## Canadian Railway Troops.

The story of the Canadian Railway Troops is one of the romances of the war recording how one Battalion of Canadian Railwaymen grew into a Corps of nearly 16,000 strong, which from the Spring of 1917, took a major part in the construction and maintenance of railways of all gauges to within easy reach of the Front Line. After the Battle of the Somme, it was clearly proven that road and animal transport could not alone bring forward in the fighting zone over shell-torn terrain, the weight of war material (as much as 2,000 tons per mile of active front per day) required to stage a modern battle.

In the early stages of the War, the French General Staff assumed the entire responsibility for the maintenance and construction of railways, in the zone of the British Armies on the Western Front. Though six Imperial Royal Engineer Railway Construction Companies were sent to France in 1914, they were not permitted by the French to do any, or scarcely any, work until it was recognized that the duration of the War would be indefinitely prolonged, and the French Government would be unable to furnish either sufficient Railway Construction personnel or material.

In 1914, some well known Canadian railway contractors requested the Department of Militia and Defence to be allowed to raise a Railway Construction Unit, but for reasons outlined in the preceding paragraph, this proposal was not approved.

However, in the Spring of 1915, the War Office requested the Canadian Government to send over two Railway Construction Companies. These, the Canadian Pacific Railway Company undertook to organize at the request of the Department of Militia and Defence with the result that the Canadian Overseas Railway Construction Corps proceeded to France in August, 1915.

This Unit was made up of 500 picked men from the construction forces of the Canadian Pacific Railway. Each man before enlisting was required to pass a test as to his technical ability before he joined the unit which was the pioneer Canadian Railway Construction Unit in France.

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After personal representations had been made to several Departments of the War Office, it was finally decided in May, 1916, to ask the Dominion to furnish another Unit of approximately 1,000 strong for railway construction work on the Western Front.

**Reorganized Transport Service.**—The organization of this Battalion fell to Major-General J. W. Stewart, C.B., C.M.G. (then Lieutenant-Colonel), who gathered recruits from among the experienced railway workers of every Province in the Dominion. It was known as the 239th Overseas Railway Construction Corps, but before it could sail, General Stewart was called to England, at the request of the War Office, to assist in the general organization of better transport facilities on the Western Front.

As outlined above, after the commencement of the Battle of the Somme, it was decided by the Imperial General Staff to make greater use of railways, and more especially of light railways in forward areas as used by both the French and Germans. To accomplish this, Sir Eric Geddes was appointed Director-General of Transportation, with practically plenipotentiary powers to re-organize all the transportation services on the British Western Front.

As during recent years more new railways have been built in Canada than in any part of the British Empire, Sir Eric Geddes naturally looked to Canada for a man to supervise and direct the construction of railways.

It was agreed that Canada should furnish five Battalions of construction men to be known as the Canadian Railway Troops, and that Major-General (then Lieutenant-Colonel) Stewart should proceed to France immediately to act as Deputy Director of Light Railways as well as being in immediate command of the Canadian Railway Construction Battalions on their arrival in France. Colonel, then Lieutenant-Colonel, Angus McDonnell, C.M.G., was delegated to remain in England to organize the units and to follow Major-General Stewart as Second in Command on the completion of the organization.

On Jan. 1, 1917, Major-General Stewart (then BrigadierGeneral) was appointed Deputy Director General Transportation (Construction) and made directly responsible to the Director General of Transportation for all railway construction, the maintenance and provision of necessary material, thus having supervision of the work done by the Royal Engineers'

Railway Construction Companies (at this time numbering 5,312 all ranks), in addition to that done by the Canadian Railway Troops, as well as direct administrative command of the latter.

An administrative office to deal with the organization was set up in London, and a depot established at Purfleet, Essex.

The original five Battalions were made up as follows:—

The 1st Canadian Construction Battalion which had proceeded to France on Oct., 1916, and at that time (Nov. 11, 1916), was working on standard gauge railways, was re-organized and re-equipped as the 1st Battalion Canadian Railway Troops in France.

The 127th Infantry Battalion, then at Bramshott, was re-organized as the 2nd Battalion Canadian Railway Troops, proceeding to France Jan. 11, 1917.

The 239th was re-named the 3rd Battalion Canadian Railway Troops, and went to France on March 22, 1917.

The 4th and 5th Battalions were organized at Purfleet, and proceeded to France in Feb., 1917.

However, before the 3rd Battalion left for France on March 22, it had been decided to increase the number of Battalions to 10, and as more units arrived from Canada, they were sent to Purfleet. So swiftly was the new organization carried out, that by April 1, 1917, there were six Canadian Railway Troops Battalions fully equipped and serving in the Field. All 10 Battalions were at work on the British Western Front by the end of June of the same year.

The greater number of the Units were employed on light railway construction and maintenance, and with the help of attached labour since 1917, all the light railway construction and maintenance, on the British Western Front until the Armistice was signed, was carried out by Canadian Railway Troops.

The whole Canadian Railway Troops organization was separate from the Canadian Corps. The administrative Headquarters of the Canadian Railway Troops were established at General Headquarters of the British Armies in France in March, 1917, to enable Major-General Stewart to fill the dual capacity of General Officer Commanding the Canadian Railway Troops, and Deputy Director of General Transportation (Construction).

Just in Time.—The Railway Troops, indeed, arrived in France just in time to prove their worth. During the German retreat on the Somme, in February and March, the first of the

Battalions to arrive were able to push forward standard gauge and light railway lines with surprising rapidity in spite of the obstacles and difficulties imposed by atrocious weather and the thoroughness of the destruction left by the enemy in the wake of his retreat.

On the 9th of April, 1917, began the Battle of Arras, when the Canadians attacked and captured Vimy Ridge, then the strongest German fortress on the Western Front. For several weeks prior to the opening of the attack the weather had been extremely bad and the ground in the battle area was like a quagmire. Notwithstanding this, the Canadian Railway Troops had laid steel to within a short distance of the front line.

Then, as soon as the Infantry advanced on that memorable Easter Monday, the Railway Battalions constructed new lines on the heels of the fighting men. Supplies and ammunition were carried forward . on standard and light gauge lines, and the wounded were evacuated over them to the very doors of the Field Ambulance Dressing Stations and the Casualty Clearing Hospitals. It was the first time that such work had been accomplished during the War.

Within a week of the opening of that Arras offensive, trains were running to the brow of Vimy Ridge, and by the end of April, by which time the British lines had been pushed for some distance across the level plain stretching beyond the Ridge, light railways were running forward as far as the Battalions' ration dumps.

The next big Offensive in 1917 was at Messines, and there the Railwaymen from Canada contributed their quota to success, in spite of interruptions caused by enemy shell fire, the almost impassable sea of mud which they were compelled to cross, and the many other obstacles that beset the path of railway construction on the battlefield-obstacles that are unknown to the civilian railroad worker. Nor were the Railway Troops less determined and successful during the final attack at Passchendaele, in which the Canadian Corps again won undying fame under conditions among the most trying and exasperating encountered during the War.

Task at Ypres.—The difficulty of the task set the Canadian Railway Troops in the Ypres salient may be gauged from the fact that during more than two months of the Summer of 1917, the average daily number of breaks in the light railway lines due to enemy shell fire, was about 100 in the areas of the 2nd and 5th British Armies alone.

It was in March, 1918, when the German Offensive began in the Somme sector, that it unfortunately became necessary to, leave many miles of standard and light gauge railways in the hands of the enemy. Seven Battalions of the Corps of Canadian Railway Troops had to be withdrawn from railway work and were employed for a time on the construction of a rear defence trench system. In this work, which was carried out under the direction of Major-Genera} Stewart, they were assisted by 20,000 troops from Labour, Engineer, Road and other technical Units. When the task was completed, they had built a defensive trench system on a front over 30 miles, with a total trench mileage of approximately 120 miles. In addition many strong points and machine gun emplacements were built and the whole front protected with thick belts of wire.

In addition to this work the railway system was being altered and lines added so that, if the position became still more serious, supplies and material could be handled with greater despatch and convenience. Nor was this all. On the southern part of the Front, a point where the German thrust had been most successful, the Railway Troops were kept busy on the reorganization of the Lines of Communication.

As Fighting Men.—The months of March and April, 1918, were indeed eventful for the Corps of Canadian Railway Troops, for not only did the situation strain their wonderful adaptability to the utmost, but it threw out a direct challenge. There arrived ;I moment when it became necessary for the Canadian Railway Troops suddenly to transfer themselves into fighting men.

They met the challenge with a skill and a success which proved the wisdom of the policy insisted on by the Canadian Military Authorities-that every Canadian at the Front engaged on work of a technical nature, should first be trained as a soldier.

It was during the last four days of March, when the enemy was advancing on Amiens, that one Battalion of the Corps of Canadian Railway Troops was called on to take part in the defence of the city. The Railwaymen promptly organised 16 Lewis Gun teams and held tenaciously to the position allotted them until relieved by troops from the New Zealand Division. Again, in the First British Army area, three of their Battalions. were organised into what was called the Canadian Railway. Brigade. No sooner, however, had they been so formed, than the importance of engineering again became such a paramount consideration that the Canadian Railway Brigade, which had

been organised with every intention of making use of it as a fighting force, had to be disbanded. Two Companies, however, from still another Railway Battalion, were put into the Line and did very good work until relieved by Imperial troops.

In the meantime, the number of battalions had been increased to 13 by the conversion and re-organization of the 2nd and 3rd Canadian Labour Battalions with the 11th and 12th Battalions Canadian Railway Troops respectively, and the formation of the 13th Battalion from personnel at the depot at Purfleet, England.

Later in the Spring of 1918, the Germans launched an Offensive in two sectors in the north, with the intention of reaching the Channel Ports. This, too, placed a considerable strain on the Corps of Canadian Railway Troops as they were at once put to work on the construction of broad gauge lines and the elaboration of the light railway system which acted as a feeder to the front line trenches.

In the early Summer of 1918, the Canadian Overseas Railway Construction Corps, the 58th Broad Gauge Operating Company, the 13th Light Railway Operating Company, the 69th Wagon Erecting Company, and the '85th Engine Crew Company were brought under the Headquarters, Canadian Railway Troops, and the whole formed into the Corps of Canadian Railway Troops.

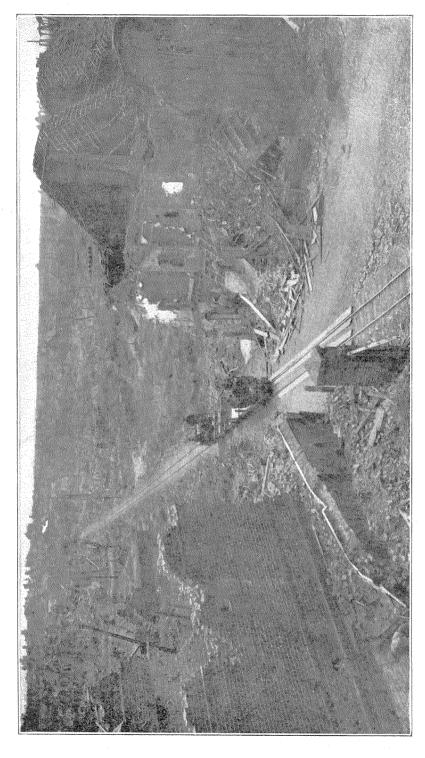
About the same time Major-General Stewart was appointed Director of Construction, and as such his duties embraced all construction of a civil engineering character in the zone of the British Armies. '

This work continued until the end of July, and at the beginning of August, preparations were being made by the Railwaymen for the work which would be required of them in the attack by the Allies on a 20-mile front beyond Amiens.

Amiens.—The achievements accomplished by the Corps of Canadian Railway Troops in that battle formed a brilliant chapter in their career, and from then on the Railwaymen continued to lend invaluable aid in the successive offensives which, launched on different parts of the front, finally led to the victory.

In this record, mention should not be omitted of the fact that during the offensive in Palestine in the Summer of 1918, when General Allenby called for a party of expert bridge builders, the War Office requisitioned the services of Canadian Railway Troops. Six officers and 250 other ranks were thereupon selected from among the volunteers who came forward in France, and left for Palestine on Sept. 20, 1918.

## THE TRIUMPH OF THE CANADIAN LIGHT RAILWAY SYSTEM.



There was practically no point on the Western Front inaccessible to the Canadian Light Railways. This scene is typical of the desolation through which their tracks were laid.

It should be added that many officers were seconded from the Canadian Construction Railway Troops to fill executive positions, in different departments under the Director General Transportation which should be considered as a high tribute to the technical efficiency of the officers concerned and the Corps of Canadian Railway Troops as a whole.

Below is given a table showing the comparative strength of the Imperial and Canadian Railway Construction Forces on the Western Front as at the dates given:—

Date.	Nominal Strength. Imperial Railway Construction Troops.	Nominal Strength Canadian Railway Construction Troops.	
Dec. 31, 1914	1,476	_	
Dec. 31, 1915	2,440	512	
Dec. 31, 1916	4,900	1,617	
Jan. 30, 1917	7,340	11,562	
Dec. 31, 1917	7,340	13,772	
Nov. 11, 1918	7,340	14,877	

In addition there were four Canadian Railway Troops Operating Companies with a strength of 1,087, all ranks on November 11, 1918.

The total strength of Canadian Railway Troops in England on November 11, 1918, was 3,364.

During their career at the front, the personnel of the Corps of Canadian Railway Troops were awarded 489 honours and decorations.

The Construction Units of the Corps of Canadian Railway Troops were more mobile than any other construction Units on the British Front, as their establishment provided for 280 mules, 10 lorries and 8 box cars per unit. They also were able to carry out new construction with great rapidity by using scrapers and mules, thereby saving man power, one of the most important questions in the concluding phases of the compaign.

In this necessarily condensed report, it is impossible to give more than the briefest outline of the organization, functions and operations of the Canadian Railway Troops. The importance of the work assigned to them can easily be understood by anyone with only a rudimentary knowledge of warfare, as since prehistoric times, mobility has been recognized as an essential factor to victory. The career of the Canadian Railway Troops on the Western Front furnishes one of the most engaging chapters in the record of Canada's contribution in the War, and was a factor in helping to spell victory with a capital V.

ARY OF WORK DONE BY THE CORPS OF CANADIAN RAILWAY TROOPS  DURING THE YEAR 1918.  Broad Gauge Lines.	Average Number Other Ranks, C.R.T., Daily on Maintenance.	697		Average Number Other Ranks, C.R.T., Daily on Maintenance.	2166	
	Average Number Attached Labour Daily on Construction.	4616		Average Number Attached Labour Daily on Construction.	3288	
	Average Number of Miles Maintained Monthly.	154 · 18	VES.	Average Number of Miles Maintained Monthly.	546.81	
	Miles Track Laid.	1038.00	NARROW GAUGE LINES.	Miles Track Laid.	823.79	
	Miles Grade Repaired.	838 · 52	NARI	Miles Grade Repaired	385 · 76	
	Miles Graded.	369 · 65	-	Miles Graded.	722.37	
SUMMA		Miles Located.	211.28		Miles Located.	1494-19