



CWM 8387

Brigadier-General Raymond Brutnel as painted by William Logsdail in 1919.

Canada's First Armoured Unit Raymond Brutinel and the Canadian Motor Machine Gun Brigades of the First World War

Cameron Pulsifer

The First World War began for Canada on 4 August 1914, when the British Empire declared war on Germany. Just a week later, on 11 August, Sam Hughes, the Canadian Minister of Militia and Defence, gave his approval for the formation in Ottawa of "one of the most revolutionary fighting units put into the field by any country."¹

This was the Automobile Machine Gun Brigade No.1, later renamed the 1st Canadian Motor Machine Gun Brigade which is believed to be the first motorized armoured unit formed by any country during the war. The British, by way of contrast, did not begin using purpose-built armoured fighting vehicles until October.

The brain behind this innovative unit was Raymond Marc Pierre Brutinel (1882-1964), a Frenchman from the Department de l'Aude in the south of France, who immigrated to Canada in 1905. There is an element of mystery about Brutinel's career before he came to Canada. He claims to have begun thinking about the use of the machine gun and mobility in warfare while serving as an officer in the French army. Yet the research of historian Yves Tremblay, who has examined Brutinel's career in greater depth than anyone else, reveals that he never served as an officer, but rather as a conscript, eventually rising to the rank of *sergent-instructeur*. Tremblay believes that his ideas on the machine gun and mobile warfare were in fact developed from readings in the available literature on the subject, particularly the writings of two innovative thinkers, Major R.V.K Applin of the British army, and General Francois Oscar de Negrier of the French army. In articles published before the



First World War, both of these officers explored the possibilities of using the machine gun for indirect fire, in the manner of high-powered artillery, and using the weapon's firepower to enhance opportunities for mobility (although they had in mind cavalry rather than motor vehicles). Nothing is known of Brutinel's professional background. He described

himself at various times as an engineer, mineralogist, and entrepreneur. Tremblay believes the term that best describes him is adventurer, in the sense that he believed life consisted of a series of opportunities to be grasped to the full. Whatever the case, he was certainly resourceful enough to become one of the leading authorities on the use of the machine gun in the war, and to propel himself to the command of the Canadian Machine Gun Corps when it was formed in March 1918.²

On coming to Canada in 1905 Brutinel settled in Edmonton, where he earned a fortune through speculation in the booming fields of agriculture, railways, and oil. He moved east to Montreal in 1913, and, as the war clouds gathered in Europe in the summer of 1914, made plans to return home to rejoin his regiment, the 53^e *Régiment d'infanterie*, of the French Midi region. First, though, he visited the Colt Firearms Company in Hartford, Connecticut, to enquire about obtaining Colt machine guns for the French army. He had barely returned to Canada before he was contacted by Sir Clifford Sifton, a wealthy businessman and former minister in the government of Sir Wilfrid Laurier. Sifton urged him to remain in Canada and apply his talents and energies to this country's emerging war effort.



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Brutinel, with his back to the camera, salutes as the Governor-General, the Duke of Connaught, descends from one of the vehicles made for transporting the officers, during his inspection of the Automobile Machine Gun Brigade at the Rockcliffe Ranges, Ottawa, 23 September 1914.

After receiving the assurances from the French ambassador that "Whatever you are doing with or for Canadians will help France," Brutinel decided to stay. Combining his fascination with the machine gun with an interest in the potential of the motor vehicle stemming from his days in the Canadian west, Brutinel developed with Sifton a proposal "to organize a mobile motorized machine gun unit... The guns being mounted in pairs on lightly armoured trucks." After receiving ministerial approval, recruiting for the new unit began on 24 August in the lobby of the Chateau Laurier hotel, where a plaque still commemorates the event.

In the meantime, Brutinel proceeded to the United States to acquire equipment. First, he returned to the Colt Firearms Company and ordered 20 of their Model 1895 .30 in. 'Potato Digger' machine guns. He later recalled that German workers at the plant attempted to prevent the guns being shipped, which necessitated their being spirited away surreptitiously at night. He next proceeded to the Autocar Company in Ardmore, Pennsylvania, to acquire the vehicles. They made a light truck that Brutinel had earlier noticed being used by American Express in New York, and which he thought would make an excellent basis for his envisioned armoured machine gun carrier.

Brutinel arrived at the Ardmore plant with a sketch of what he wanted, and the managers there, intrigued by his scheme, agreed to give him first priority on the chassis then being assembled. They then made arrangements for acquiring various thicknesses of steel from a near-by steel mill for testing as armour plating. Brutinel recalled: "It was sought to give a fair protection to the driver and the officer commanding the truck but we had to be satisfied with a much lighter plate...for fear of overloading the truck which had to carry ten thousand [*sic*] rounds of 303 ammunition and crew's equipment."³ On 2 September 1914, he reported that "The construction of the armoured car[s] is progressing satisfactorily. The special alloy steel has been made and submitted to a severe test which shows that it is bullet proof up to 100 yards, the surface being normal to fire line. We can therefore rely on absolute protection up to from 80 to 60 yards."⁴

By mid-September the vehicles had arrived in Ottawa. There were 20 in all: eight armoured machine gun cars, which were the fighting nucleus of the unit, five trucks for carrying ammunition and supplies, four for transporting the officers, one for carrying gasoline, one repair truck, plus one ambulance, donated by the Autocar Company. Parts were interchangeable

amongst the vehicles, an innovation for the time. A report in the *Ottawa Citizen* of 24 September noted that: "All the cars are painted a dull blue grey so as to render them as inconspicuous as possible."⁵

The cabs and engines of the eight machine gun carrying vehicles were covered in armour plate, except that the roof was open and the driver's head protruded over the top. The front plate bore two headlights and a large searchlight in the middle for nighttime operations. The two machine guns were mounted centrally at the rear, while steel ammunition chests, capable of holding 12,000 rounds of .303 ammunition, extended the length of both sides and enclosed the rear. When raised, the lids of these chests provided armoured protection for the gunners. Nonetheless, when operating their weapons the gunners remained dangerously exposed, which resulted in very high casualties in action. Weighing 30 cwt.,⁶ the vehicles ran on four solid rubber tires, and could reach speeds of 64 kilometres per hour (40 mph). As noted they were first equipped with Colt machine guns, but on 9 August 1916 these were dispensed with in favour of the classic British machine gun of the war, the Vickers, which they continued to use until the war's end.⁷

Recruiting the new unit advanced speedily. In his report of 2 September 1914 Brutinel observed that all the officer positions were filled and that "a large number of the men had been recruited and are now in Camp at Ottawa where

they undergo preliminary training."⁸ By 9 September it had reached its authorized strength of 1 major, 3 captains, 5 subalterns, 4 sergeants, 2 sergeant artificers, 4 corporals, and 101 privates. Of these, only 25 percent were reported as having had any military experience. But probably equally important, in a unit employing technology that was still relatively new, as many as 50 per cent of the total were classified as either chauffeurs or mechanics, 29 per cent were skilled in other trades, and 10 per cent were university graduates.⁹

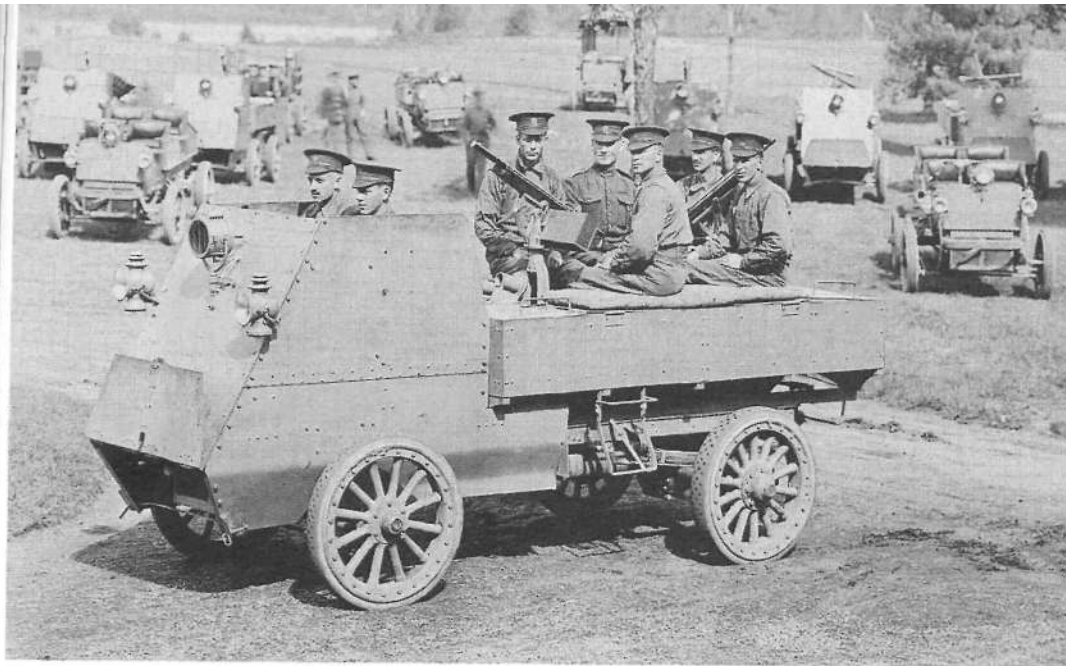
Popularly known as the Sifton Brigade, the new unit was inspected by the Governor General, the Duke of Connaught, at die Rockcliffe Ranges on the outskirts of Ottawa on 23 September. The unit then paraded through the city streets to the railway station across from the Chateau Laurier, where the vehicles were loaded onto railway flatcars for shipment to Montreal. From there they departed for England, and from England for the fighting on the continent on 16 June 1915, bearing a new title, 1st Canadian Motor Machine Gun Brigade (1st CMMGB).

The unit soon went into the line at Chateau la Hutte, in Flanders, in support of the 1st Canadian Division. By then, however, the trench lines had begun to solidify and the conflict turned into a static slugging match that lasted three more years. Opportunities for mobile operations no longer existed which prompted the British to withdraw their own armoured car units to other theatres, such as the Middle East, where they

Brutinel, at the left, chats with the Governor-General, the Duke of Connaught during the latter's inspection of the Automobile Machine Gun Brigade, Rockcliffe Ranges, Ottawa, 23 September 1914.

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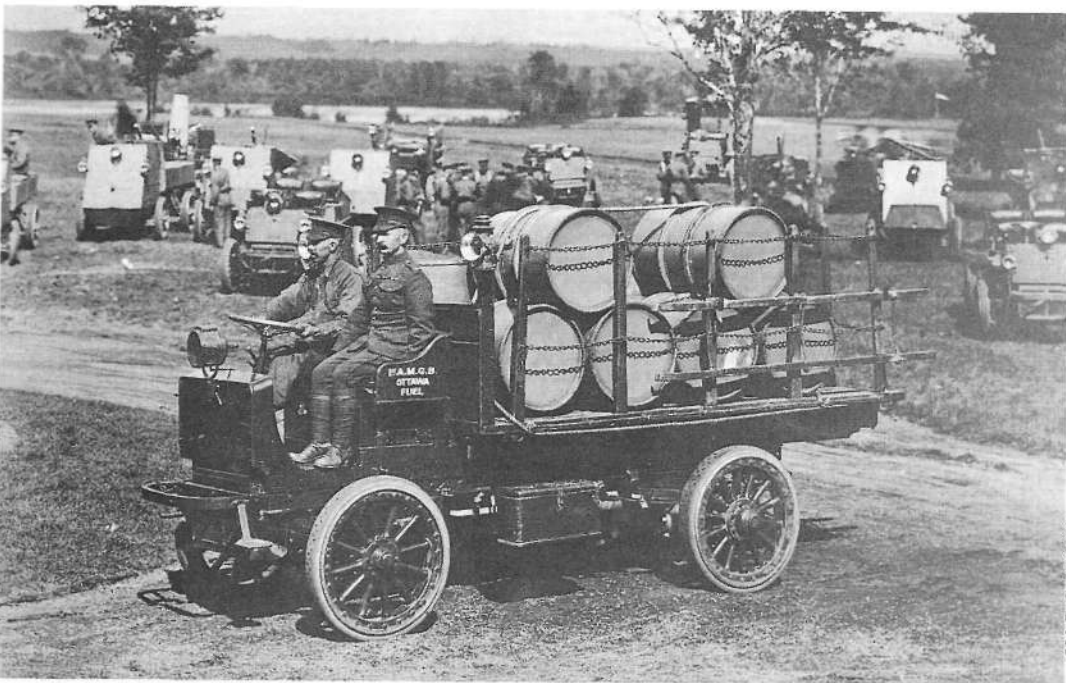
Automobile Machine Gun Brigade vehicles being prepared for inspection by the Governor General, the Duke of Connaught, at Rockcliffe Rifle Range, September 1914.

Top: An armoured Autocar mounting two Colt machine guns.

Middle: An unarmoured Autocar carrying barrels of fuel.

Bottom: "A" Battery commander's car.

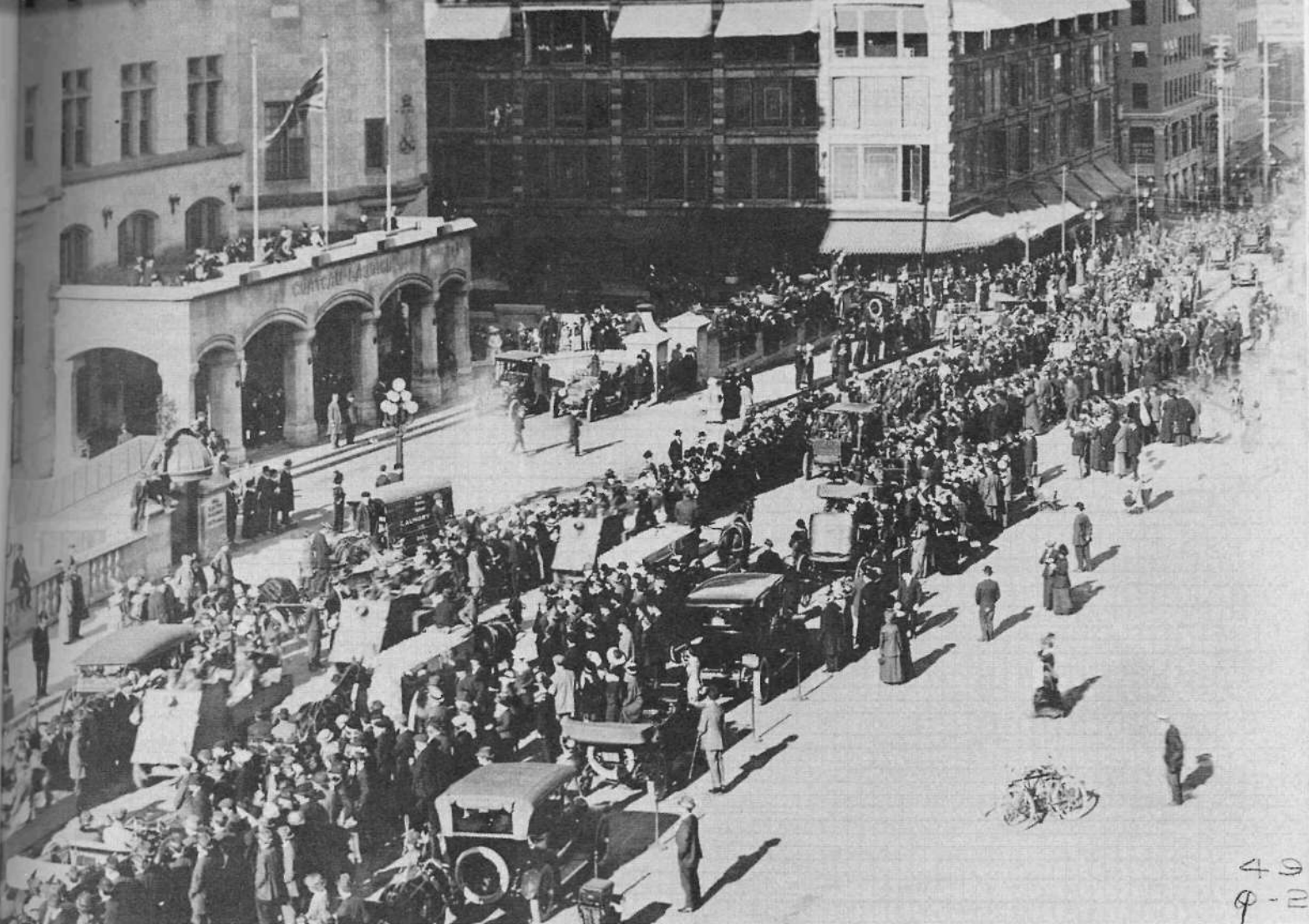
Note that in the background of each photo can be seen others vehicles of the unit.



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The vehicles of Brutinel's Automobile Machine Gun Brigade lined up on Rideau Street, outside the Chateau Laurier Hotel, Ottawa, 23 September 1914. They were soon to be loaded onto flatcars at the railway station across the street (the present day Congress Centre - not visible in the photograph) for travel to Montreal. There they were to board ship for transportation overseas.

could operate more effectively. Brutinel took advantage of the situation for training behind the lines, all the time developing and refining his notions concerning the use of the machine gun to provide indirect fire and as an offensive weapon. Slowly his ideas were noticed and then implemented by Canadian commanders, and Canadians became the acknowledged leaders in the innovative and effective use of the machine gun. Brutinel pioneered techniques for achieving concentration of fire, in the use of machine guns in indirect fire, and for employing the weapons in an offensive capacity. Indeed his influence was such that in September 1916 he was appointed Corps Machine Gun Officer. Here he was able to apply his methods on a Corps-wide basis, with such success that his developments were studied and emulated by other Allied armies.¹⁰ Brutinel has testified to the fact that the work he did in this larger sphere was an evolution of the

methods and techniques that he had worked out earlier for the Motor Machine Gun Brigade. He wrote in 1957 that the Brigade was:

the fundamental cradle of the eventual Canadian Machine Gun Corps. In it were evolved MG schools, methods of training, new tactical employment of Machine Guns - eventually adopted by all the allied armies and [that] influenced markedly the fighting method of infantry and other arms in trench warfare and open fighting.¹¹

In June 1916 the strength of the unit was augmented by the addition of three more batteries: the Borden, Eaton, and Yukon Batteries, which had been formed in Canada in late 1914, soon after Brutinel's own unit. Becoming, respectively, "C," "D," and "E" Batteries, for the most part they carried their machine guns in unarmoured lorries, from which

the guns had to be unloaded before they could be fired. The eight armoured Autocars remained with the original "A" and "B" Batteries.

The component units of the 1st CMMGB played notable parts in most of the Canadian Corps' major battles, singly with different Divisions until June 1916, and thereafter brigaded together as corps troops. But for the most part during this period, they were compelled either to remain stationary or else move on foot, with little opportunity for the type of mobile operations using their motor vehicles that Brutinel had envisioned. In April 1917 at Vimy Ridge, the 1st CMMGB was given an especially demanding task. Its five batteries were required to leap frog forward to successive firing positions over a distance of about five kilometres, while covering one another with protective fire. This was all done on foot.¹²

The opportunity for mobile operations finally came in 1918. In March, with Russian out of the war, the Germans launched their great offensive aimed at pushing through to Paris and, they hoped, knocking Britain and France out of the war as well. The bulk of the initial attack fell most heavily on the British Fifth Army, under the command of General Sir Hubert Gough, in the area of the River Somme. Indeed it looked for a

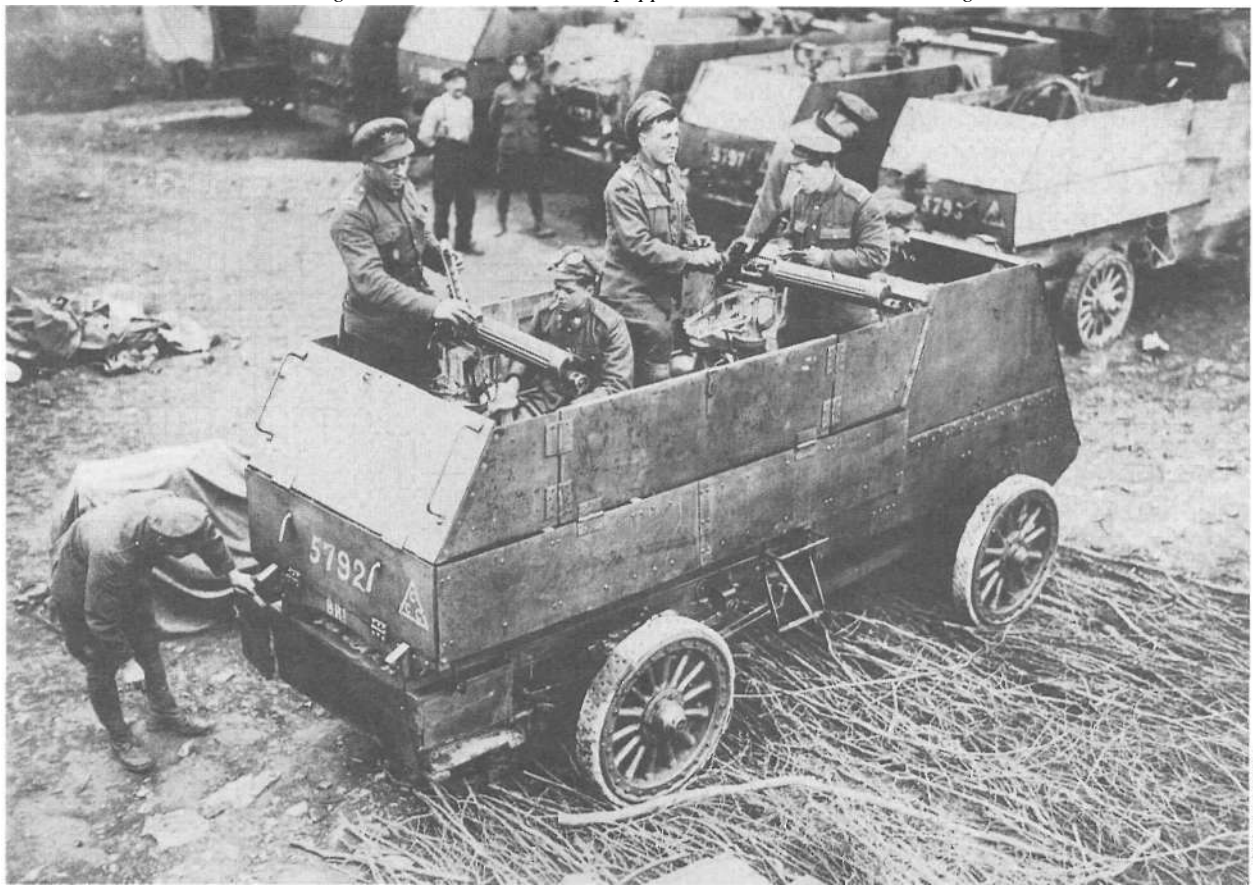
time as if the front might collapse completely as the Germans pressed forward and threatened to open a gap between the British and the French army on its right. Because the trench lines had been broken and units were ranging widely over the open countryside, conditions now existed where it seemed mobile forces might be put to good use. Cavalry was thrown into the action, while the British put in a special request to the Canadians for the services of the one available armoured car unit amongst the British armies on the Western Front at that time, the 1st CMMGB.

In his memoir of his father's service with the Yukon Battery, Alex Lynch provides the following shrewd assessment of the desirability of the 1st CMMGB:

Each Battery was equipped with 8 Vickers Machine guns and operated under a Captain with two Lieutenants. They usually worked with a six-man gun crew; one firing, one feeding the belt and the others loading belts.

Now this was a formidable concentration of firepower in those days. Here was a mobile attack force of 300 men who could concentrate 40 heavy Vickers machine guns in one area. In those days an entire Division of 10,000 men only had a total of 64 Vickers guns.¹³

One of the armoured Autocars of the 1st Canadian Motor Machine Gun Brigade in France, now equipped with Vickers machine guns.



Under the command of the six foot two inches tall Lieutenant-Colonel W.K. "Tiny" Walker, the unit arrived at the Fifth Army Headquarters in the early afternoon of 22 March. It consisted of "A" and "B" Batteries, each equipped with four of Brutinel's original Autocars, "C," "D," and "E" Batteries, each with four Napier Light Trucks, plus a transport company consisting of 20 3-ton Lorries. Also included was a force of 65 motorcyclists, who were to serve as scouts and maintain communications amongst units.¹⁴ There were in all about 330 officers and men.

Fifth Army Headquarters was at Villers-Bretonneux, about nine miles to the northeast of Amiens. Here Gough had established his HQ that morning, having retreated 20 miles over the previous two days. Gough admitted to Walker that the situation was desperate and decided that it would be best to use the Canadian unit to maintain liaison with the flanking formations, Third British Army on the left and the French on the right. They were also to "cover withdrawals, strengthen defensive positions, and reconnoitre German positions."¹⁵ Within hours the Eaton and Yukon Batteries were dispatched to the northeast, and the Borden and "B" Battery of the original CMMGB to the northwest, to help stem German incursions. ("A" Battery was kept in reserve at Headquarters.) "In a matter of moments," writes C.S. Grafton in his history of the Canadian Machine Corps, the units sent off "were breasting the tide of retreat, with its rumours tossing wildly, gaunt-eyed stragglers showing only too eloquently what they had experienced, on roads choked with transport and refugees."¹⁶

They remained fully engaged in the fighting for the next two weeks. Prevailing opinion at the time was that the unit played a significant role in helping to stiffen Fifth Army's resistance through their capacity to intervene in one sector, then withdraw and move to another, to reinforce isolated outposts, and maintain communications amongst widely scattered units. The *London Times*, for example, enthused that "Everywhere they went they steadied the line."¹⁷ The cost, though, was high. A total of 37 were killed, 116 wounded, and 11 missing, a casualty toll of over 40 per cent. Also, two of the original eight Autocars were destroyed during this period.

In the meantime, changes were afoot in the Canadian Corps. In March 1918 the 5th

Canadian Division, maintained as a defensive force in England since February 1917, was disbanded. The arrival of its machine gun companies in France allowed for a restructuring of the Canadian Machine Gun Corps. By April Machine gun battalions of three companies each were created, one for each Division. The Canadians now had 96 Vickers Guns per Division as opposed to the British 64. And for the first time "the machine gun service was to be regarded as a distinctive arm, intermediate between the infantry and artillery, and with tactics of its own."¹⁸ The man behind this restructuring was Raymond Brutinel, who on 26 March was officially appointed as the first commanding officer of the Canadian Machine Gun Corps with the rank of brigadier-general.

This restructuring of the machine gun service, and the success of the 1st CMMGB in helping the Fifth Army in March, allowed Brutinel to push for the creation of a second motor machine gun unit. The intervention of Field Marshal Sir Douglas Haig, who wrote that the "work of the 1st CMMG Brigade in recent operations has proved the value that can be obtained from such units, and recommends the formation of a 2nd Brigade be undertaken forthwith," certainly did nothing to harm his cause.¹⁹ The result was the creation of the 2nd Canadian Motor Machine Gun Brigade at the end of May 1918. The Yukon and Eaton Batteries were withdrawn from the 1st Brigade and added, as "A" and "B" Batteries respectively, to the new unit. Three other batteries were made up of machine gun companies recently arrived from the disbanded 5th Division. The original "A" and "B" Batteries, together with the Borden, designated "C" Battery, were left in place as the core units of the 1st CMMG Brigade. Two additional batteries, "D" and "E," were added from companies recently arrived from the 5th Division.²⁰

By the time the Allies launched their great counterattack against the Germans in the Battle of Amiens of 8 August they were fully convinced of the advantages of armoured mobility. The British, for example, commenced the battle with a total of 604 tanks as well as the recently formed 17th Armoured Car Battalion. The Canadian order of battle included 42 British tanks per division and a formation designated the Canadian Independent Force, commanded by Brutinel. This latter formation consisted of the two Motor

Machine Gun Brigades, machine gun bearing lorries, about 60 motorcycles, a Trench Mortar section with the weapons borne on two lorries, together with ancillary vehicles. This force went through many reorganizations over the coming months, and at various times bore the name

"Brutinel's Brigade." The original formation consisted of six groups of mobile machine gun batteries, with four of the six remaining Autocars being allotted to one group and the other two to another. As these were ordered to be provided by both Motor Machine Gun Brigades it clear that sometime earlier than this the six vehicles had been split between the two units.²¹

Commanders hoped that this force would repeat, on a larger scale, the success that the 1st CMMGB had enjoyed in March. Certainly on many occasions they fulfilled the earlier promise, by bringing their enormous fire power to bear at critical situations, by supporting isolated outposts, by forging ahead of the infantry and securing advantageous ground, and by providing effective liaison and communication (the motorcycles being especially useful here). Still, it must be said that their operations in these latter months were not the same unqualified success as was the case a few months

Left: An armoured Autocar of the 1st Canadian Motor Machine Gun Brigade going into action during the Battle of Amiens, August 1918.

Below: Canadian Motor Machine Gun Brigade waiting alongside Arras-Cambrai Road. Advance East of Arras. September 1918.



earlier. As in the Second World War, the Germans proved themselves highly adept in conducting an effective, and to their opponents, costly, retreat. The result was that the mobile units of Brutinel's various formations often found themselves stymied and unable to move due to effective return machine gun fire, and to blown bridges or roads that were either cratered or blocked by felled trees. Indeed, in a critical report that he wrote of his force's performance in September, Brutinel actually recommended the addition of 4 Squadrons of *cavalry*. These, he stated, "would give the force ability to manoeuvre, and would correct the road limitations of the M.G. Brigades."²² (This was acted upon during the October 1918 re-organization with the addition of two squadrons of Canadian Light Horse.²³) Despite these problems, in one form or another Brutinel's formations were fully involved, with few breaks, in most of the important Canadian operations of the last 100 days, from the Canal du Nord, the taking of Cambrai, and the move on from there to Valenciennes, and thence to Mons. In the later days, however, it would seem that only four of the original eight Autocars continued to operate (two from each of the CMMG Brigades).

After the taking of Valenciennes on 1-2 November, the Canadian Corps continued to share in the general Allied advance against an increasingly beleaguered enemy. In the Canadian sector this advance was towards Mons, in Belgium, which lay about 30 kilometres to the northeast of Valenciennes. A section of Brutinel's force was along "to take the initiative once the enemy's rear guard had been broken."²⁴ A number of 3-ton lorries, loaded with timber, had been allotted to Engineering units for bridging the craters in the roads. An indication of the difficulties that the mobile units still faced is provided by the following extract from Logan and Levey's account of the Canadian Machine Gun Corps, which is largely based on the unit diaries. They write of an operation on 7 November:

The Independent Force was unable to follow up the progress made by the Infantry. 4 large Mine Craters, approximately 40 feet in diameter and 12 feet in depth made the Valenciennes-Mons Road between Quarouble and Quievrain completely impassable to traffic.

By mid-day, when the Engineers had finished their work,

2 Armoured Cars were ordered forward to cooperate with and assist "A" and "B" Batteries,

One of the Machine Gun Brigades' Autocars in the victory parade held by Canadian troops in the Belgian town of Mons on the afternoon of 11 November 1918. This may be the car that is currently in the collection of the CWM. Note the Lewis Gun that had by then been added to the top of the front glacis plate.



which had been instructed to advance towards Bossu. In spite of what appeared to be a favourable opportunity for the employment of mobile forces, the advance of the Armoured Cars and Batteries was completely stopped by a huge Mine Crater...²⁵

It is difficult to ascertain precisely the units' operations in the final days of the war. Much of our available information comes from the recollections of Major-General F.F. Worthington, "father" of the Canadian Armoured Corps before the Second World War, and, in 1918, a captain in command of "E" Battery of the 1st CMMGB. By 21st October both "C" and "E" Batteries, together with the two armoured cars were working as a single group under Worthington's command. The armoured cars, however, were under the immediate command of Lieutenant T.A. Smith. There followed, on the 22nd, a very dramatic action when this small armoured force pressed forward to secure a bridge over the Canal de l'Escaut just to the north of Valenciennes. This was more than a mile ahead of the Canadian infantry and well in the midst of the enemy's front lines. On their arrival at about mid-morning they found a party of Germans on the bridge attempting to lay demolition charges. Machine gun fire from the armoured cars drove them off, and then a full-fledged firefight developed as the Germans rushed reinforcements to the area. Lieutenant Smith was killed in one of the armoured cars. Worthington then had a couple of machine guns from his "E" Battery lorries placed in the upper floor of a building overlooking the bridge. These not only were effective against enemy troops on the ground, but were able to drive back at least three German attempts to get back on the bridge. Logan and Levey comment on the "demoralizing effect of the intense and effective Machine Gun fire" of the Motor Detachment, and note that its effect "may be judged from the fact that... [the detachment] was able to operate successfully although it was surrounded by Germans."²⁷

Realizing their position was slipping, the Germans rushed machine guns of their own to the area, and the battle raged on into the early afternoon. At about 1350 hours, wrote Worthington afterwards in his report of the action: "the enemy's fire power decreased and we obtained superiority of fire over them. His fire was erratic; much of it went very wild. He then sent up a flare which broke into several balls

and shortly after his fire ceased."²⁸ By 1500 hours the 52nd Battalion had moved up and the position was made secure for the Canadians. By 1730 hours Worthington and his tired crew were able to withdraw to billets behind the lines. For his actions that day, Worthington was awarded a bar to his Military Cross.²⁹ In her biography of her husband, Larry Worthington writes: "One of the two armoured cars taking part [in this incident] is now at the Royal Canadian Armoured Corps School in Camp Borden."³⁰ This is the vehicle that is now at the Canadian War Museum, which for a long time was on loan to the Canadian Armoured Corps in Camp Borden.

Brutinel had realized for some time that the original Autocars were hopelessly obsolete and by 7 November was formulating proposals for their replacement. His comments on their operations and usefulness to that point are interesting and worth quoting in full.

The 1st Cdn. M.M.G.B was equipped when it came to France with 8 Armoured Cars, of these 2 definitely were lost during the battle of Amiens in April of this year [sic] and were not replaced.

The 6 Cars left [he must have been unaware of a third car lost on 4 November] have been damaged from time to time by direct hits with Field and Anti-Tank Guns and have been repaired, ordinarily boiler plate being used as replacement of the armour destroyed.

These cars are worn out and it is with the utmost difficulty that 2 or 3 cars can be maintained in action.

Since the beginning of the war of movement the armoured cars have been of real value, and in addition to the great service they rendered during the German offensive of March-April, they have been successfully employed in every battle fought by the Canadian Corps this year

They are in constant demand from the Divisions and Infantry Brigades.

It is therefore requested that the establishment of the M.T. Company Cdn Machine Corps should be amended to include 10 Armoured Cars. These will supersede the six Armoured Cars now in our possession and 4 3-ton Lorries.

This amendment will not require any increase of personnel and each Cdn Motor Machine Brigade will then be composed of: 5 Motor Machine Batteries and 1 Armoured Car Battery.

It is recommended that the "six wheel Armoured Car type" designed by Monsieur de Guingan in Paris and which it is understood has been favourably considered by the French Army should be adopted by the Canadian Corps.³⁵

Right: The Autocar that is now in the collection of the Canadian War Museum being used by members of the Montreal militia unit, the 1st Motor Machine-Gun Brigade, in the 1920s. Note the indentation towards the bottom of the left front armour plate. F.F. Worthington attributed this damage to a hit from German machine gunfire during the action at the Canal de L'Escaut on 21 October 1918. The car came to the CWM in 1939 and the indentation is still present.



Courtesy of the Royal Canadian Hussars

Left: Major-General F.F. Worthington rides in the Autocar along a line of Centurion tanks during an inspection at the Royal Canadian Armoured Corps School at Camp Borden, ca. 1960. The car was at Camp Borden on loan from the CWM for a number of years in this period, and used frequently by the RCAC for ceremonial functions.



Courtesy of the Royal Canadian Hussars

Four of the original eight armoured Autocars were still operational at the time of the Armistice, two from each of the Motor Machine Gun Brigades. One of these cars participated in the victory procession that paraded before General Currie in Mons that afternoon, of which there is a photograph. The car shown in this photograph has a Lewis Gun mounted on the top of its front armoured plate, just above the spot where its searchlight would have been mounted. The searchlight is missing, however, as are its two headlights, originally mounted about halfway

down on either side of the front plate. The brackets, which originally held these headlights, are still in place, however. These details match precisely those of the car in the collection of the Canadian War Museum. In 1967, the chief curator of the museum, Ralph Manning, asked Worthington specifically whether he thought it "possible that this is a picture of the same car" (ie. as the one in the CWM).³⁶ Worthington replied that "it is believed that it is the one you now have."³⁷ This is the only car to show up in contemporary photographs bearing these particular details, but this too is the only known photograph available of any of the cars stemming from these last days of the war. However, it is not impossible that all four of the surviving cars had Lewis Guns mounted in this same position and also, having seen much hard service, had been deprived of their searchlights and headlights. Thus, while there is

a good chance that the car in the photograph of the Mons victory parade is the one currently on display in the Canadian War Museum, there must remain an element of doubt.

In summation, the Autocars themselves were not of great significance to the over-all story of the Canadian Corps in France and Flanders in the First World War. Their numbers were too small to have had any major impact. They did, however, form the nucleus around which the 1st and also later the 2nd Canadian Motor Machine Brigades were formed, which, besides Autocars, included machine gun bearing lorries. These in turn became components of the various larger formations commanded by Brutinel in the last months of the war. A mixture of armoured cars, lorries, motorcyclists, cyclists, and some cavalry, these represented an attempt to introduce a fairly sizable element of mechanized mobility into the operations of the Canadian Corps. The Autocars were considered to be obsolete by this time, and seen as the least effective part of the forces' operation. At least half the original force of Autocars remained in operation to the end, however, and they represented the original nuclei around which the rest of the force had grown. It has been argued above that the success of these particular formations was mixed, but they were one of the types of military innovations begun at the time that helped to break the stalemate of the Western Front. They were the first significant Canadian venture into the field of mechanized warfare, and as such are of considerable importance in the military history of this country.

Five Autocars survived at the end of the war, one of those damaged in action evidently having been repaired. After the cessation of hostilities all five were put into storage in Great Britain. What exactly Canadian authorities had in mind for them is not clear. Possibly, in the words of historian Brereton Greenhous, they

The Autocar as currently on display in the CWM's first floor galleries.

were simply "awaiting the scrapheap."³⁸ However, civil unrest in Canada in 1919 led authorities here to consider the acquisition of British-made armoured cars. When these proved too expensive attention turned to the Canadian-made ones languishing in their British warehouse. Two of the five were packed up and brought back to Canada, but by the time they arrived civil quiet had returned. One of the cars was shipped to Winnipeg, where it was used for a time by a local militia unit, before it vanished, never to reappear. The other made it as far as Montreal where it was found on the dock by none other than F.F. Worthington, then serving as adjutant with the militia successor unit to the 1st CMMGB. He immediately secured it as a training vehicle for the unit, and when, much later, they ceased having a use for it, they sent it to the Canadian War Museum in Ottawa. There it was accessioned into the collection as a War Trophy in 1939. The Car remains on display in the first floor Gallery of CWM today, *the* only surviving example of this revolutionary military vehicle.

As for Brutinel, after the war he resumed living in southern France where he entered the field of banking. Upon the outbreak of war in 1939 he made an offer to the Canadian government to act as a supplier to Canadian troops who might be sent to France, but his offer was rejected. Not surprisingly, given his Canadian contacts, when the Germans occupied his region of France the Gestapo kept him under close

Photo by Bill Kent, CWM



supervision as a possible Allied intelligence agent, although they never did arrest him. Before and after the war he remained in touch with former colleagues from the Canadian Corps, and made his last visit to Canada in 1958. Thereafter his health declined, and he died a recluse in 1964, largely forgotten in Canada except within the Royal Canadian Armoured Corps, where his name continues to be revered.

Notes

- David Fletcher, *War Cars: British Armoured Cars of the First World War* (London: HMSO: 1987), p.73.
- Yves Tremblay, "Raymond Brutinel et la guerre de mouvement," in Roch Legaut and Jean Lamarre, eds., *La Première Guerre Mondiale et le Canada: contributions sociomilitaires québécois* (Montreal: Meridien), pp.195-224. Tremblay is the leading authority on Brutinel and the publication of his forthcoming full-length biography is eagerly awaited. Readers should also be aware of *The Royal Canadian Armoured Corps, an Illustrated History*, by John Martinson and Mike McNorgan, published in October 2000 under the auspices of the Royal Canadian Armoured Corps Association and the Canadian War Museum. I am greatly indebted to Yves Tremblay and Mike McNorgan for their advice on this paper, and on an earlier draft, which grew out of an in-house attempt at the CWM to assess the historical importance of the Autocar artifact. I hope this article will serve to whet appetites for their much more substantial studies. I would also like to acknowledge my indebtedness to J.F. Wallace for his indispensable research carried out for his *Dragons of Steel: Canadian Armour in Two World Wars* (Burnstown, ON: General Store Publishing, 1995), esp. pp. 13-85.
- Raymond Brutinel, "An Account of the Events which led to the Formation of the 1st Canadian Motor Machine Gun Unit in August 1914," 5 March 1957. Typescript in the Autocar Artifact File, CWM, AN#19390001-002 ,p.2
- National Archives of Canada [NAC] RG 9 III D Vol.4803, R. Brutinel, "Organization of the Machine Gun Automobile Brigade," 2 September 1914.
- Ottawa Citizen, 24 September 1914, p.7.
- 30 cwt or hundredweight equals approximately 3,360 lbs or 1524 kg.
- H.T. Logan and M.R. Levey, "History of the Canadian Machine Gun Corps, C.E.F.," Unpublished ms., 1919, Directorate of History and Heritage, Ottawa, p. 13.
- Brutinel, "Organization of the Machine Gun Automobile Brigade," p.2.
- Logan and Levey, p. 16.
- See Sheldon Bidwell and Dominic Graham, *Firepower: British Army Weapons and Theories of War* (London: George Allen, 1982), p. 123. See also, William Rawling, "Technology in Search of a Role: The Machine Gun and the CEF in the First World War," *Material History Review*, 42, Fall, 1995, pp.87-100.
- Brutinel, "An Account of the Events....," p.3.
- On this see *Ibid.*, pp.44-46.
- Alex Lynch, *Dad, the Motors and the Fifth Army Show* (Kingston, ON: Printing Factory, 1978), p. 16
- Wallace, *Dragons of Steel*, p.52.
- Ibid.*, p.52.
- C.S. Grafton, *The Canadian "Emma Gees": A History of the Canadian Machine Gun Corps* (London, ON: Canadian Machine Gun Corps Association, 1938), p.125.
- The *Times* (London), 26 March 1918, quoted in Breerton Greenhouse, *Dragoon: The Centennial History of the Royal Canadian Dragoons, 1883-1983* (Ottawa: Guild of the Royal Canadian Dragoons, 1983), p.227.
- G.W.L. Nicholson, *Canadian Expeditionary Force, 1914-1919* (Ottawa: Queen's Printer, 1964), p.383. A British Division at this time had fewer battalions. Canadians still came out ahead, however, as the number of machine guns in proportion to rifles in the British service was 1 to 141; in Canadian service 1 to 138.
- Wallace, p.61
- Ibid.*, pp.60-61.
- NAC RG 9 III D 3 Vol. 4987, War Diary, 2nd Canadian Motor Machine Brigade, Organization - Canadian Independent Force, 7 August 1918.
- Logan and Levey, p.594. Desmond Morton somewhat unfairly sums up their role in these final months of operations thus: "As for Brutinel's "Motors," a few fallen tree trunks stopped them." *When Your Number's Up: The Canadian Soldier in the First World War* (Toronto: Random House of Canada, 1993), p. 179.
- Ibid.*, p.624.
- Ibid.*, p.659.
- Ibid.*, p.666.
- F.F. Worthington, "First Self Propelled Vehicle in the Canadian Army," 23 May 1956, Unpublished Manuscript in Autocar artifact File, AN#19390001-002, CWM, p.2.
- Logan and Levey, , p.646.
- NAC RG 9, War Diary 1st CMMGB, Report by Captain F. Worthington, 22 October 1918.
- D.K. Riddle, D.G. Mitchell, comps., *The Military Cross Awarded to Members of the Canadian Expeditionary Force, 1915-1921* (Winnipeg: Kirkby-Marlton Press, 1991), pp.362-363.
- Larry Worthington, "Worthy": *A Biography of Major-General F.F. Worthington* (Toronto: Macmillan, 1961), pp,111-113.
- Logan and Levey, p.656.
- Ibid.*, p.659.
- NAC RG 9, III D 3 Vol. 4987, "Report of Operations. ..F.F. Worthington, 7 November 1918, pp.2-3.
- Ibid.*, pp.2-3; Logan and Levey, pp.661, 668.
- NAC RG 9 III Vol. 3945 folder 63, file 5, Report of Operations, 1st CMMGB, 28 October - 6 November 1918, R. Brutinel.
- R.V. Manning to Major-General F.F. Worthington, 20 April 1967, MMB 22-2, Typescript of letter in CWM artifact file, AN#9390001-002.
- Major-General F.F. Worthington to L.F. Murray, CWM, undated, received at CWM 8 May 1967, MMB 22-2, Original letter in Artifact File, CWM AN#19390001-002
- Greenhouse, p.273.

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