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FRONT COVER: CNR locomotive 6750 hauling a CRHA "Apple Blossom Special" excursion on the former Montreal and Southern Counties interurban line on June 5, 1971. Motive power for this trip consisted of 6750 and 3900; this photo was on the return trip when 6750 was leading. Photo by Peter Murphy

BELOW: British troops aboard an armoured train rushing to the scene of a Boer raid during the South African War of 1899 - 1902. There were several different varities of armoured trains used during that war, and they saw much service although they did have their weak points, and were vulnerable to attack. It was on such an expedition that Winston Churchill was captured by the Boers in November, 1899. La Presse, Montreal, le 20 Decembre, 1899

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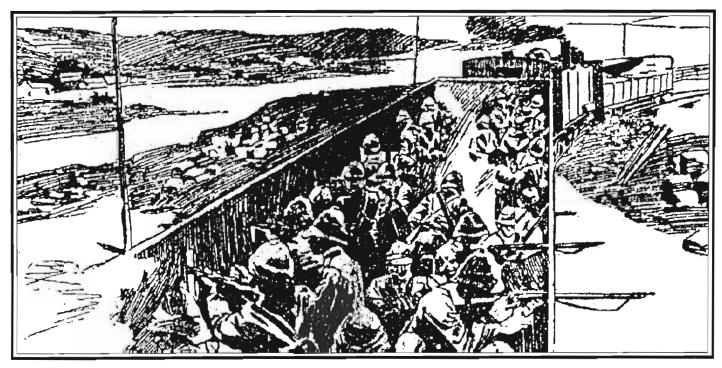
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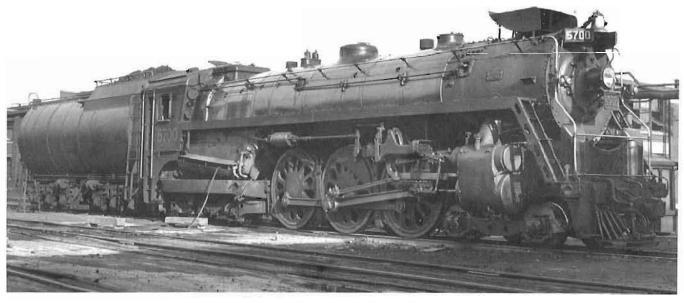
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AN ARMOURED TRAIN - SOUTH AFRICA 1899

Smoke Deflectors - Écrans Lève-Fumée

by - par Hugues W. Bonin



No. 1. Canadian National 5700, 4-6-4 Hudson. Toronto, Ontario, (Spadina Yards, c. 1937) Photo: W.C. Whittaker. Collection: Hugues W. Bonin (bought from Dave Shaw)

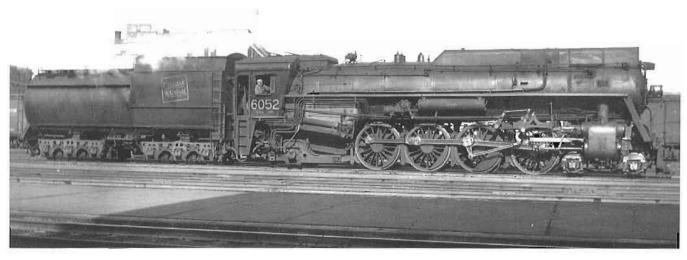
Steam locomotives have always produced lots of smoke. Unlike stationary steam engines which could be provided with tall stacks, steam locomotives have short ones to clear the many obstacles along the railway, such as tunnels, bridges and electric railway's live wires. In addition, smoke from the locomotive was often a nuisance for the crew and passengers alike, since, at high speeds, it tended to stick with the train rather than lift high above it. While breathing equipment could be used by the engine crew, the worst hazard was having the visibility obscured by the smoke and failing to see the aspect of sideline signals such as block and interlocking signals, and order boards. This could well result in catastrophic collisions further down the line.

It was recognized early that if one could create upward lifting air currents close to the stack, then the smoke could be lifted high enough to clear the locomotive cab, at least. Throughout the world, all kinds of devices were tried, but apparently the most successful was the vertical smoke lifters, usually known as "elephant ears", affixed to the smokebox on both sides of the stack. These were very much in use in Europe, Asia and Africa, and were not that rare in North America, although a minority of steam locomotives were fitted with them, often for only a small part of their career. It was recognized that the smoke lifters were not that efficient and considered by most crews as more a nuisance than anything, as the vision from the cab was significantly impaired. This is why most of the "elephant ears" were removed from the steamers.

In Canada, the 1930s were the years when the interest for smoke abatement was at its highest, mostly for the Canadian National Railways which carried out several experiments with various devices such as scoops around the stack, boxes and

Les locomotives à vapeur ont toujours produit beaucoup de fumée. Au contraire des machines à vapeur stationnaires qui pouvaient être pourvues de longues cheminées, les locomotives à vapeur ne pouvaient qu'avoir des cheminées de taille réduite pour pouvoir passer sans encombre sous des obstacles tels que les tunnels, ponts et fils électriques au-dessus des voies ferrées. La fumée des locomotives nuisait souvent tant aux membres d'équipage qu'aux passagers puisque, le plus souvent à haute vitesse, la fumée avait tendance à coller au train plutôt que de s'élever au-dessus de la locomotive et des wagons. L'ingénieur et le chauffeur pouvaient utiliser de l'équipement respiratoire, mais le plus grand danger était que la fumée pouvait obscurcir la vue et on pouvait manquer de voir des signaux le long de la voie, tels que les signaux de bloc ou de points de rencontre, et les signaux indicateurs de messages aux gares, ce qui pouvait avoir des conséquences catastrophiques.

On a reconnu tôt que si l'on pouvait créer des courants d'air ascendants auprès de la cheminée de la locomotive, on pourrait alors faire lever la fumée assez haut pour, à tout le moins, passer par-dessus la cabine de la locomotive. Partout dans le monde, on a essayé toutes sortes de dispositifs, mais, il semble que ce soit les écrans lève-fumée verticaux, fixés de chaque coté de la "boîte à fumée" et appelés "oreilles d'éléphants" qui aient connu le plus de succès. Ces écrans étaient très répandus en Europe, en Asie et en Afrique, et n'étaient pas si rares en Amérique du Nord où il n'y avait qu'une minorité de locomotives qui en étaient munies, la plupart du temps pour une petite partie de leur vie utile. On a fini par admettre que les écrans lève-fumée n'étaient pas si efficaces que cela et qu'ils nuisaient à la visibilité des équipages. C'est pourquoi on finit par les enlever de la plupart des locomotives.



No. 2. Canadian National 6052, 4-8-2 Mountain. Saskatoon, Saskatchewan, 30 July 1942 Photo by E. Elliot. Collection: Hugues W. Bonin (bought from Dave Shaw)

fins, vertical steel panels against the smokebox, such as with Central Vermont's (4-8-2) Mountains, and finally the more widespread "elephant ears" in various shapes located just outside the running boards.

Photograph No. 1 shows 4-6-4 Hudson 5700 with a smoke scoop around its stack, as an experiment carried out around 1937. This evolved into a streamlined duct as shown on 4-8-2 Mountain 6052 which probably had some kind on scoop behind the stack (Photograph No. 2). The same idea was retained for the U-4a and U-4b 4-8-4 Northern, such as the preserved 6400. This particular design was adopted after extensive testing

Au Canada, les années trente furent celles où la vogue des dispositifs de contrôle de la fumée fut à son paroxisme, surtout pour les Chemins de Fer Nationaux du Canada qui poursuivirent un programme de recherche dynamique sur ce sujet. Le CN expérimenta plusieurs types de dispositifs allant de la "pelle à fumée" autour de la cheminée, en passant par différentes boîtes et arrangements d'ailettes, jusqu'à des panneaux verticaux fixés contre la boîte à fumée (4-8-2 Mountains du Central Vermont) et aux "oreilles d'éléphant" traditionnelles, de formes diverses, montées à l'extérieur de la passerelle le long de la chaudière.



No. 3. Canadian National 3458, 2-8-2 Mikado. Hamilton, Ontario, February 1938

Collection: Hugues W. Bonin (bought from Dave Shaw) (from Paterson-George collection)



No. 4. Canadian National 3458, 2-8-2 Mikado. Ottawa, Ontario, July 1947 Collection: Hugues W. Bonin (bought from Dave Shaw)

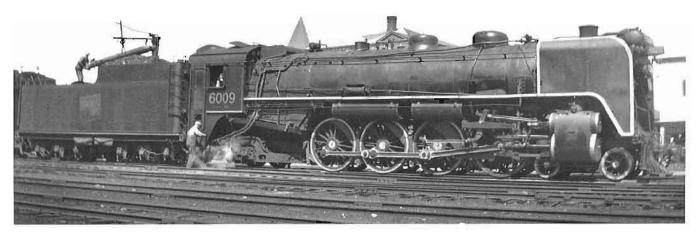
on a scale model in the wind tunnel at the National Research Council establishment in Ottawa. Most probably, the streamlining of this class of locomotives helped as much as the scoop within the duct in lifting the smoke, but this was not successful enough since the locomotives built for the CNR after the U-4s were not fully streamlined, with the exception of the "Bullet-Nosed Betties" (4-8-2 Mountains 6060-6079) built in the forties. These were only semi-streamlined, and did not have smoke lifting devices at all.

While one would think that smoke lifting screens would be most efficient for the fastest locomotives, several classes of more humble steamers were fitted with them, such as 4-6-2 Pacifics and even 2-8-2 Mikados such as the 3458 which is seen in the two photographs (Nos. 3 and 4) with "elephant ears" of different shapes. Obviously, someone at the CNR thought that smaller angled lifters would be better than the larger squarish ones equipping the same locomotive some nine years earlier. It is obvious that the "elephant ears" gave the locomotives a very different look, often more powerful. While most of the CNR's locomotives did not have special decorations on their smoke lifters (contrary to the Ontario Northland), some managed to display a little colour, such as the 4-8-2 Mountain 6009 with white outlines on its smoke deflectors (Photograph No. 5). The next photograph (No. 6) shows 4-8-2 Mountain 6050 with larger, squarish "elephant ears", but without the white outlining.

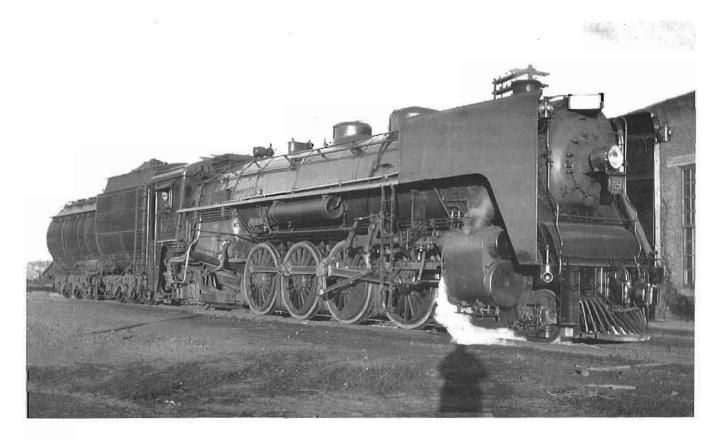
Most steam locomotives on the CNR eventually had their smoke deflectors removed before the end of their careers.

La photographie #1 montre la 4-6-4 Hudson #5700 avec une "pelle à fumée" entourant la cheminée, illustrant une expérience effectuée vers 1937. Une variante était la conduite telle que celle qui équippait la 4-8-2 Mountain #6052, qui avait probablement un genre de "pelle à fumée" derrière sa cheminée (Photo #2). La même idée fut retenue pour les locomotives carénées des classes U-4a et U-4b (4-8-4 Northern), telle que la #6400 qui a été préservée. Ce design particulier fut adopté à la suite de tests extensifs conduits à l'aide de la soufflerie du Conseil National de la Recherche Scientifique à Ottawa. Il est probable que le carénage de la locomotive contribuait autant que la "pelle à fumée" à soulever celle-ci, mais il semble que le problème ait persisté puisque aucune des locomotives subséquentes construites pour le CN ne fut pourvue d'un carénage complet. Seules, les "Bullet-Nosed Betties" (4-8-2 Mountains, Classe U-1f, #6060-6079), construites vers 1944, furent carénées partiellement, sans appareil spécial autour de la cheminée.

Alors que l'on serait porté à croire que seules les locomotives les plus rapides justifiaient des écrans lève-fumée, plusieurs locomotives plus humbles du CN en furent pourvues, telles que les 4-6-2 Pacific et les 2-8-2 Mikado. Les photographies #3 et 4 montrent la 2-8-2 #3458 arborant fièrement des "oreilles d'éléphant" de formes différentes. Il semble bien que quelqu'un au CN a cru que des écrans angulaires plus petits seraient plus efficaces que les écrans carrés plus grands qui équipaient la même locomotive neuf ans plus tôt. Il est certain que le port d'écrans lève-fumée changeait



No. 5. Canadian National 6009, 4-8-2 Mountain. Truro, Nova Scotia, 1 April 1940 Collection: Hugues W. Bonin (bought from Dave Shaw)



No. 6. Canadian National 6050, 4-8-2 Mountain. Saskatoon, Saskatchewan, 1 April 1940 Collection: Hugues W. Bonin (bought from Dave Shaw)



No. 7. Canadian Pacific 2816, 4-6-4 Hudson. Calgary, Alberta, (No date) Collection: Hugues W. Bonin (bought from Dave Shaw)

However, for the last trips of excursion locomotive 4-8-4 Northern 6218 as part of the "Countdown 6218" in June and July 1971, someone found a pair of smoke lifters and installed them on the venerable locomotive for these last trips. It was thought then that this would be the very end of steam on the Canadian National, but, a few years later, the 4-8-2 Mountain 6060 was refurbished for another round of steam fan trips. The 6218 was stored for several months at the Pointe Saint-Charles shops and the smoke deflectors were removed before the 6218 was put for display in Fort Erie where it still is. The smoke deflectors were later installed on sister 4-8-4 6213 displayed at the Marine Museum on the Toronto waterfront.

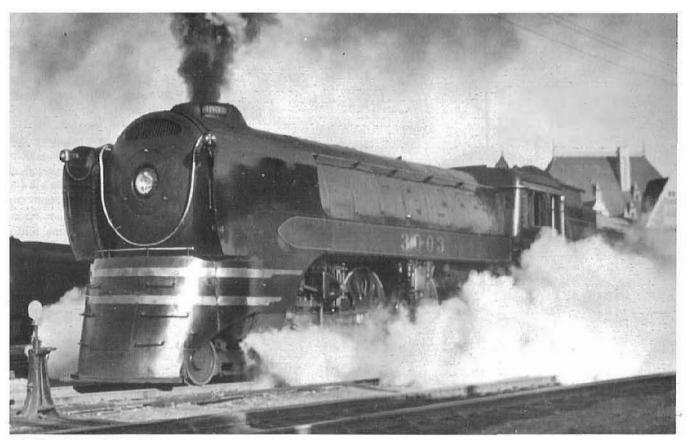
The Canadian Pacific Railway also tried the smoke lifters on several classes of its locomotives. The most notable ones were the two K-1-a 4-8-4 Northerns (3100 and 3101) and the non-streamlined Hudsons (Classes H-1-a and H-1-b 2800-2819). Most CPR locomotives equipped with elephant ears had them mounted outside the running boards, but a few had them

définitivement l'apparence de la locomotive, lui conférant un aspect plus puissant. Contrairement au chemin de fer Ontario Northland, le CN n'a pas tellement utilisé les surfaces offertes par les écrans pour décorer la locomotive. Des exceptions existent, comme la 4-8-2 Mountain #6009 qui avail les bords de ses écrans accentués de blanc (Photo #5). Quant à la 4-8-2 Mountain #6050, (Photo #6), elle arborait de grands écrans lève-fumée de forme plutôt carrée, mais sans aucune décoration.

La grande majorité des locomotives à vapeur du Canadien National finirent leur carrière sans les écrans lèvefumée. Cependant, pour les dernières excursions de la 4-8-4 Northern #6218, dans le cadre d'un programme appelé "Countdown 6218" en juillet 1971, quelqu'un réussit à dénicher une paire d'écrans et notre héroïne termina sa carrière affublée d'"oreilles d'éléphants". On croyait à l'époque que c'était bien la fin de la vapeur sur les lignes du Canadien National, mais, quelques années plus tard, la décision fut prise de rescaper la 4-8-2 Mountain #6060 de son enclos de Jasper et de la remettre à neuf pour plusieurs autres années d'excursions à la vapeur. Quant à la 6218 qui était entreposée aux ateliers de Pointe Saint-Charles, on finit par lui

enlever les écrans lève-fumée, avant d'aller l'installer dans un musée de Fort Erie, Ontario, où on peut encore l'admirer.

Le Canadien Pacifique a lui aussi essayé les écrans lèvefumée et plusieurs de ses locomotives en furent pourvues à un moment ou à un autre. Les exemples les plus connus sont les deux 4-8-4 Northern (classe K-1-a, #3100 et 3101) ainsi que les 4-6-4 Hudson non-carénées (Classes H-1-a et H-1-b, #2800-2819). La grande majorité des vapeurs du CP qui étaient pourvues d'écrans lève-fumée les avaient montés à l'extérieur des passerelles, mais le CP a aussi essayé de les installer tout contre la boîte à fumée, tel qu'illustré par le photographie #7 montrant la Hudson #2816 à Calgary, Alberta. Il est par ailleurs fort surprenant de constater que le carénage complet des locomotives 4-4-4 Jubilee de la série 3000 (Classe F-2-a) ne réussissait pas apparemment à solutionner le problème de la fumée, puisque le CP en a équipé au moins une, la #3003, d'écrans lève-fumée, comme le démontre la Photographie #8 prise à la Gare du Palais de la ville de Québec.



No. 8. Canadian Pacific 3003, 4-4-4 Jubilee. Québec City, Québec, 1942 Photo: unknown (post card) Collection: Hugues W. Bonin

flush with the smokebox, such as 2816 shown at Calgary, Alberta, on Photograph No. 7. Surprisingly, even the streamlining of the F-2-a class Jubilees (4-4-4) could not solve the smoke problem and at least one of them, 3003, was briefly fitted with elephant ears as shown on Photograph No. 8 in Québec City.

Another example of a fully streamlined steam locomotive equipped with smoke deflectors is that of Temiskaming and Northern Ontario 4-6-2 Pacific 700, shown on Photograph No. 9 at North Bay in 1943. The T&NO, later the Ontario Northland, went in a big way toward the smoke lifters and most of its mainline steamers were equipped with them. Its elegant 4-8-4 Northerns indeed sported them in more than one shape, as depicted by 1003 on Photographs Nos. 10 and 11 taken less than five years apart; not only had this locomotive different paint schemes, but she had different "elephant ears" as well.

Even less glamorous T&NO and ONR locomotives had the smoke deflectors, including several 2-8-2 Mikados such as the 307 and the 311 in a very strange configuration (Photograph No. 12). This may be the A-A arrangement for steam locomotives.

Finally, a locomotive did not have to be big and glamorous to sport smoke deflectors; witness this obscure little 2-6-0 Mogul 30 of the Manitoba Paper Co. (Photograph No. 13). This indeed adds lots of character to this small industrial steamer!

Il existe un autre exemple d'une locomotive à vapeur complètement carénée munie d'écrans lève-fumée: la Temiskaming & Northern Ontario #700 (4-6-2 Pacific), qui apparaît à la Photographie #9 (North Bay, 1943). Le T&NO, qui changea de nom en 1946 pour devenir l'Ontario Northland, adorait les "oreilles d'éléphant". La grande majorité de ses vapeurs de grande ligne en étaient pourvues. Ses élégantes 4-8-4 Northern les ont arborées en plus d'une forme, comme le montrent les photographies #10 et 11 de la #1003, prises à moins de cinq années l'une de l'autre et montrant non seulement des livrées différentes, mais aussi des formes différentes des écrans lève-fumée. Même des locomotives moins glorieuses du T&NO et de l'ONR ont arboré fièrement des "oreilles d'éléphant", comme les 2-8-2 Mikado montrées à la photographie #12 en train de tirer un lourd train selon une configuration très inusitée. C'est probablement cela la configuration "A-A" pour les locomotives à vapeur!

Enfin, une locomotive ne devait pas nécessairement être immense et rapide pour être munie d'écrans lève-fumée. À preuve la 2-6-0 Mogul #30 de la compagnie Manitoba Paper Co. (photographie #13). On peut certes dire que ces écrans lève-fumée ajoutent beaucoup de caractère à cette petite vapeur industrielle!

Du côté américain, l'usage d'écrans lève-fumée ou de différentes techniques de contrôle de la fumée était relativement beaucoup moins répandu qu'au Canada. La plupart des compagnies ferroviaires américaines semblaient résignées à



No. 9. Temiskaming & Northern Ontario 700, 4-6-2 Pacific. North Bay, Ontario, 12 September 1943 Collection: Hugues W. Bonin (bought from Dave Shaw)



No. 10. Temiskaming & Northern Ontario 1103, 4-8-4 Northern. North Bay, Ontario, 4 August 1941 Collection: Hugues W. Bonin (bought from Dave Shaw)



ABOVE: No. 11. Temiskaming & Northern Ontario 1103, 4-8-4 Northern. Extra South (41 cars), North Bay, Ontario, 20 March 1946. Note: 1103 painted blue

Collection: Hugues W. Bonin (bought from Dave Shaw)

OPPOSITE TOP: No. 12. Ontario Northland 307 & 311, 2-8-0 Consolidations. Extra North (76 cars). North Bay, Ontario, 11 May 1948

Collection: Hugues W. Bonin (bought from Dave Shaw)

OPPOSITE BOTTOM: No. 13. Manitoba Paper Co. Ltd. 30, 2-6-0 Mogul. Location unknown, October 1959

Collection: Hugues W. Bonin (bought from Dave Shaw)

On the American side, the use of smoke deflectors on steamers was relatively less widespread, with most railroads not interested. Some companies had found alternative solutions, such as the Pennsylvania Railroad which had signals installed within the cab of its locomotives used on its major lines. There were some exceptions such as the Union Pacific (its 4-8-4 Northerns and 4-6-6-4 Challengers being the most notable examples), the New York Central, with their 4-8-4 Niagaras and 4-8-2 Mohawks, the Nickel Plate Road with its famous 4-6-4 Hudsons, the Boston and Maine (4-6-2 Pacifics and 4-8-2 Mountains) and, of course, the Delaware and Hudson with their 4-6-2 Pacifics and their 4-8-4 Northerns. But these seem to be about it for our American friends.

Of all the Canadian steam locomotives equipped with smoke deflectors, there are fortunately a few survivors in parks and museums. The Canadian National is represented by two locomotives, 4-8-4 Northerns 6213 (Photograph No. 14), displayed at the Marine Museum on Toronto's waterfront, and 6400 (Photograph No. 15), which has the "scoop" within the streamlined duct on top of the smokebox and boiler. The latter is part of the collection of the National Museum of Science and Technology in Ottawa.

vivre avec ce problème, d'autres avaient trouvé des solutions alternatives, comme le Pennsylvania Railroad qui avait des signaux installés dans la cabine des locomotives sur les lignes importantes. Les exceptions les plus notables étaient l'Union Pacific qui utilisait des écrans lève-fumée sur certaines de ses locomotives rapides, dont les 4-8-4 Northern et les 4-6-6-4 Challenger, la New York Central (4-8-4 Niagara et 4-8-2 Mohawk), la Nickel Plate Road (4-6-4 Hudson), la Boston & Maine (4-6-2 Pacific et 4-8-2 Mountain), et, bien sûr, la Delaware & Hudson (4-6-2 Pacific et 4-8-4 Northern). La liste n'est sans doute pas exhaustive, mais c'est à peu près tout pour l'intérêt de nos voisins américains dans ce domaine.

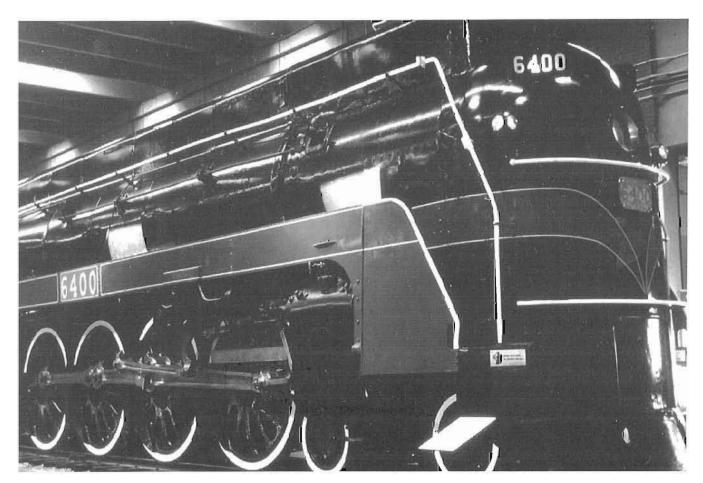
De toutes les locomotives à vapeur équipées de dispositifs de contrôle de fumée, il en reste heureusement quelques exemplaires préservés dans des parcs et des musées. Le Canadien National est représenté par deux locomotives, toutes deux des 4-8-4 Northern: la #6213 (photo #14), au Musée Maritime de Toronto, Ontario, et la #6400, dotée d'une "pelle à vapeur" et en montre au Musée National de la Science et de la Technologie à Ottawa (photo #15).



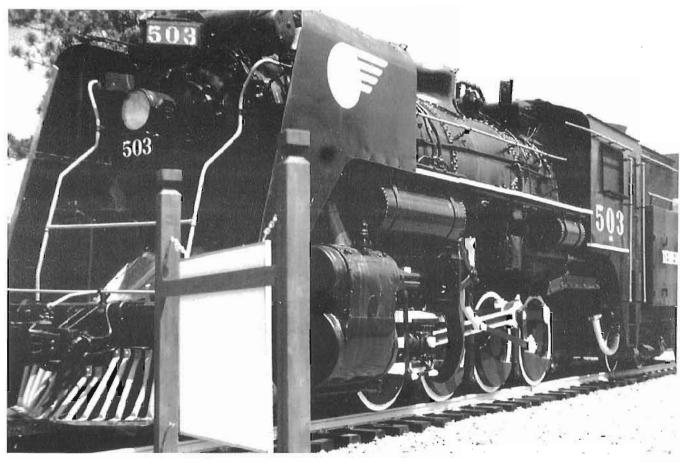




No. 14. Canadian National 6213, 4-8-4 Northern. Toronto, Ontario, 11 April 1989 Photo #29266 by Hugues W. Bonin



No. 15. Canadian National 6400, 4-8-4 Northern, Class U4a, MLW 1936 b-n: 68715. Ottawa, Ontario, 10 July 1983 Photo #12058 by Hugues W. Bonin



No. 16. Temiskaming & Northern Ontario 503, 2-8-0 Consolidation. North Bay, Ontario, 30 June 1984 Photo #14140 by Hugues W. Bonin

The other three locomotives are of Temiskaming and Northern Ontario (Ontario Northland) origin (Photographs Nos. 16, 17 and 18). T&NO 503 (2-8-0 Consolidation) is preserved and displayed in Lee Park in North Bay, Ontario, and the latest news is that it may be refurbished and possibly moved to a new park on the edge of Lake Nipissing. T&NO 701 (4-6-2 Pacific) is maintained in superb condition near the station in Engelhart, Ontario, and, like the 503, shows how the smoke lifters could well serve in the decoration of the locomotive. In Sept-Îles, Québec, 4-6-2 Pacific 702 of the Quebec North Shore & Labrador Ry., stands proudly in company with Gulf Pulp and Paper #48, an old 0-6-0, in a small garden near the QNS&L station. A sister of the #701 of the T&NO, she was purchased by the QNS&L at the time of the construction of this mining railway in the 1960s and hauled construction trains along with 1112 (ex-CNR), a 4-6-0 now preserved as part of the CRHA collection and displayed at the Smiths Falls Railway Museum in Smiths Falls, Ontario.

There may be other steam locomotives preserved and still sporting "elephant ears" or some other kind of smoke deflectors in Canada, that the author is not aware of. If the reader knows of any other, the editors of "Canadian Rail" would be grateful to receive a note with the pertinent information. In particular, the Canadian Railway Museum in Delson / St-Constant, Qué., has several steamers in its collection, and one or two of them could well be fitted with "elephant ears" to demonstrate this fascinating part of our steam locomotive

Les trois autres locomotives encore en existence proviennent toutes du Temiskaming & Northern Ontario (Ontario Northland) (Photographies #16, 17 et 18). On peut admirer au Parc Lee de North Bay, Ontario, la T&NO 2-8-0 Consolidation #503. Les dernières nouvelles au sujet de cette locomotive sont qu'elle sera remise à neuf (cosmétiquement) bientôt pour être déménagée dans un nouveau parc au bord du lac Nipissing. Quant à la 4-6-2 Pacific #701, elle est maintenue en superbe condition près de la gare d'Engelhart, Ontario, et, tout comme la #503, elle démontre comment les "oreilles d'éléphant" peuvent très bien servir à la décoration d'une locomotive à vapeur. Enfin, la Quebec North Shore & Labrador 4-6-2 Pacific #702, anciennement T&NO (ONR) #702, peut être admirée dans un petit jardin au milieu du stationnement de la gare de Sept-Îles, Québec, fièrement en compagnie de la Gulf Pulp & Paper #48, une vieille 0-6-0. La #702 fut achetée par le chemin de fer Quebec North Shore & Labrador et servit à la construction de la ligne Sept-Îles - Shefferville - Labrador City en compagnie de la QNS&L #1112 (4-6-0 Ten-Wheeler) au début des années soixante. Cette dernière, anciennement du CN, fait maintenant partie de la collection de l'Association Canadienne d'Histoire Ferroviaire et est en montre au Musée Ferroviaire de Smiths Falls, à Smiths Falls, Ontario.

Il se peut bien qu'il y ait d'autres locomotives à vapeur en existence au Canada et qui arborent encore des "oreilles d'éléphant" ou d'autres dispositifs de contrôle de la fumée. Si le lecteur en connaît d'autres, les rédacteurs de la revue "Le

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Canadien"

seraient très recon-



No. 17. Temiskaming & Northern Ontario 701, 4-6-2 Pacific, CLC 1921. Englehart, Ontario, 21 June 1988 Photo #26590 by Hugues W. Bonin

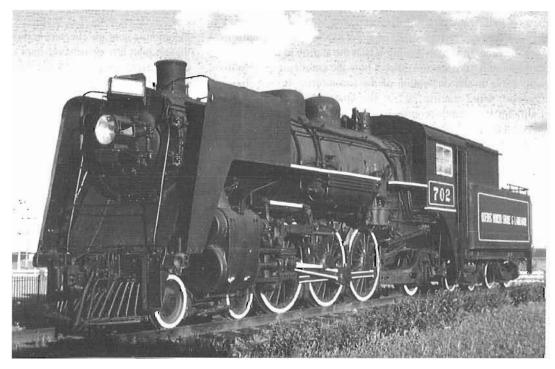
history. After all, most of us rail buffs would agree that these devices gave quite a different character to the locomotives.

Acknowledgments: The author wishes to express his thanks for authorization to use several photographs for this article to Mr. Dave Shaw. Copies of these photographs (noted "from Mr. Shaw's collection" may be purchased from him at the following address: Mr. Dave Shaw, 2046 Limerick Court, Mississauga, Ontario L5H 3Z8. Telephone: (905) 278-6550.

naissants de recevoir une note avec les renseignements pertinents. Le Musée Ferroviaire Canadien de Delson / Saint-Constant, Québec, possède plusieurs vapeurs dont certaines pourraient fort bien être équipées d'"oreilles d'éléphant" afin de démontrer au visiteur cette facette de l'exploitation de la vapeur sur les chemins de fer canadiens. Je ne risque aucunement de tromper affirmant que les amateurs de trains trouvent que les écrans lève-fumée ajoutent certes au caractère d'une locomotive à vapeur.

Remerciements: L'auteur tient à remercier M. Dave Shaw pour sa permission d'utiliser plusieurs des photographies pour le présent article. On peut se procurer des copies des photographies indiquées comme provenant de la collection de M. Shaw auprès de ce dernier à l'adresse suivante: M. Dave Shaw, 2046 Limerick Court, Mississauga, Ontario L5H 3Z8 Tél.: (905) 278-6550.

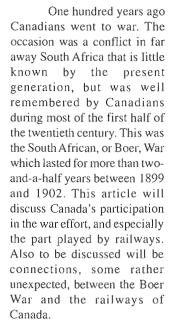
No. 18. Quebec North Shore & Labrador 702, 4-6-2 Pacific, ex-Ontario Northland 702. Sept-Îles, Québec, 1 July 1987 Photo #22942 by Hugues W. Bonin





The Boer War 1899 - 1902 Canada's first overseas war The Railway Connection

by Fred Angus



In order to understand the situation, a very brief history of South Africa is necessary. Since most people know little about the Boer war, we will also give an overview of the events in that conflict, emphasizing, where possible, the railway, and the Canadian, connection. The first and foremost thing to realize is that the Boer war was not, as some people today believe, a war between Europeans and Native

Africans. It was strictly a fight between two nationalities of European descent, although the native Africans suffered very badly by being caught in the middle. The first European settlement in South Africa occurred in 1652 when Dutch settlers established a colony at the Cape of Good Hope. For nearly 200 years this colony survived until the expansion of the British Empire in the nineteenth century. Increasing conflict between the descendants of the Dutch settlers and the British caused the former to pull up stakes in 1836 and head inland in what was known as the "Great Trek". These settlers were known as Boers, which simply means farmers, and in due course they established two republics, the South African Republic (popularly known as the Transvaal), and the Orange Free State. Both these republics were in the interior of South Africa, far from the influence of Britain and other European nations, and the Boers hoped that they could now live in peace.



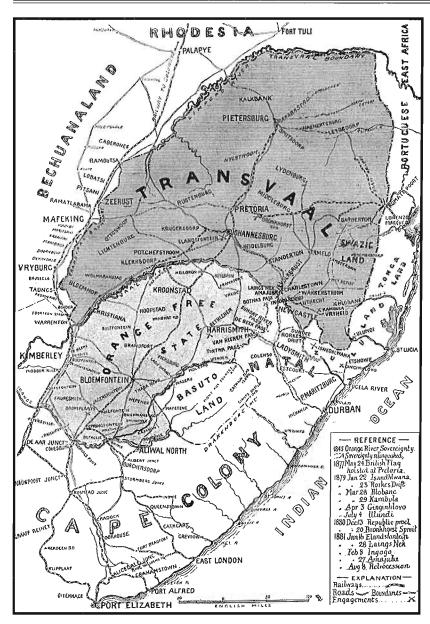
An 1897 cartoon showing Cecil Rhodes as "The Colossus of Rhodes" thumbing his nose at the world. Note the "Cape to Cairo" railway which then extended to Bulawayo. It was never completed. Today Rhodes is remembered for his scholarships.



Unfortunately events were to deny them this peace. In the second half of the nineteenth century gold and diamonds were discovered in Boer territory, and other countries scrambled to exploit these discoveries. Foremost among the newcomers were the British, who moved inland from Cape Colony and Natal, and the old friction began again. War broke out in 1879, culminating in the defeat of the British at Majuba in 1881, and their retreat back to Natal and Cape Colony. For a few more years the Boer republics were left in peace, but not for long. Chief among the exploiters in Africa was Cecil Rhodes who had established mines, railways, and other works in the southern part of the continent, and dreamed of a series of British colonies, and a railway to go with them, extending all the way from "Cape to Cairo"; he even had a whole country (Rhodesia) named after him!

Matters came to a head in 1895 when Rhodes engineered a raid to overthrow the Boer republics by force of arms. This was known as the "Jameson

Raid", and was a complete disaster to Rhodes. Not only was he forced to resign his important presidencies, but the whole fiasco caused international condemnation, especially from Kaiser Wilhelm of Germany, and increased many fold the tension between the British and Boers. So far the score was Boers 2, British 0, but this was only the beginning. Tensions got worse and worse, the chief point of disagreement being the status of the "Uitlanders", that is the foreigners living in the Boer republics. Paul Kruger, president of the South African Republic (Transvaal) did not want to give them any legal status or rights. Discussions went on for several years, culminating in urgent meetings during the summer of 1899. Some concessions were made, but not enough, and after rejection of a final ultimatum, war broke out on October 12 1899 (springtime in South Africa) between the British Empire on one side and the Transvaal and the Orange Free State on the other.



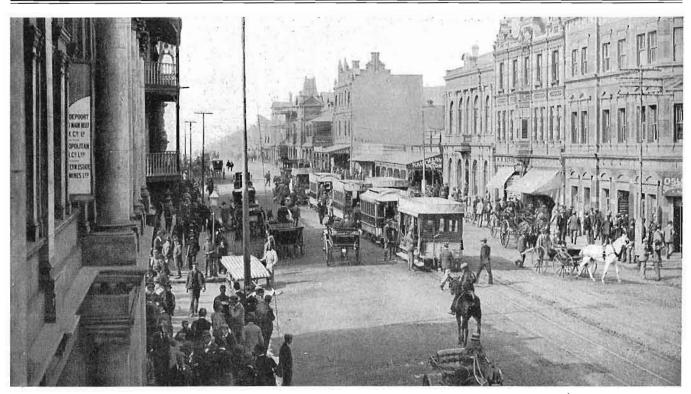
This map and distance table, both printed in 1899, show most of the places mentioned in this article. Many of the distances are very great.

DISTANCES	BY RAILR	OAD IN SOUTH AFRIC	A.
CAPETOWN TO	MILES.	PORT ELIZABETH TO	MILES
Kimberley	647	Naauwpoort	270
Mafeking	870	Norval's Point.	
Modder River		Bloemfontein	450
Norvals Point	628	Kroonstad	590
Buluwayo	1,861	Johannesburg	
Johannesburg	1,014	Pretoria	
Pretoria	1,040	DURBAN TO	1677 ma
De Aar	501	·· -··- ·	MILES 70
Bloemfontein	750	Pietermaritzburg	
Naauwpoort	570	Ladysmith	
Vryburg		Spion Kop	
Paardesburg		Harrismith	
DELAGOA BAY TO	MILES.	Glencoe	
		Newcastle	
Pretoria		Laing's Nek	
Johannesburg		Volksrust	
Bloemfontein		Johannesburg	
Majuba Hill	515	Pretoria	511

Today it would be considered flagrant aggression for a huge empire to invade two peaceful little republics for no real reason than to seize control of gold and diamonds (the other reasons given were merely excuses). However in 1899 the British Empire was at its height, and it was considered "normal" for it to take control of this country from the "rough" Boers. The war was condemned in many places, notably in Germany and the United States, but the countries of the Empire, including Canada, rallied round the flag and sent troops to fight in South Africa. Many thought that it was merely a matter of marching inland, occupying Pretoria, the capital of the Transvaal, and the Imperial troops would soon crush the Boers. And so the troops sailed away to the tune of such songs as "Soldiers of the Queen", "Goodbye Dolly Gray" and "Marching to Pretoria". However the Boers had other ideas. They were fighting for their own country on familiar ground, often very mountainous, and they won many stunning victories. Far from being over in a few weeks, the war dragged on well into the new century, and did not end until May 31, 1902.

By 1899 much of South Africa's railway network was already in place. The first line was in Capetown in 1859, and this began to be extended, as 3 ft. 6 in. gauge, in 1873. This was known as the Cape Government Railway (CGR), and reached Kimberly in 1885, and Mafeking in 1895. By 1899 a line ran north to Bulawayo; the start of what Cecil Rhodes hoped would be the "Cape to Cairo" railway. The first railway in Natal was built in 1860, and was taken over by the Government in 1877 and named Natal Government Railways (NGR). It reached Pietermaritzburg in 1879, Ladysmith in 1890, the Transvaal border in 1891 and the Orange Free State in 1892. In the Transvaal, the Netherlands South African Railway Company (NZASM) built lines to Johannesburg and Pretoria, as well as connecting lines to the CGR and NGR. The latter

> connection, at Charlestown, was completed in 1895. Farther north, another east-west line connected Pretoria with the Portugese colony of Laurenco Marques, reached in 1894. There were other lines which connected the various main lines, as well as to Delagoa Bay and East London. Ironically, had things gone differently, there might not have been a war, and there might have been more railways built. Negotiations had been held by which President Kruger would allow the "Uitlanders" more voting rights in return for permission for the S.A.R. to build across Swaziland to the Indian Ocean. Of course this discussion ended when the war broke out.

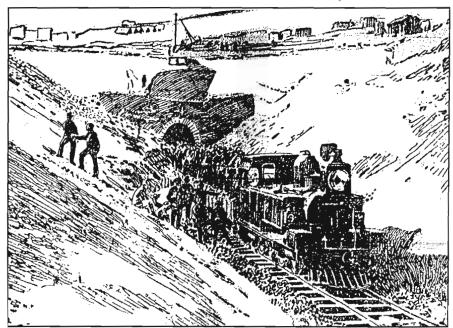


ABOVE: Johannesburg was already a large city, with a street car system, when this photo was taken in 1899. Its economy was fuelled by the nearby gold mines. Collection of Weldon McLean.

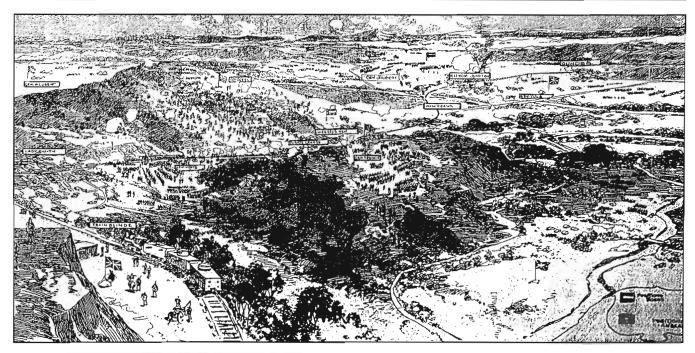
RIGHT: The Charlestown Tunnel, at Laing's Nek was near the Transvaal - Natal border on the main line from Johannesburg to Durban.

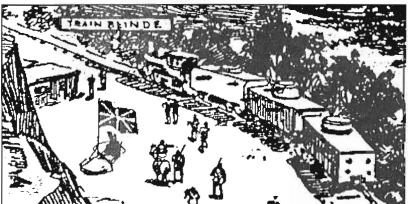
La Presse, Montreal, le 12 Octobre, 1899.

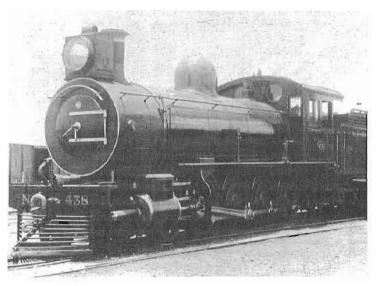
BELOW: "Oom Paul's money", a silver two-shilling piece of the South African Republic or Transvaal. One side shows President Paul Kruger, the other shows the coat of arms of the S.A.R. Note the covered wagon, representing the "Great Trek" of 1836. This coin was brought back as a souvenir by a Canadian soldier who had fought in the Boer War.











The South African railways played a most important part in the war. At the very beginning, the British formed the Imperial Military Railways (IMR) and took over the CGR and NGR, as well as any captured Boer lines. The latter were under direct military control, while the CGR and NGR retained their civilian management. After the war all railways were returned to civilian control, those in the Transvaal and Orange Free State becoming the Central South African Railways (CSAR).

Although moving troops and supplies by rail was nothing new, there was one feature of the Boer War that was of great interest to railway historians. These were the armoured trains which were used

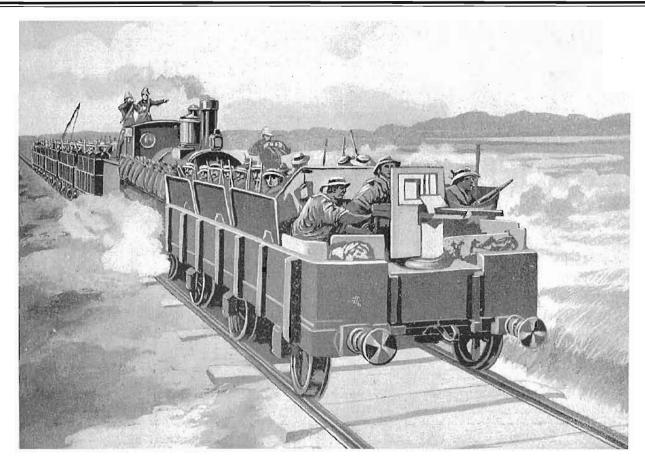
quite extensively in the conflict. Basically they consisted of a locomotive and three or four cars, protected on the sides by steel armour plate. Usually the locomotive was placed in the middle of the train, with the cars at the ends. Usually there was no roof on the cars, but the steel side plates were proof against rifle fire, but not against artillery shells. There were loopholes in the car sides through which the soldiers could fire at the enemy, both with rifles and heavier guns.

The armoured trains were impressive, but they had their weak points. They could not be used against an enemy at a distance from the track and, in that rugged terrain, it was easy for the Boers to retire out of range. They were also vulnerable to artillery fire and, most importantly, could be derailed by the enemy by the simple act of taking out a rail or placing obstacles on the track. However they did write a new chapter in the history of railroading. An attack on an armoured train near Vryburg, in November 1899, was described by the engine driver as follows:

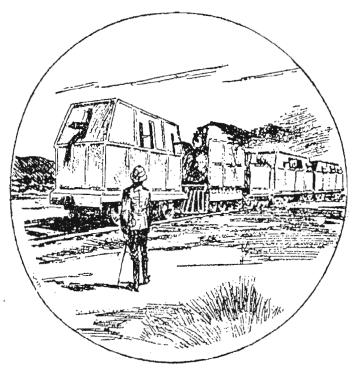
TOP: A schematic bird's eye view of the scene of the battles in the early days of the Boer invasion of Natal. La Presse, Montreal, le 25 Octobre, 1899

MIDDLE: An enlargement from the above, showing an armoured train on the line to Ladysmith.

BOTTOM: One of the locomotives built for the Imperial Military Railways in 1902 to replace those destroyed or damaged in the war.



"The train consisted of an armored car, in which were fifteen men, a short truck loaded with ammunition, and a bogey car carrying two big guns and a quantity of shells. An officer of the mounted police at Maribogo warned Captain Nesbitt, who was in charge of the train, that Boers were on the line, but Captain Nesbitt gave the order to go ahead. It was dark at the time. The pilot engine was about forty yards in advance of the train. When near Kraai Pan it ran off the line. I got down and showed a red light, stopping the train behind. I found loose rails near the track and began to fix the line where the Boers had removed the rails. Almost immediately shots were fired from a dried water-course, where the Boers were hiding. Some of the train crew were wounded. The Boers sniped us all night and at daybreak started with their big guns. All their shells were aimed at the engine, which was soon in a bad way. All this time I was lying down inside the truck, until I heard an officer order a flag of truce to be shown. Two flags were raised, but the Boers paid no heed to them for about a quarter of an hour. When they ceased firing, I got out of the truck and crawled on my stomach for about a mile and a half, until the Boers were out of sight. I had a miraculous escape. I made my way to Maribogo. I do not know what became of the others, but feel certain that all were taken prisoners. The Boers' shells did not touch the trucks containing the guns. The ammunition must have fallen into the hands of the Boers undamaged".



TOP: A drawing of an armoured train out on patrol in South Africa in 1899. The protection here is less than on some other trains. Collection of Weldon McLean.

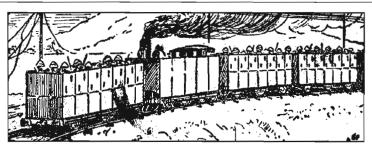
BOTTOM: A different style of armoured train, in which the car tops are also covered, and larger guns are mounted. La Presse, Montreal, le 26 Octobre, 1899





The most famous incident involving an armoured train occurred on November 15, 1899. On that day, one of the trains was out on an expedition near Estcourt on the Natal Railway when it was attacked and derailed by the Boers. After an attempt to clear the line, a Boer force appeared and there followed a seventy-minute engagement. The result was that the locomotive and some of the crew and troops on the train escaped, but most were taken prisoner, and eventually confined in Pretoria. Among them was a 25 year old war correspondent named Winston Churchill. Less than a month later, Churchill escaped by the

simple expedient of climbing over the wall. Making his way to the Pretoria railway yard, he hid under a tarpaulin covering an open freight car, and managed to evade detection on the long run to Laurenco Marques, until the train reached neutral Portugese territory. His dispatches were published in newspapers, and later in a book. They contain much of interest to the railway historian, and excerpts from two of them appear here. He was, of course, the same Winston Churchill who, many years, and two wars, later, became British Prime Minister during most of World War II.



A CRUISE IN THE ARMOURED TRAIN.

by Winston Churchill

Estcourt: November 9, 1899.

An armoured train! The very name sounds strange; a locomotive disguised as a knight errant; the agent of civilisation in the habiliments of chivalry. Mr. Morley attired as Sir Lancelot would seem scarcely more incongruous. The possibilities of attack added to the keenness of the experience. We started at one o'clock. A company of the Dublin Fusiliers formed the garrison. Half were in the car in front of the engine, half in that behind. Three empty trucks, with a platelaying gang and spare rails to mend the line, followed...... The train maintained a good speed; and, though it stopped repeatedly to question Kaffirs or country folk, and to communicate with the cyclists and other patrols who were scouring the country on the flanks, reached Chieveley, five miles from Colenso, by about three o'clock; and from here the ladysmith balloon, a brown speck floating above and beyond the distant hills, was plainly visible.

Beyond Chieveley it was necessary to observe more caution. The speed was reduced - the engine walked warily. The railway officials scanned the track, and often before a culvert or bridge was traversed we disembarked and examined it from the ground. At other times long halts were made while the officers swept the horizon and the distant hills with field glasses and telescopes. But the country was clear and the line undamaged, and we continued our slow advance......

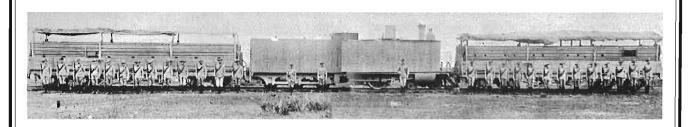
There followed a discussion. Perhaps the Boers were lying in wait for the armoured train; perhaps they had trained a gun on some telegraph post, and would fire the moment the engine passed it; or perhaps, again, they were even now breaking the line behind us..... "It only takes one shell to do the trick with the engine", said the captain who commanded. "Got to hit us first, though," he added. "Well, let's get a little bit nearer." The electric bell rang three times, and we crept forward - halted - looked around, forward again - halt again - another look round; and so, yard by yard, we approached Colenso. The Boers realize the advantage of the railway. At this moment, with their trains all labelled "To Durban", they are drawing supplies along it from Pretoria to within six miles of Ladysmith. They had resolved to use it in their further advance, and their confidence in the ultimate issue is shown by the scrupulous care with which they avoid damaging the permanent way. We had learned all that there was to learn - where the line was broken, that the village was deserted, that the bridge was safe, and we made haste to rejoin the train. Then the engine was reversed, and we withdrew out of range of the hills beyond Colenso at full speed..... So we rattled back to Estcourt through the twilight; and the long car, crowded with brown-clad soldiers who sprawled smoking on the floor or lounged against the sides, the rows of loopholes along the iron walls, the black smoke of the engine bulging overhead, the sense of headlong motion, and the atmosphere of war made the volunteer seem perhaps more than he was

OPPOSITE TOP: In the armoured train near Frere, on the line between Durban and Ladysmith. Collection of Weldon McLean.

OPPOSITE BOTTOM: An armoured train shelling a Boer battery at night. Note the powerful searchlight mounted on the train. Collection of Weldon McLean.

ABOVE: Excerpts from Winston Churchill's dispatch, dated November 9, 1899, describing a trip on the armoured train. The bridge that he describes as being still intact was destroyed by the Boers on November 15.

NEXT TWO PAGES: Selections from another dispatch by Winston Churchill, dated at Pretoria on November 20, 1899, in which he recounts the Boer attack on the armoured train. It was in this raid that Churchill was taken prisoner by the Boers.



THE FATE OF THE ARMOURED TRAIN.

by Winston Churchill

Pretoria: November 20, 1899.

A week ago I described to you a reconnoitering expedition in the Estcourt armoured train, and I pointed out the many defects in the construction and the great dangers in the employment of that forlorn military machine. So patent were these to all who concerned themselves in the matter that the train was nicknamed in the camp "Wilson's death trap."

At daylight on Wednesday morning [November 15, 1899] another spray of patrols was flung out towards the north and north-west, and the Estcourt armoured train was ordered to reconnoiter towards Chieveley. The train was composed as follows: an ordinary truck, in which was a 7pounder muzzle-loading gun, served by four sailors from the "Tartar", an armoured car fitted with loopholes and held by three sections of a company of the Dublin Fusiliers, the engine and tender, two more armoured cars containing the fourth section of the Fusilier company, one company of the Durban Light Infantry (volunteers), and a small civilian breakdown gang; lastly, another ordinary truck with the tools and materials for repairing the road; in all five wagons, the locomotive, one small gun, and 120 men. Captain Haldane, D.S.O., whom I had formerly known on Sir William Lockhart's staff in the Tirah Expedition, and who was lately recovered from his wound at Elandslaagte, commanded.

We started at half-past five and, observing all the usual precautions, reached Frere Station in about an hour. Here a small patrol of the Natal police reported that there were no enemy within the next few miles, and that all seemed quiet in the neighbourhood. It was the silence before the storm. Captain Haldane decided to push on cautiously as far as Chieveley, near which place an extensive view of the country could be obtained. Not a sign of the Boers could be seen.....

All was clear as far as Chieveley, but as the train reached the station I saw about a hundred Boer horsemen cantering southwards about a mile from the railway. Beyond Chieveley a long hill was lined with a row of black spots, showing that our further advance would be disputed. The telegraphist who accompanied the train wired back to Estcourt reporting our safe arrival, and that parties of Boers were to be seen at no great distance, and Colonel Long replied by ordering the train to return to Frere and remain there in observation during the day, watching its safe retreat at nightfall. We proceeded to obey, and were about a mile and three quarters from Frere when on rounding a corner

we saw that a hill which commanded the line at a distance of 600 yards was occupied by the enemy. So after all there would be a fight, for we could not pass this point without coming under fire. The four sailors loaded their gun - an antiquated toy - the soldiers charged their magazines, and the train, which was now in the reverse of the order in which it had started, moved slowly towards the hill.

The moment approached: but no one was much concerned, for the cars were proof against rifle fire, and this ridge could at the worst be occupied only by some daring patrol of perhaps a score of men. "Besides", we said to ourselves, "they little think we have a gun on board. That will be a nice surprise."

The Boers held their fire until the train reached that part of the track nearest to their position. Standing on a box in the rear armoured truck I had an excellent view through my glasses. The long brown rattling serpent with the rifles bristling from its spotted sides crawled closer to the rocky hillock on which the scattered black figures of the enemy showed clearly. Suddenly.... the Boers opened fire on us at 600 yards with two large field guns, a Maxim firing small shells in a stream, and from riflemen lying on the ridge. I got down from my box into the cover of the armoured sides of the car without forming any clear thought. Equally involuntarily, it seems, that the driver put on full steam, as the enemy had intended. The train leapt forward, ran the gauntlet of the guns, which now filled the air with explosions, swung round the curve of the hill, ran down a steep gradient, and dashed into a huge stone which awaited it on the line at a convenient spot.

To those who were in the rear truck there was only a tremendous shock, a tremendous crash, and a sudden full stop. What happened to the trucks in front of the engine is more interesting. The first, which contained the materials and tools of the break-down gang and the guard who was watching the line, was flung into the air and fell bottom upwards on the embankment. I do not know what befell the guard, but it seems probable that he was killed. The next, an armoured car crowded with the Durban light Infantry, was carried on twenty yards and thrown. over on its side, scattering its occupants in a shower on the ground. The third wedged itself across the track, half on and half off the rails. The rest of the train kept to the metals.

We were not left long in the comparative peace and safety of a railway accident. The Boer guns, swiftly changing their position, re-opened from a distance of 1,300 yards before anyone had got out of the stage of exclamations. The tapping rifle fire spread along the hillside, until it encircled the wreckage on three sides, and a third

field gun came into action from some high ground on the opposite side of the line.....

The driver at once sprang out of the cab and ran to the shelter of the overturned trucks. His face was cut open by a splinter, and he complained in bitter futile indignation. He was a civilian. What did they think he was paid for? To be killed by bombshells? Not he. He would not stay another minute. It looked as if his excitement and misery - he was dazed by the blow on his head - would prevent him from working the engine further, and as only he understood the machinery all chances of escape seemed to be cut off. Yet when I told this man that if he continued to stay at his post he would be mentioned for distinguished gallantry in action, he pulled himself together, wiped the blood off his face, climbed back into the cab of his engine, and thereafter during the one-sided combat did his duty bravely and faithfully - so strong is the desire for honour and repute in the human breast......

Having seen this much, I ran along the train to the rear armoured truck and told Captain Haldane that in my opinion the line might be cleared. We then agreed that he with musketry should keep the enemy's artillery from destroying us, and that I should try to throw the wreckage off the line, so that the engine and the two cars which still remained on the rails might escape. I am convinced that this arrangement gave us the best possible chance of safety, though at the time it was made the position appeared quite hopeless......

The task of clearing the line would not, perhaps, in ordinary circumstances have been a very difficult one. But the break-down gang and their tools were scattered to the winds, and several had fled along the track or across the fields. Moreover, the enemy's artillery fire was pitiless, continuous, and distracting. The affair had, however, to be carried through.

The first thing to be done was to detach the truck half off the rails from the one completely so. To do this the engine had to be moved to slacken the strain on the twisted couplings. When these had been released, the next step was to drag the partly derailed truck backwards along the line until it was clear of the other wreckage, and then to throw it bodily off the rails. This may seem very simple, but the dead weight of the iron truck half on the sleepers was enormous, and the engine wheels skidded vainly several times before any hauling power was obtained. At last the truck was drawn sufficiently far back, and I called for volunteers to overturn it from the side while the engine pushed it from the end. It was very evident that these men would be exposed to considerable danger. Twenty were called for, and there was an immediate response. But only nine, including the major of volunteers and four or five of the Dublin Fusiliers, actually stepped out into the open. The attempt was nevertheless successful. The truck heeled further over under their pushing, and, the engine giving a shove at the right moment, it fell off the line and the track was clear. Safety and success appeared in sight together, but disappointment overtook them.

The engine was about six inches wider than the tender, and the corner of its footplate would not pass the

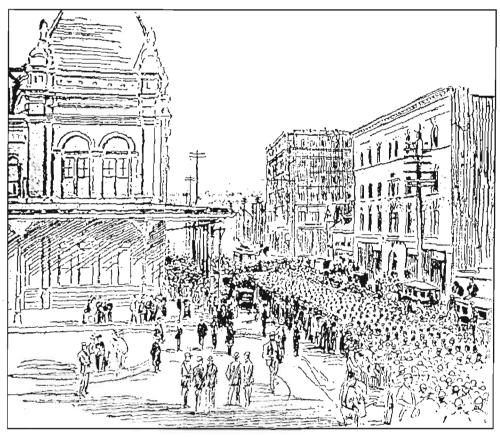
corner of the newly overturned truck. It did not seem safe to push very hard, lest the engine should itself be derailed. So time after time the engine moved back a yard or two and shoved forward at the obstruction, and each time moved it a little...... The engine hauled at the wreckage, and before the chains parted pulled it about a yard backwards. Now, certainly, the line was clear at last. But again the corner of the foot-plate jammed with the corner of the truck, and again we came to a jarring halt.

I have had, in the last four years, the advantage, if it be an advantage, of many strange and varied experiences, from which the student of realities might draw profit and instruction. But nothing was so thrilling as this: to wait and struggle among these clanging, rending iron boxes, with the repeated explosions of the shells and the artillery, the noise of the projectiles striking the cars, the hiss as they passed in the air, the grunting and puffing of the engine - poor, tortured thing, hammered by at least a dozen shells, any one of which, by penetrating the boiler, might have made an end of all - the expectation of destruction as a matter of course, the realization of powerlessness, and the alternations of hope and despair - all this for seventy minutes by the clock with only four inches of twisted iron work to make the difference between danger, captivity, and shame on the one hand - safety, freedom, and triumph on the other.

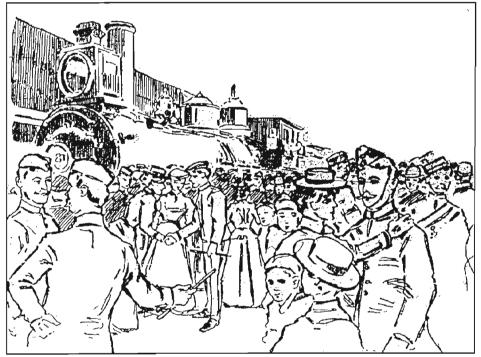
Nothing remained but to continue pounding at the obstructing corner in the hopes that the iron work would gradually be twisted and torn, and thus give free passage. As we pounded so did the enemy. I adjured the driver to be patient and to push gently, for it did not seem right to imperil the slender chance of escape by running the risk of throwing the engine off the line. But after a dozen pushes had been given with apparently little result a shell struck the front of the engine, setting fire to the woodwork, and he thereupon turned on more steam, and with considerable momentum we struck the obstacle once more. There was a grinding crash; the engine staggered, checked, shoved forward again, until with a clanging, tearing sound it broke past the point of interception, and nothing but the smooth line lay between us and home.

Brilliant success now seemed won, for I thought that the rear and gun trucks were following the locomotive, and that all might squeeze into them, and so make an honourable escape. But the longed-for cup was dashed aside. Looking backward, I saw that the couplings had parted or had been severed by a shell, and that the trucks still lay on the wrong side of the obstruction, separated by it from the engine..... Captain Haldane determined to be content with saving the locomotive..... As many wounded as possible were piled on to the engine, standing in the cab, lying on the tender, or clinging to the cowcatcher. And all this time the shells fell into the wet earth throwing up white clouds, burst with terrifying detonations overhead, or actually struck the engine and the iron wreckage...... The engine was soon crowded and began to steam homewards - a mournful, sorely battered locomotive - with the woodwork of the firebox in flames and the water spouting from its pierced tanks..... Increasing its pace, it drew out from the crowd of fugitives and was soon in safety.

Meanwhile, back in Canada, interest in South Africa grew greater day by day. All through the summer of 1899 Canadians read reports of the deteriorating situation, and the ever-increasing liklihood of war. So there was little surprise when, on October 12, the war did indeed break out. We will not go into the politics of the issue, but there was such a rush to volunteer that the federal government decided to send a contingent of troops to South Africa. This was not the first time that an organized force of Canadians had been sent to an overseas war, for in 1884 a group of Canadian boatmen had been sent to the Nile as part of the unsuccessful expedition to rescue General Gordon from Khartoum. However 1899 was the first time that an organized contingent of Canadians went overseas, as a fighting force, to fight in an overseas conflict. In these days of Imperial pride, there was no difficulty in finding volunteers, and much enthusiasm was shown by most of the population.



The parade of recruits arriving at Montreal's Bonaventure station on the morning of October 25, 1899, ready to board the trainfor Quebec. Note the street car and omnibuses in the background. La Presse, Montreal, le 25 Octobre, 1899



The recruits saying goodbye to their families and friends at Bonaventure station in Montreal on October 25, 1899. Soon they will board the Grand Trunk train which will take them to Quebec, where they will embark on the "Sardinian" for South Africa.

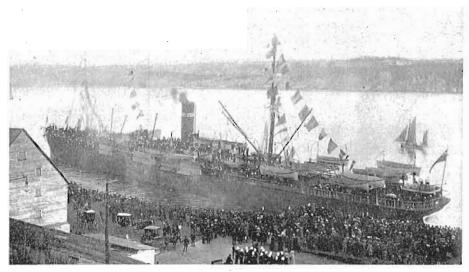
La Presse, Montreal, le 25 Octobre, 1899.

By the end of October, 1040 officers and men had "joined the colours" and on October 30, 1899 the first contingent boarded the Allan liner "Sardinian" and sailed from Quebec City bound for South Africa. In keeping with the general enthusiasm, the Grand Trunk Railway offered return tickets for the price of one-way from anywhere on their system to Quebec, to encourage people to go and see the troops off. The "Sardinian" had a very long career. Launched in 1874, it was already quite an old ship in 1899. It was the same vessel on which Sir John A. Macdonald had sailed to England in 1881 during the early days of the CPR construction. On November 26 1901 it sailed from Liverpool carrying Marconi and his equipment to set up a wireless station in Newfoundland. Many years later the CPR took over the Allan Line, and the old "Sardinian" joined the CPR fleet. Sold in 1920, it became a coal hulk at Vigo, Spain, and was finally scrapped at Bilbao, Spain in 1938.

During the tine the Canadians were en route, things were going very badly for the British in South Africa. The major towns of Mafeking and Kimberly had been under siege since October 12, and on November 1, following the Boer invasion of Natal, Ladysmith was also cut off and besieged. Many troops were caught in the besieged towns, and all three sieges lasted well into 1900, although none of the three was ever captured. These towns were important railway centres, and with them besieged by the enemy the efficiency of the railways was greatly diminished. For a time it seemed as if the Boer forces would sweep right through to the coast at Durban and occupy the whole of Natal. During these dark days, in fact throughout the whole war, the railways, especially those from Cape Town and Durban, performed invaluable service in

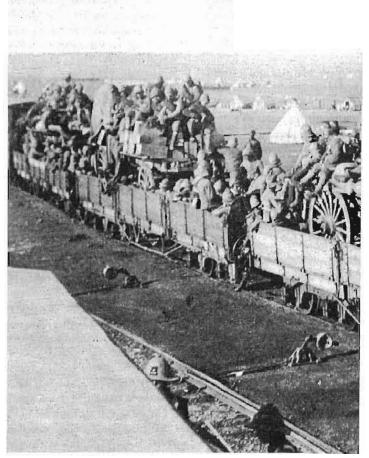
moving troops and supplies. When Canada saw that this was not going to be a short war, there was a demand for a second contingent. Scarcely had the first departed than recruiting and organization began on the second. All this took more than six weeks, but the second contingent sailed from Halifax, aboard three different ships (the "Laurentian", the "Pomeranian" and the "Milwaukee") between January 20 and 31, 1900. Meanwhile the "Sardinian", with the first contingent, had arrived in Capetown on November 30, 1899, where they heard the news of the British defeats. The next day they boarded trains for De Aar Junction, 501 miles north. For two months they underwent intensive training, and all were ready for battle by the end of January. However some Canadians had already seen action. On the last day of 1899 a flying column under Colonel Pilcher attacked and captured a Boer strong point. In this column were members of

Company "C" of the Royal Canadians. This was the first time in history that Canadians, Australians and Englishmen had fought side by side, and they were victorious.



The "Sardinian" leaving the wharf at Quebec on October 30, 1899, bound for South Africa with the first Canadian contingent. It would take a month to get to Capetown, and another month before any of the Canadians got into action. Alas, for some it would be a one way trip.

Collection of Weldon McLean.

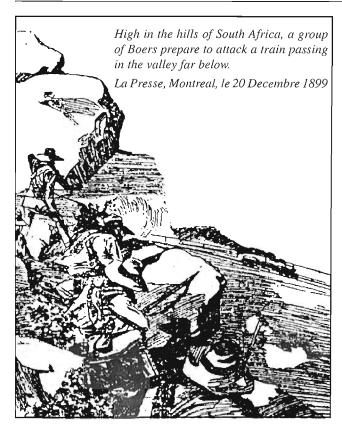


Off for the front! Canadian troops aboard a train of open-topped cars about to cross the veldt en route to Paardeburg in February, 1900. Collection of Weldon McLean.

By the end of 1899 the tide began to turn. The British government, finally listening to the advice of Queen Victoria, appointed Lord Roberts (commonly known as "Bobs") as commander of the British forces in South Africa, with Lord Kitchener as his immediate subordinate. At last a winning team had been found. However it took time for Roberts and Kitchener to get to South Africa and in the meantime there was another disaster at Spion Kop on January 24, 1900. However the pendulum was swinging in favour of the British, and the siege of Kimberly was lifted on February 15, 1900.

The biggest contribution to the war effort in Canada, and in fact in the entire empire, came from Lord Strathcona. Here there is a definite railway connection, for Strathcona was the same person who, when known as Donald A. Smith, had been closely involved in the CPR, and had driven the Last Spike at Craigellachie, B.C. on

November 7, 1885. Early in 1900 he offered to raise and equip a mounted force of 500 plainsmen and land them at Capetown, all charges prepaid. His offer was accepted and the corps was



raised by the Canadian Minister of Militia under Lord Strathcona's direction. Lieut.-Col. Sam Steele of the North West Mounted Police was given command. Recruiting began on February 5, and was completed, with all lists full, five days later. This unit was known as Lord Strathcona's Horse, and consisted largely of Westerners, including NWMP officers, with great experience in horsemanship. The Strathcona Horse, to use its popular name, was reviewed by Prime Minister Laurier on March 8, and on March 15 embarked at Halifax on the "Monterey" bound for Capetown.

In the meantime, Canada's big moment had come at the battle of Paardeburg on February 27 when Boer general Cronje surrendered to a force consisting largely of Canadians. The very next day, many miles east in Natal, the siege of Ladysmith was relieved, and among those entering with the relief force was Winston Churchill. Now only one town remained besieged; Mafeking, where Col. R.S.S Baden-Powell was holding out despite daily bombardment. News of the relief of Ladysmith arrived in Canada on March 1, and touched off great celebrations. However in Montreal the enthusiasm was somewhat smothered by a 48-inch snowfall, the worst of the 1900s, with the possible exception of the great storm of March 1971. The city was paralyzed, even the street cars offered little service, and outdoor celebration was kept to a minimum. For many years thereafter the 1900 snowfall was always referred to as the "Ladysmith Storm".

Meanwhile the Imperial forces moved forward slowly. On March 13 occurred the surrender of Bloemfontein, the capital of the Orange free state, and gradually the Boer-occupied territories became smaller and smaller. In most of these actions the Canadian played important parts, and of course the railways were the lifeline, moving men and supplies 24 hours a day.



When money ran short in besieged Mafeking, Baden-Powell ordered these siege notes to be printed. The 10-shilling note was designed by "B-P" himself, and it is said that the pictures were engraved on wood obtained from an old croquet mallet! The notes were redeemable after the siege, but many were kept as souvenirs.

Then on May 17 occurred the moment everyone was hoping for, the relief of Mafeking. Since October 12, Baden-Powell and his beleaguered garrison had been holding out, and the siege had become a world-wide symbol of British "pluck" and tenacity. There was, however, real danger, for a truly determined Boer attack could easily have taken the town. Then on May 17, a force under Cols. Mahon and Plumer finally broke through and raised the siege. Around the world spread the electrifying bulletin that later became the symbol for sudden important news: "Mafeking is relieved!". After all the tension and suspense of the last seven months, people everywhere were relieved too, and the news was the excuse for great celebrations, comparable to those at the end of both world wars. Baden-Powell later became famous as the founder of the Boy Scouts. To this day, their uniforms resemble those of the scouts that served under "B-P", as he was known, in South Africa.

The end now appeared near. Johannesburg fell to the British on May 31, and, on June 5 the Imperial troops finally occupied Pretoria. In this march to Pretoria the Canadians, including the Strathcona Horse, played an important part. The Strathcona Horse remained an individual unit rather than being combined with British units. Hence they were the only group in the entire war to receive the Queen's South Africa Medal with the dates "1899-1900". The dates had been planned to appear on all the medals, but when the war extended beyond 1900 they were ground off the medals already made, except for those to the Strathconas who received the full dated medals. On its return to Canada, the Strathcona Horse remained in existence and, headquartered in Calgary, still exists today.

In due course the Transvaal and the Orange Free State were annexed to the British Empire, and later in 1900 the Canadian contingents returned home. Their losses had been serious, but nothing remotely what they would be in the wars of 1914-1918 and 1939-1945. Altogether 224 Canadians had been killed in battle, one of which was Lieut. Borden, the only son of the Minister of Militia. However many more Canadians had died of enteric fever, caused by drinking bad water. When

the Canadians returned home there were huge celebrations of welcome. That in Toronto on November 5, 1900 was typical. The returning troops marched under a huge banner, reading "Toronto Welcomes Her Brave Boys", stretched across Bay Street in front of the new city hall.

That should have been the end of it, but unfortunately it wasn't. Unbelievably the war was less than half over! Despite the occupation of much of their country, the Boers did not make peace but took to the hills and carried on guerrilla warfare. By now there were few Canadians remaining in South Africa, as most major units had returned home. Although there were no more big battles, the new phase of the conflict brought out the worst on both sides. There were sneak attacks and raids, and the British instituted a policy of farm-burning, and detaining civilians in concentration camps. On January 1, 1901 the twentieth century began, and three weeks later, on January 22, the Victorian era ended, as the old queen died; yet still the Boer War went on. Finally, efforts at peace negotiations were successful, and on May 31, 1902 a peace treaty was signed at Vereeniging. The long war was over at last.

Seven years later, the various South African colonies, now firmly a part of the British Empire, united to form the Union of South Africa. Then in 1914 came the outbreak of World War I, and the countries of the Empire once more joined the forces in far greater numbers than before, as if South Africa had been a "dress rehearsal" for

the big one. There was a difference this time. Many of the Boer officers and men, once enemies of Britain, now fought beside the British, their superb fighting qualities well known to those who had once faced them in battle. Eventually the old empire ceased to exist, being replaced by the Commonwealth, an association of free and independent nations. In later years political differences caused South Africa to leave the Commonwealth, but in the 1990s, following its transition to democratic rule, it rejoined, and is now a full member once again.



The banner hung across Toronto's Bay Street welcoming the troops home on November 5, 1900.



The Queen's South Africa medal, awarded to all those who served. The other side has a picture of the Queen. Note the ghostly dates "1899-1900" which were ground off when the war continued beyond 1900. After years of tarnishing and cleaning, the dates have reappeared. The bars indicate particular actions. A few medals had as many as nine bars.

The South African railways recovered from the destruction of 1899-1902, and are still very much a part of the country. Until quite recently they were a standby of steam, as huge Beyer-Garretts climed the steep mountain ranges on their way inland. Railway lines still pass through Kimberly, Ladysmith and Mafeking; in fact the later town is still an important railway centre. It is not known if anything remains of the old armoured trains, but after 100 years it is doubtful if much is left.

In Canada, as elsewhere in the Commonwealth, veterans of the Boer War held reunions for many years. For Canadians the big day was February 27, Paardeburg Day, when the veterans would get together, renew old acquaintances, sing some of the old songs like "Soldiers of the Queen" and re-tell their wartime experiences. Your editor remembers talking to an old family friend, Weldon McLean (1881-1962) of Saint John N.B. There is another railway connection here, for his father, Hugh H. McLean was a director of the New Brunswick Southern Railway, and also of the Saint John Railway (the street car company) from 1894 to 1917, and was president of that company from 1913 to 1917. Weldon McLean had sailed on the "Sardinian", with the first contingent, on October 30, 1899 and remembered it well. Interestingly, he would talk readily about his South African experience, but would seldom mention his far greater service in the two world

wars; they were just too terrible to talk about. He was interested in railways and may have been the only Boer War veteran to become a member of the CRHA! Regarding South Africa, he did say "we didn't know what we were fighting for". In time the old veterans died; the last meeting of the South African Veterans in Saint John being held in the early 1970s, more than seventy years after the war. Now they are all gone, and few people in this generation even remember what happened.

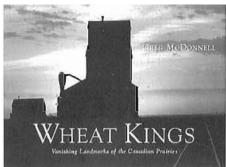
Canada still has many mementos of the Boer War, if one knows where to look. Most larger cities have monuments; that in Montreal, in the old Dominion Square, being especially impressive with its equestrian statue of a member of the Strathcona Horse. There are also towns, some of which were founded about 1900, which bear names evocative of the Boer War. There is a Ladysmith and a Kimberley in British Columbia (both, interestingly, the site of tourist railway operations). There is also a Mafeking, Manitoba, and some Estcourts, Mafekings, Natals and other towns in various places. The largest place named for a Boer War veteran is Kitchener which was renamed from Berlin in 1916, during World War I.

Regardless of how one may feel about the justification for the war, it nevertheless was an important part of Canadian history which should never be forgotten. Additionally, the railway adventures were spectacular, fully comparable to those of the Canadian Railway Troops in the 1914-1918 war. After a century it is well to look back on our history of what happened in South Africa, "lest we forget".

Book Reviews

WHEAT KINGS: VANISHING LANDMARKS OF THE CANADIAN PRAIRIES

By Greg McDonald



"Wheat Kings" acts as witness to the end of a rich chapter of prairie history; from the dusty interior of the Gretna, Manitoba working elevator nearing its final days to the lonely pursuit of the peddlers, pullers and tramps that patrol the CN rail line through Wroxton until the line's abandonment and the permanent closure of its attendant Sask Pool A elevator. Wheat Kings documents the reshaping of the vast western horizon due in part to the ever increasing numbers of silo-shaped super elevators rising over the prairie. These new order efficiencies not only spell doom for the small town elevator but cast countless small villages and community businesses into oblivion. The inevitable arrival of the wreckers and abandoned rail lines turn once thriving communities into ghost towns yet Wheat Kings conveys the still-evident pride and will of the prairie's people. "Everybody thinks we're closing but we're not," says one of six people still living in the sleepy village of McMahon, Saskatchewan. And quitting is not in Leonard Richmond's plans either. As long as he keeps returning to the country elevator, Leonard and the Neelby B will be part of a precious link with the tradition and heritage of the prairie and the nation — the tradition and heritage of the Wheat Kings.

120 pages, 100 colour photos

Published by Boston Mills Press, 132 Main Street, Erin, Ontario

Price: \$39.95 Canadian, \$29.95 U.S.

MAGNETIC NORTH CANADIAN STEAM IN TWILIGHT

By Roger Cook and Karl Zimmerman

"The next day, crisp and cloudless, we would follow Pacific No. 2229 peddling its goods from Farnham to Montreal's St. Luc Yard. But somehow we had said farewell to Canadian steam the day before at Mount Orford, as the ghostly Ten Wheeler charged upgrade out of the mist, whistling plaintively for the road crossings, it's modest clattering behind." p. 131

On May 29, 1958 Roger Cook and Karl Zimmerman stood amid the soon-to-be-razed classical grandeur of New York's Pennsylvania Station, ready to board the Montrealer, for their first trips together to Canada in search of steam. In the next two years, they'd encounter and sometimes travel with others who enriched their understanding of Canadian railroading as they ventured often to Montreal, to Toronto, to the Waltham

Branch running west from Ottawa, and finally to Quebec's Eastern Townships. Magnetic North is an inspiring record of their travels, some armchair but mostly real, into Canada in those magic days when the air was sweet with hot grease and sour with coal smoke, when cinders crunched under foot, and when the crack of locomotives exhaust echoed off the hills.



In a sense, Roger and Karl have been collaborating on this book for 40 years. In carefully wrought essays and in photographs selected from among many hundreds made by the authors, Magnetic North is a vision of classic steam railroading rendered with first-person immediacy. Steve Ward, Jim Shaughnessy and Don Wood, all gifted photographers, traveled extensively in search of Canadian steam and contributed countless photographs as well as personal recollections to Magnetic North, enriching the scope and artistry. Magnetic North is an inspiring chronicle of the brief, bright moment when steam locomotives ran their final miles in Eastern Canada.

Karl Zimmerman is a frequent contributor to Trains Magazine. His stories on trains and travel have also appeared in such publications as the Globe and Mail, the New York Times, the Washington Post, the Los Angeles Times among others. He is the author of 12 previous books including "CZ: The Story of the Califomia Zephyr", "The Milwaukee Road under Wire" and "Lake Michigan's Railroad Car Ferries".

Roger Cook's photographs have been featured in numerous books, including several written by Karl Zimmerman. Together they authored "The Western Maryland Fireballs" and "Black Diamonds". His photographs appear regularly in such magazines as Trains, Railfan & Railroad, CTC Board and Locomotive & Railway Preservation.

11 X 8.5 inch hard cover

160 pages, 180 duotones, 40 colour images

Published by Boston Mills Press, 132 Main Street, Erin, Ontario

Publication Date: November 1, 1999 Price: \$49.95 Canadian, \$37.95 U.S

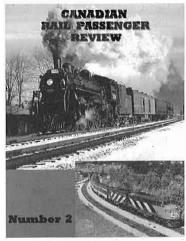
CANADIAN RAIL PASSENGER REVIEW, No. 2

By Douglas N.W. Smith

Each year we look forward to the annual appearance of Doug Smith's Canadian Rail Passenger Reviews, and the present issue (numbered 2, following a renumbering last year) continues the high standard set in previous years. This number is

"dedicated to the men and women who have worked for the Camadian Railways". There are 100 pages of text, containing 162 illustrations (including maps and drawings), 42 of them in

colour.



In addition to the usual review of the preceding year, there are feature articles, including some with a decided "end-of-century" flavour (although the century will not end until December 31, 2000). We see "The 20th Century in Retrospective", describing a significant development in passenger rail for each of the ten decades from the 1900s to the 1990s. There is also "The Century's Most Popular Train", but you must read the book to find out what it was!

Continuing the standard set by the previous history of trains in London, Ontario, we read a 29-page article on "The Stations and Trains of Levis", which recently lost its passenger service. We are surprised to find how many of Levis' stations burned down! There are also articles on the White Pass & Yukon, the Talgo trains, the West Coast Express, the Minister of Transport, the Development of the Roomette, and other interesting items.

Once again, this publication is highly recommended.

Published by: Trackside Canada,

P.O. Box 1369, Station "B", Ottawa, Ontario K1P 5R4

Price: \$23.95 Canadian.

ACROSS THE CANADIAN SHIELD

By Alan Lill and Robert Wanner

This book is unusual in that it covers only a very short time span and a very isolated area of Canada which has received very little attention to date. The book's coverage is very comprehensive thanks to the variety of photographs of not only trains but also structures and people at work. The purpose was to try to give an in-depth detailed picture for the historian, railfan and modeller at the transition time from steam to diesel on the Canadian National's main line through northern Ontario to Winnipeg, Manitoba rather than the more usual overview covering a much longer time span and broader geographic area. The colour photos in particular are a great aid to modellers both in terms of prototype colour schemes and weathering.

"Across the Canadian Shield" is profusely illustrated with the majority of the 185 photos a full eight-by-ten size with detailed captions covering steam and first generation diesel locomotives, equipment, structures, and operations. It contains

fascinating accounts from those who were there when the CNR was the life line of a very isolated area of Canada as well as the principal transportation link between East and West. The book covers one of the last runs of the "Continental Limited" and the introduction of the "Super Continental" as well as fast freights, express extras and lowly mixed trains pulled by a wide variety of steam and diesel power. It contains a detailed description of train order railroading using a dramatic real-life situation with actual orders and expert commentary provided by retired CNR dispatcher H.R. (Bob) Clarke. You visit Winnipeg and Transcona, Manitoba as well as Redditt, Sioux Lookout, Nakina, Hornepayne, Capreol and Windsor, Ontario when the sounds of steam engines still echoed through these and other smaller isolated communities.



Many of the trains featured in the book operated all the way from Vancouver to Toronto and Montreal which should spark the interest of modellers, railfans, and railway employees everywhere. Many folks will recall traveling through the Canadian Shield by train before the airlines became the principal means of long distance public transportation. The book's Epilogue compares today's railroading to the time when the CNR was the largest employer in Canada and a major focus in many communities.

The detailed appendices include locomotive assignments for the Western and Central Regions as well as listings of freight and first-class passenger cars in service on the CNR during the mid 1950s. There are track plans at key locations and scale drawings of a variety of station types.

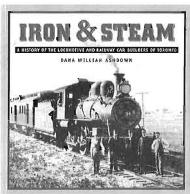
"Across the Canadian Shield" is hard bound in landscape format, 8 1/2 " by 11 inches, with 208 pages of which 32 are in full colour. The colour covers have beautiful scenes of CNR trains crossing the Canadian Shield.

The price is \$49.95 (plus GST) in Canada or \$36.95 in the United States (US funds to US addresses).

The CN Lines Special Interest Group, c/o 260 Henderson Highway, Winnipeg, MB, Canada R2L 1M2 publishes the book. Several of the members have contributed substantially to the production and marketing of the book including Stafford Swain who assisted in the research and copy editing and Hilt Friesen who did the layout and typesetting. It is available from hobby shops and bookstores and can also be ordered direct. Direct orders should add \$5.00 for postage and handling plus 7 percent G.S.T in Canada. Visa or Mastercard may be used on direct purchases.

IRON & STEAM: A HISTORY OF THE LOCOMOTIVE AND RAILWAY CAR BUILDERS OF TORONTO

by Dana William Ashdown



Nearly 150 years ago James Good transformed his burgeoning iron foundry at the corner of Yonge and Queen streets into the Toronto Locomotive Works. Within months the first railway engine built in British North America - the Toronto - was born, and over the next seven decades Toronto's factories rolled out more than 220 steam and electric locomotives and hundreds of cars for Canada's railways, not to mention giant Bucyrus steam shovels, turntables, bridges and streetcar trucks.

The names of the customers who bought this equipment are now legendary: the Ontario, Simcoe and Huron Union; the Northern; the Buffalo, Brantford & Goderich; the Buffalo & Lake Huron; the Cobourg & Peterborough; the Grand Trunk; the Great Western; the Toronto, Grey & Bruce; the Toronto & Nipissing; the Canada Southern; the Canadian Pacific; the Canadian Northern; and others. Yet the six concerns responsible for this prodigious output are largely forgotten. Most were general iron founders like James Good's Toronto Locomotive Works; Dickey, Neill & Company's Soho Foundry; William Hamilton & Son's St. Lawrence Foundry; and Canadian General Electric's Canada Foundry Company, later known as Canadian Allis-Chalmers. McLean & Company's Toronto Car Factory specialized in railway cars, as did the Canada Car & Manufacturing Company. The latter was a unique social and economic experiment that relied on convict labour from the Central Prison, an industrial reformatory opened in 1874. It was believed that learning a useful trade would enable criminals to earn a living in the community and make them less likely to return to crime. The story of this fascinating confluence of commerce, prison reform and politics is told in detail.

The successes and failures of these enterprises were inextricably linked to the tidal forces of the economy, not to mention their own business acumen and will. Now, for the first time, "Iron and Steam" reveals their full story, from humble beginnings to triumphs and downfalls, through text and pictures. Railway buffs will delight in the descriptions of equipment, including coverage of every known locomotive built. Industrial archaeologists can tour the works. And history readers in general will discover new insights into Canada's past.

Dana William Ashdown is a Toronto-based researcher with a special interest in transportation and military history, and the author of "Railway Steamships of Ontario" (Boston Mills Press, 1988), described by Canadian Geographic as "a valuable source for probing Ontario's shipping past," and by

the Toronto Sun's Mike Filey as "wonderful reading." In addition, he was a contributor to the book "Researching Yonge Street", edited by Sheila Brown (Ontario Genealogical Society, Toronto Branch, 1996), and he has written a number of articles published in Canada and the United States.

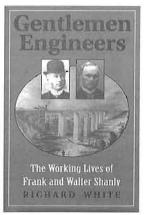
302 pages, 7 1/2 X 7 1/2 inches. About 140 photos, drawings and maps

Published by Robin Brass Studio, 10 Blantyre Ave., Toronto, Ontario M1N 2R4

Price: \$22.95 Canadian.

GENTLEMEN ENGINEERS, THE WORKING LIVES OF FRANK AND WALTER SHANLEY

By Richard White



"Gentlemen Engineers" tells the engaging story of the working lives of Frank and Walter Shanly, two well-connected nineteenth-century Canadian civil engineers and businessmen who worked on many of the significant projects of the age. Drawing on rich documentary sources, Richard White reveals details of their work, not just in the office and in the field, but in their homes and private studies as well.

The most striking discovery White makes is that when the brothers entered the civil engineering profession in the 1840s, it was already an established profession with a fairly high social status. The Shanlys were from an old Irish gentry family, but found the profession quite compatible with their social position and gentry culture. The author thoroughly explores the connection between the Shanlys as engineers and as gentlemen. White finds another unexpected theme in the Shanlys' lives. In much of the recent social history of business, studies of elite nineteenth-century businessmen have tended to concentrate on how these men acquired, consolidated, and transmitted power and status over generations. But the careers of Frank and Walter Shanly were, in fact, full of hard work, struggle, and disappointment.

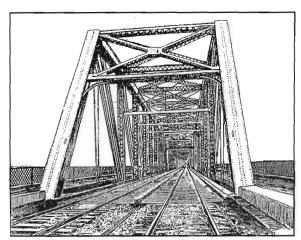
This study is an important contribution to our understanding of the professionalization of civil engineering, and to the modernization of business practices in nineteenth-century Canada.

Richard White has a PhD in history from the University of Toronto. He works as a freelance historian, and teaches Canadian history at several universities in the Toronto area.

Published by: University of Toronto Press

Price: \$50.00 Canadian.

The End of the Century??



Victoria Bridge open for road traffic. La Presse, Montreal, le 1 Décembre, 1899



Santa in his automobile. Toronto Star, December 15, 1899

drift in his swell new automobile!

This is the last page of Canadian Rail for the 1900s, and the 11,971st since the publication began in 1949. As a commemoration, we reprint three interesting illustrations from December 1899, just 100 years ago, that we discovered while researching the Boer War article that appears in this issue. Most interesting from the rail historian's point of view is the fact that on December 1, 1899 the rebuilding Victoria Bridge was completed, and the roadway opened that day. This was the first road crossing of the St. Lawrence, and it is still in use after 100 years. Although the schedule of tolls on the bridge did

not mention automobiles, that machine had appeared on the scene, as we see from the delightful drawing of Santa Claus in an auto that appeared in a Simpson's advertisement in the Toronto Star on December 15, 1899. Already he had abandoned his sleigh and reindeer but, judging by numerous Christmas cards of the last 100 years, he even took the train sometimes and, of course, still uses the sleigh on many occasions.



Then, on December 30 1899, La Presse published this cartoon giving their predictions for "Le Siecle Nouveau". Unlike so many more optimistic predictions, they got it almost right on, although they missed the airplane and computer. However they did show both a locomotive and street car. Perhaps influenced by the war then raging in South Africa, they predicted a 50-50 mix of peace and war; just about the way it turned out.

Finally it must be pointed out that, although the 1900s are ending, the 20th century has one more year to go. There was no year 0, so 2000 is the 100th year of the 20th century. The following lines are from a poem written on January 1, 1801, almost 200 years ago, and reprinted in the Gazette 100 years later, on January 1, 1901. This is a good way to end the article:

Precisely at 12 o'clock last night
The 18th Century took its flight.
Full many a calculating head
Has racked its brains, its ink has shed
To prove by metaphysics fine
A hundred means but ninety nine.
Go on ye scientific sages
Collect your light a few more ages.
Perhaps as swells the vast account
A century hence you'll learn to count.

BACK COVER: On a snowy Sunday, January 7 1962, Peter Murphy and Fred Angus took a ride on the CNR train to Lac Remi, in the Laurentians. This photo shows the rear of the caboose on the snow plow train which departed southbound, half an hour before the passenger train, seen on the right of the photo. It was one of the worst storms of the winter, so the plow was definitely needed; but plow and passenger train got through all right. We never learned the meaning of the "6" drawn in the snow on the back of the caboose! The following June this scenic line was abandoned.

Photo by Peter Murphy

Canadian Rail

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