets the wheels push the switch points sideways or open for the flanges to move through the switch. Once clear, the points go back to their normal position for traffic on the main line, without the train needing to stop for a crew member to get off and throw the switch. A “**facing**” **switch** is where one approaches the diverging tracks, a “**trailing**” **switch** where one approaches from one of the diverging tracks.

team track – often used interchangeably with “siding”, but strictly speaking the track on which freight is delivered or picked up by the teams (of horses) or, latterly, by trucks.

throw a switch (to) – to set a switch to allow a train to pass from one track to another.

timetable – the authority for the movement of regular trains (i.e., those shown in the timetable, as opposed to “extra” trains, which are not), according to the rules. The timetable contains classified schedules with special instructions related to the movement of trains and includes other important information. The “schedule” is that part of the timetable which prescribes class, direction, number and movement of a regular train (see also **trains, class of**). Frequently referred to as an “employee timetable”, to distinguish it from a “public timetable” that is displayed or given to the public.

train – any engine with or without a consist, authorized by timetable or dispatcher, to move from point A to point B.

trainman – see **brakeman**

train order - A train order conveys authority upon a train crew to perform a movement that is not covered by the timetable. Train orders are used to create extra trains, annul scheduled trains or change their times, arrange meets between trains, and so forth.

trains, class of – in the pre-Grand Trunk period, trains were usually “express”, “mail”, “accommodation” or “freight”. During the Grand Trunk period and subsequently, trains came to be numbered as “first class” through to “fourth class”. Normally main line passenger trains would be “first class”. Some branch line passenger trains were “second class”. Mixed trains (i.e., trains composed of both freight and passenger cars and doing both freight and passenger work) would normally be second or third class. Freight trains were normally third or fourth class, or designated as “extra”.

trains, superiority of – a train is superior to another by right, class or direction. Right is conferred by a train order. Class or direction is defined by timetable. Right is superior to class or direction. On single track, direction is superior as between trains of the same class. Trains of the first class are superior to those of the second class, and so on. On single track, east- or southbound trains are superior to west- or northbound trains of the same class. (The timetable specifies the direction for the purpose of the determination of superiority.) Extra trains are inferior to regular trains. If a dispatcher does not state which train is to take the siding, the train in the inferior direction takes the siding.

transfer table – a track mounted on a moveable platform supported by rails in a transverse pit, that can transfer an engine to any one of a number of parallel tracks leading into a wide engine house with a large number of tracks. The transfer table can be fed by a single lead track.

trestle – see **GLOSSARY OF BRIDGE, TRESTLE and CULVERT TERMS**

triple-header – a train pulled by three engines.

turntable – a track mounted on a deck with a centre pivot in a circular pit; for turning a locomotive at the end of its run. The earlier ones were hand-operated (frequently referred to as “armstrong” tables).

type – steam locomotives in particular are defined as to “type” by their wheel arrangement, which is also usually described by a name.

Common locomotive types are:

0-4-0 – Four-wheel switcher (often referred to as a “yard” or “pony” engine).

0-6-0 – Six-wheel switcher

0-8-0 – Eight-wheel switcher

2-6-2 – Prairie

4-4-0 – American

4-4-2 - Atlantic

2-6-0 – Mogul

4-6-0 – Ten-wheeler

4-6-2 – Pacific

4-6-4 – Hudson or Baltic

2-8-0 – Consolidation

2-8-2 – Mikado

2-8-4 - Berkshire

4-8-2 – Mountain

4-8-4 – Northern

The combination of numbers is known as the “Whyte” classification system. The first (0, 2 or 4) refers to the number of wheels on the pilot (leading) truck. The second (4, 6 or 8) refers to the number of driving wheels (drivers). The third (0, 2 or 4) refers to the number of wheels on the truck under the cab.

water station – a Grand Trunk Railway generic term for any place where a steam locomotive could take on water. This could be direct from a **water tank** or **water tower**, or from any kind of stand (usually located at the end of a station platform). Later, better known as a “water plug” or “stand pipe”.

water tank or tower – a tall circular or square frame or stone foundation that supports a (usually) round tank beside a track, from which the tender of an engine can be refilled with water. On the CPR some water tanks were totally encased in a wooden frame to prevent freezing.

way freight – merchandise handled at a freight shed and by way freight crews. Also, trains designated to handle and move way (freight) cars and do switching en route.

weight load – see **live load**.

wye – a triangular track formation used instead of a turntable for turning a locomotive or cars. A wye requires more land but less maintenance, and has the added advantage of not having the same limitations of weight load or length as a turntable. Depending on the distance between the three switches, a wye could be used for turning a whole train.

yard – a system of tracks for the making up of trains, storing of cars and other purposes. A larger yard would be under the jurisdiction of an assistant superintendent, a trainmaster or a yard master. A yard at a smaller station would likely be under the jurisdiction of the (station) agent (qv).

yard limits – that portion of main line trackage within limits defined by yard limit signs. Yard limits need not be near a yard, although they may be included. The signs exist to restrict the speed of trains entering any congested area, such as a busy junction. Yard limits do not restrict first and second class trains.