

things get out of gear. Then the telephone in the Canadian colonel's hut rings an S.O.S. from the battery commander. Twelve-inch howitzer shells are badly needed at a certain battery. Eight cars have been ditched at Clapham Junction or Timbuctoo. Will the colonel send out a gang to the rescue. Out it goes, and with luck the track is repaired and the trucks replaced by an hour's hard work. In case it should occur again farther ahead, a wrecking crew goes with it right up to the guns, no matter how hard the Huns are shelling. That is the work of railway troops.

"Today in a large yard, crowded with everything that is needed to build and maintain a railway, I witnessed one of the rewards. There was a big mogul that came from Canada only a few months ago, standing on the standard gauge, and from the cab window leaned a locomotive man in brown jumpers. I asked him whether I could use his cab as a grand stand, and when he replied, 'Sure, Mike!' I felt I was at home. Six months ago he was running a C.P.R. locomotive out of Toronto. These Canadians, almost in the mighty army which Britain was attacking, were being presented with the Military Medal for episodes which have happened in the preparation for the great attack. In a little cleared space in the yard seven Canadians from Lt.-Col. Martin's company were lined up, and before them was the British Corps Commander. In a very sincere speech he told them how the work of their railway battalions was appreciated, and how happy he was to present them with the decorations they had won as bravely as their comrades in the fighting line with bayonet and bomb. These are the men, and this the bald, official tale:

"Sergt. Del Plain, who comes from Washington State. He ran levels over a projected light railway line under heavy enemy barrage, and when it was completed went over the line again, marking his stakes.

"Sergt. K. Armstrong, from Prince Albert, under heavy shell fire drove a motor engine and box car to a battery and removed three badly wounded gunners to a dressing station.

"Sergt. J. Manahan, from Moose Jaw, assisted, under heavy shell fire a wounded n.c.o. to a place of safety and also conducted his section from a badly shelled area into artillery dugouts.

"Corp. R. Webster, from Montego Bay, Jamaica. While the enemy had a heavy barrage on the area he ran a transit over a projected light railway for a distance of a mile.

"Sapper W. Jacobs, of Toronto, carried a badly wounded soldier from a wrecked railway line to a shell crater and then went for stretcher bearers and assisted in bringing him to the dressing station, all under machine gun and shell fire. He also carried a wounded soldier from an exposed position to a dugout and gave him first aid.

"Sapper R. H. Clark, a Kentish man, who joined in Canada, when the locomotive man of a ballast train was severely wounded, took charge of the locomotive, refilled the tank while under fire, and ran the train out of the danger zone.

"These are incidents all in the day's or night's work of the Canadian railway troops, and they never seem to rest. Infantry have their turn in the trenches and some out to refresh. The railway troops must always be on the job, because the railway must always be there and working."

In another letter, Roland Hill said: "Building a military railway is not like

constructing a transcontinental. You don't quite know what the route will be, and your right of way has to be purchased with blood and shells. But you have to make a roadbed and string rails just as swiftly, perhaps more so, for the penalty clause in the contract is defeat. I couldn't find the colonel of the Canadian railway battalion I visited. He was somewhere out in front among the field ambulances where disgruntled German shells were still bursting, locating the grade for his next section, through the quagmire of a much fought over no man's land. But the adjutant was there, in a battered estaminet which had been, until yesterday, an advanced dressing station. His painter—they carry painters and divers, too,—had changed the Red Cross symbol into the sign that means Canadian Railway Construction Corps, and which has a Canadian brigadier, whose name is a text book in railway construction, at its head. The adjutant had his ear glued to the telephone and he was asking how his trains of material were coming along.

"When you at home read that 'the guns were being brought up satisfactorily,' and that there 'have been heavy rains all day,' you picture struggling teams of horses dragging batteries into advanced positions.

"I'll want 200 12-in. shells at Ottawa dump tomorrow night," said the gunner captain. 'Mind you, the line isn't built yet, and the gun is somewhere back at Vancouver, which is an old, before-the-push station.' 'All serene,' answered the Canadian adjutant. 'I can pick them up at Halifax dump and bring them with the train taking the 8-in. to Oshawa.' (Dominion geography is a bit mixed up here.)

"It is swift travelling for a newly constructed line, but then when the combination of railway and artillery experts gets going, things do travel with celerity. If Hindenburg wants to keep away from the big guns he will have to fall back more than 5,000 yards in two days. Thanks to sacrifices by British and Canadian railways, we have plenty of material, and we have the blended brains and labor, too, in these men of modern war, who pave the way for the huge guns and clear the way for the fighting men who 'go over.' And when the guns are satiated, among the same lines will come anything from tin huts to house those men in the line, to tin hats to shelter them from shrapnel and tinned bully beef to feed them. There's never any want for traffic on the military railway.

"There are some of the old pictures of war left, but they are few and far between. Sometimes the gun and ammunition have to take the muddy streaks, but if luck is the least with us now they go over well planked roads where hauling is fairly light, and by the time the roads are getting wearily worn of the traffic the railway is there. We learned the value of lumber and railways at the Somme. On a huge stand, such as you might see at the draftsman's office at railhead on construction at home, there was a large scale map of what was yesterday 'Germany in Flanders.' There are blue and red lines which begin behind our old trenches and end nowhere—perhaps on the Rhine. There are the standard gauge and the light railways, and they are wanted quickly. Already this particular 2,000 yards of advance had been platted out with little stakes and tapes and the red-tabbed, keen staff captain of heavy artillery was putting the finishing touches to the plan. He had worked with the Canadian adjutant before they both

knew what speed meant.

"If it was easier to build a spur for a 12-in. howitzer a few yards farther east, the gunner gave the builder the concession and phoned back to get his ranges corrected accordingly. If the gun had to go to that particular spot this Toronto captain would put on another hundred men for the job and build through the crater. There was no argument. Each knew the other knew his job. Some of the material was already up. British labor parties under the direction of a Canadian major who had worked gangs on the prairies and in the western mountains were out in the shell-pocked area making the first 1,000-yard grade. The new railway which had been advanced from yesterday was fact filling up with metals, fish plates, spikes and ties. There were just enough for the length to be built. Right and left hand switches were labelled off for the stations and gun spurs where they would be laid. The junctions and stations were sympathetically named after the places, big and little, in the Dominion, where they were torn up months ago and cast into this melting pot of the Empire's war. I am not giving the names that are on the map, but don't be surprised if tomorrow or this week you hear that new Regina or Le Pas, or even Ottawa has been shelled. There will be a good 8 or 12, perhaps 15-in., howitzer to give an account of itself there."

United States War Notes.

Three brigades of volunteer engineer regiments, composed almost entirely of railway men, from high railway officers to track layers, have been organized for service in France.

The U.S. Government has bought 150,000 tons of 80 lb. steel rails, to use in building a double track railway from its French port to its battle front in France, paying \$38 a gross ton for Bessemer rails and \$40 for open hearth rails. For angle bars \$3.25 was paid and for track bolts and nuts \$5.50. Deliveries were to be made by Oct. 1. Three hundred locomotives have been ordered for this railway, and 17,000 cars are being negotiated for. About 100,000 kegs of spikes are wanted. The U.S. Government will also build a considerable mileage of light railways in France.

C.P.R. Inspection Trip.—Sir George Bury, Vice President, C.P.R., arrived in Winnipeg, Sept. 18, on a trip over the company's Western Lines. Grant Hall, Vice President and General Manager, Western Lines, arrived in Winnipeg the same day from Vancouver, and after a conference the two vice presidents started west from Winnipeg on Sept. 20. They travelled first to Arcola, and then to Weyburn, from which point they went over the line to Alsask, travelling back via Moose Jaw to Regina and then on to the Pacific coast via Calgary. It was expected that the return trip would be made by the Kettle Valley Line and the Crowsnest Pass Line to Calgary, then on to Edmonton, returning to Winnipeg by other branch lines.

Operation of Government Railways Bridge at Fort William.—An electric switch, installed in the signal tower of the Canadian Government Railways draw bridge over the Kaministiquia River, at Fort William, Ont., will be used to signal masters of vessels which desire to pass. Whenever a vessel whistles to have the bridge opened, the operator, if in position to open it, will immediately flash all lights in the tower three distinct times.