

Private Thomas John Vincent Underhill 5 MAC

Army Service Corps - 5<sup>th</sup> Motor Ambulance Convoy



Thomas John Vincent, known as Vincent to his family, was born on 18<sup>th</sup> July 1888, the first child of Collingwoode and Clara Underhill. The 1891 census records the family living at 51 Gillott Road, Edgbaston but, by 1901, with the arrival of two further children, Dorothy Arline and Baron Collingwoode Seymour, the family had moved to more substantial accommodation at 22 Park Road, Moseley before moving next door to Number 20 by 1911.

In the census for that year Vincent, aged 22, is recorded as a 'motor engineer'. He worked for Wolseley Motors Limited. His name appears on the company's Roll of Honour listing the men who served with His Majesty's Forces in the Great War.<sup>i</sup> In 1914 the company had just opened a new 21 acre site, producing 3000 cars per annum.<sup>ii</sup>

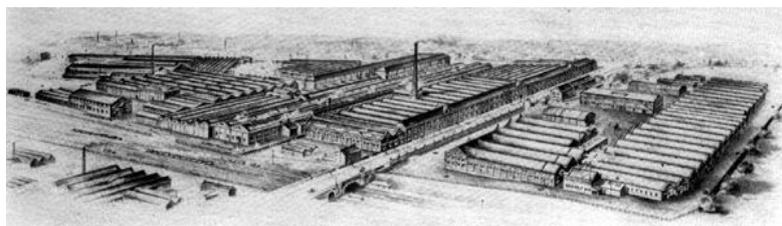


Figure 1: The Wolseley Motors site at Adderley Park, Birmingham



Figure 2: Stellite Cars poster

There was insufficient space to manufacture the new light weight car, called the Stellite 8/10, at the Adderley Park site. Instead it was produced and marketed by another subsidiary, the Electric and Ordnance Accessories Company Limited, Ward End Works, Birmingham. It had a 1075 cc four cylinder, water-cooled, overhead valve engine, a S U Wolseley carburettor (S U stands for Skinners Union the company who made them), a Carden Shaft (a shaft fitted with universal joints at its ends) and worm drive transmission. The gear box was in the rear axle. It weighed 8.5 cwt, with a wheelbase of 8' 10" and cost £158 in 1914 and 1915.<sup>iii</sup>



Figure3: Vincent Underhill in his Stellite car



ROLL OF HONOUR—Continued.

\* \* \*

## Wolseley Motors Limited.

**ADDERLEY PARK, BIRMINGHAM.**



UZZELL . . . . .	Air Service.	WAGG, F. . . . .	Mechanical Transport.
UNDERHILL . . . . .	A.S.C.	WILLIAMS, A. . . . .	Warwicks.
UNDERWOOD, W. H. . . . .	A.S.C.	WOODWARD, H. C. . . . .	R.N.V.R.
VAUGHAN, J. . . . .	Somerset Light Infantry.	WILLIAMS, F. . . . .	A.S.C.
VINCENT, V. . . . .	Warwicks.	WILLIAMS, H. . . . .	R.F.C.
VARLEY, T. . . . .	Warwicks.	WEST, W. . . . .	R.A.M.C.
VAN DAMME . . . . .	Belgian.	WOLFE, T. . . . .	Staffords.
VICKERS, W. . . . .	Warwicks.	WARNER, F. . . . .	Royal Anglesey R.E.
VAUGHAN, H. . . . .		WHEELDON, J. F. . . . .	Royal Garrison Artillery.
VERGANWEN . . . . .		WOOD, W. . . . .	
VANDEBURG . . . . .		WHITEHEAD . . . . .	
VANDEN BERGHE, A. . . . .	Belgian Army.	WAKEFIELD, H. F. . . . .	
VINE . . . . .		WEEKS, V. . . . .	R.A.F.
VINCENT, S. . . . .	Warwicks.	WATTS, J. . . . .	Coldstream Guards.
VAN GORP, G. . . . .	Belgian Army.	WEAVER, J. . . . .	Cambridgeshires.
VINCENT, A. . . . .	West Yorks.	WARDEN, E. . . . .	Royal Navy.
VENETT, H. . . . .	A.S.C.	WALLIS . . . . .	Devonshire Regt.
WALTON, S. . . . .		WILKES, C. . . . .	Worcester Regt.
WITTICK, A. J. . . . .		WOOD . . . . .	
WEBSTER, W. . . . .		WHITEHOUSE . . . . .	Somerset Light Infantry.
WAKE, R. . . . .	R.A.F.	WEBB . . . . .	Territorial Engineers.
WESTCOTT, F. . . . .	A.S.C.	WILLIAMS . . . . .	
WALSH, J. . . . .	Wiltshire Regt.	WILLIAMS . . . . .	
WRIGHT . . . . .	A.S.C. (Mechanical Transport).	WALLCROFT . . . . .	
WILSON . . . . .	A.S.C. (Mechanical Transport).	WOODFORD, A. W. . . . .	
WALLIN . . . . .	A.S.C. (Mechanical Transport).	WATTS, T. . . . .	
WOOD, C. . . . .	Air Service.	WOODCOCK . . . . .	
WYATT, H. . . . .	Worcester Regt.	WRIGHT, E. E. . . . .	
WEBB, H. . . . .	Warwicks.	WARBURTON, H. . . . .	South Staffs.
WARWICK, E. . . . .	2/5 Royal Warwicks.	WARBURTON, H. . . . .	Garrison Artillery.
WOOD, A. . . . .	Worcester Regt. (Reservist).	WEBB . . . . .	Warwicks.
WINGATE, W. . . . .	Warwicks.	WATTS, A. . . . .	Navy.
WILLEY, W. . . . .	Worcesters.	WILKES . . . . .	Royal Engineers.
WEEDON, G. . . . .	Royal Army Medical Corps.	WHELLER, W. P. . . . .	Warwicks.
WEBSTER, W. . . . .	Royal Warwickshire Regt.	WORTH, F. . . . .	Warwicks.

On August 4<sup>th</sup> 1914, Britain declared war against Germany. Vincent did not sign up to any of the local units but, instead, chose the 1<sup>st</sup> Motor Ambulance Convoy (1 MAC) of the Army Service Corps (ASC) in London, becoming Private Underhill, Service Number M1/7650.<sup>iv</sup> One possible explanation of this choice is that the family personally knew Arthur du Cros, an honorary colonel and former captain of the Royal Warwickshire Regiment, and founder of the Dunlop Rubber Company (Fort Dunlop) in Birmingham.<sup>v</sup>

Arthur du Cros' connection with W & G du Cros Ltd, owned and managed by his brothers, William and George, might have enabled Vincent to be part of this company's war effort. W & G du Cros Limited, in Warple Way, Acton, London was founded in 1908 as a garage and repair shop. The works were built to facilitate the operation of a fleet of a 1000 taxi-cabs, and undertake vehicle body building work.

With war imminent, George and Arthur du Cros made an offer to the Army Council to provide, equip and maintain a convoy of motor ambulances for work between the front line and the field ambulances in France. The offer was accepted on 20<sup>th</sup> September 1914, the vehicles to consist of 41 ambulances, 5 store wagons, 3 officers' touring cars and 10 motor cycles. The unit was referred to as No1 Motorised Ambulance Convoy (1 MAC) to the War Office.<sup>vi</sup>



Figure: Photograph of Vincent in a du Cros ambulance

Part of the offer made was that the necessary personnel should also be provided, to consist of three officers, who would serve without pay, one warrant officer, one company sergeant major, one quartermaster sergeant, four sergeants and one hundred and twenty-two driver-mechanics. The majority of men from the W & G du Cros Taxi Company enlisted into 1 MAC. As the need of the convoy at the front was urgent, the issue of having enough vehicles available in time was solved by taking the chassis of a taxi-cab (10-12 Panhard-Levassor) and fitting ambulance bodies to them. Three weeks later the convoy was ready.<sup>vii</sup>

Vincent was part of the original contingent, leaving Avonmouth on SS *Artist*, 31<sup>st</sup> October 1914, arriving in Boulogne three days later. By 4<sup>th</sup> November 1MAC had disembarked and was assigned to the Second Army of the British Expeditionary Force (BEF).<sup>viii</sup>

ARMY TROOPS—Second Army—continued.		10
UNIT.	ATTACHED TO	
<b>A.S.C.—</b>		
No. 9 Pontoon Park (M.T.) (774 Co., A.S.C.).		
2nd Army Troops Supply Column (885 Co., A.S.C.).		
2nd Army Aux. (Horse) Co. (443 Co., A.S.C.).		
17th Aux. (Petrol) Co. (587 Co., A.S.C.).		
1st Aux. (Omnibus) Co. (90 Co., A.S.C.).		
1st M.T. Mobile Repair Unit (98 Co., A.S.C.).		
9th Aux. (Steam) Co. (887 Co., A.S.C.).		
No. 588 Co. (attached Heavy Artillery).		
No. 2 Workshop for Anti-Aircraft Guns (423 Co., A.S.C.).		
<b>Medical—</b>		
Nos. 4, 5, 11, 14, and 22 Motor Ambulance Convoys (421, 823, 878, 567, and 640 Cos., A.S.C.).		
Nos. 2, 8, 10, 12, 15, 17, 46, N. Midland, Northumbrian, 1st and 2nd Australian, and 1st, 2nd and 3rd Canadian Casualty Clearing Stations.		
Nos. 2, 11 and 2nd Canadian Advanced Depots of Medical Stores.		
Nos. 1, 4, 5 (Canadian) and 14 Mobile Laboratories.		
Nos. 2 and 5 Mobile X-Ray Units.		
Nos. 1 and 2 Barge Filtration Units (I.W.T.).		
<b>Ordnance—</b>		
No. 2 Heavy Mobile Workshop.		

Once in France, 1 MAC was redesignated as 5 MAC. This was because there were already four other MACs operating there.<sup>ix</sup> It was commanded by Captain George du Cros until January 1918. The 5<sup>th</sup> Motor Ambulance Convoy spent nearly all its time on the Ypres salient under the command of General Sir Horace Smith-Dorrien from 1914 to 1915 and General Sir Herbert Plumer from 1915 to 1917.<sup>x</sup> In 1918, 5 MAC moved to the Somme area.<sup>xi</sup>

Before the war, the Royal Army Medical Corps had to depend on the use of supply wagons going back empty to the rear supply depots for the transport of casualties from field dressing stations to railhead hospitals. Although this was suitable for small wars, it proved a hopelessly inadequate system for large numbers of casualties.



Figure 5.A WW1 motor ambulance

Each motor ambulance car could carry six or eight patients sitting up, or four lying down. To neutralize the tendency of shock exhibited by so many wounded men, the vehicles were generally heated automatically by the exhaust, using a heat exchange mechanism, and also hot-water bottles.

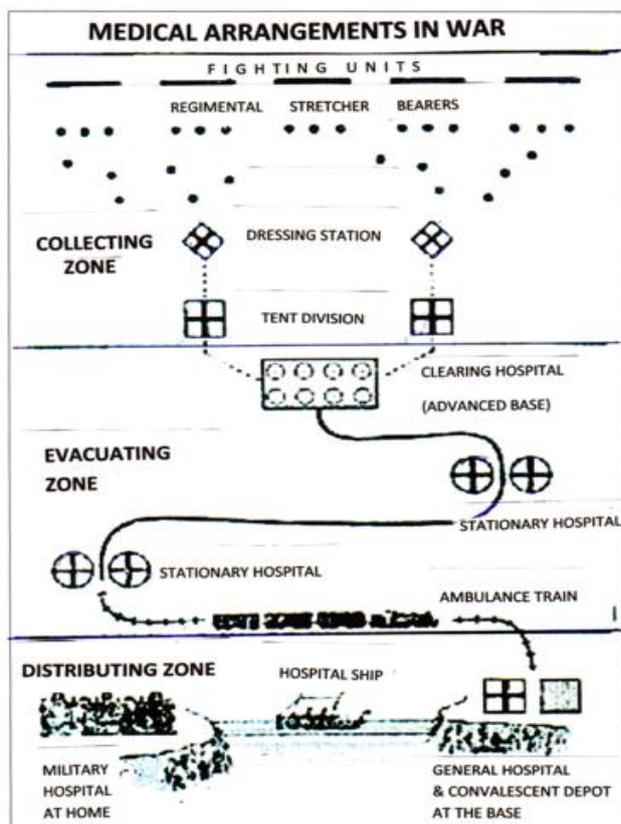


Figure 7. A diagram illustrating the organisation of the evacuation of the wounded from the battle front

Sir Tom Woodhouse, director of Medical Services for the original Expeditionary Force, provided two experimental convoys using ordinary touring cars. They were fitted with bodies very like those now used in all ambulance work. It proved so successful that motor ambulances were used hereafter for the speedy evacuation of casualties as a component part of the Royal Army Medical Corps.

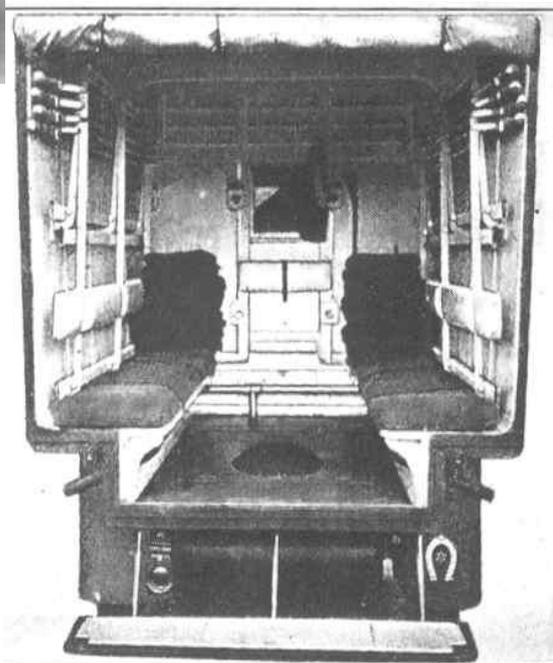
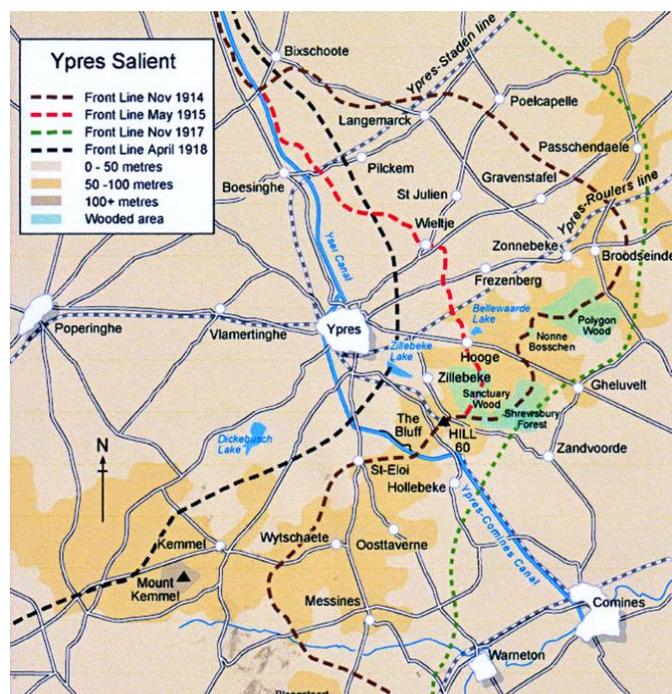


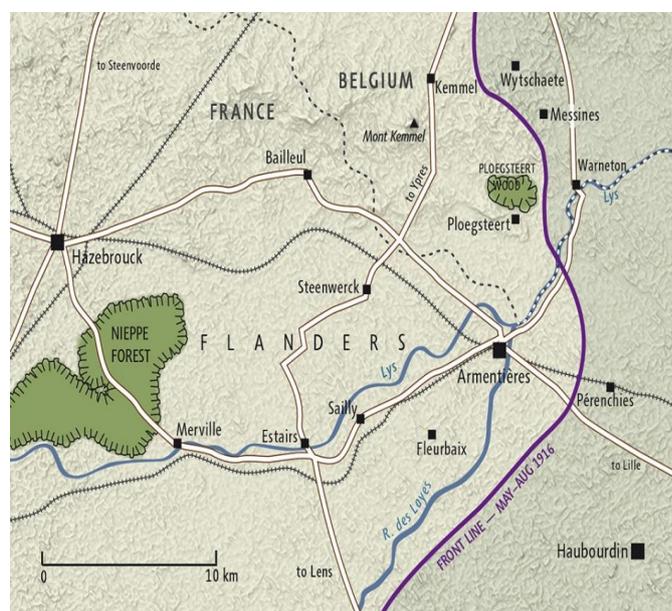
Figure 6. Inside a WW1 ambulance

When casualties were heavy, the motor ambulance convoys, usually consisting of about 50 vehicles, not only transported patients from the main dressing stations to the casualty clearing stations, but they also took patients capable of being evacuated directly to the ambulance trains. When the need arose they also conveyed the wounded to the base hospitals when the hospital trains were overwhelmed with the number of men to be evacuated.<sup>xii</sup>

On 5th November 1914, the ambulances of 5 MAC were equipped by the Royal Army Medical Corps with medical stores and left Boulogne for St Omer. It was here that 5 MAC was made up to the overseas establishment number of fifty from other makers by the Director of Transport.



**Map 1. The location of Poperinghe, St Jean, Wieltje, Vlamertinghe, St Julien and Dickebusch (near Lake Dickebusch)**



**Map 2. The location of Hazebrouck and Bailleul to the south of Poperinghe and Ypres**

patience and skill of Vincent as an engineer to create the model from mere scraps of metal discarded from the ambulance maintenance workshops. The models made it home, and at the end of the war one of them featured in an illustrated article in the May 1924 edition of the *Model Engineer and Electrician*.<sup>xvi</sup>

On 11<sup>th</sup> November, an urgent call was received at GHQ for ambulances. 5 MAC immediately proceeded to Poperinghe and commenced evacuation of wounded to Casualty Clearing Stations at Hazebrouck and St Omer from the First Battle of Ypres (18<sup>th</sup> October to 22<sup>nd</sup> November 1914).

On 14<sup>th</sup> November the HQ of the Second Army was established at Hazebrouck in the Ecole Maternelle. This enabled a workshop to be rented from the French Authorities for maintenance of the ambulances.<sup>xiii</sup>

On 4<sup>th</sup> February 1915, the ambulances came under fire for the first time clearing casualties from Dickebusch to Hazebrouck.

During the Second Battle of Ypres (22<sup>nd</sup> April to 25<sup>th</sup> May 1915), 5 MAC moved its HQ to Poperinghe, evacuating cases from the Advanced Dressing Stations at St Jean, Wieltje, St Julien and surrounding neighbourhood, to Poperinghe, Vlamertinghe and Bailleul.

On the 6<sup>th</sup> July 1915, Lord Kitchener and the Prime Minister, Lord Asquith inspected 5 MAC at Beauvorde Farm. Later in the year the King accompanied by HRH The Prince of Wales and General Plumer, inspected the Unit at Steenvoorde (7 miles north of Hazebrouck).<sup>xiv</sup>

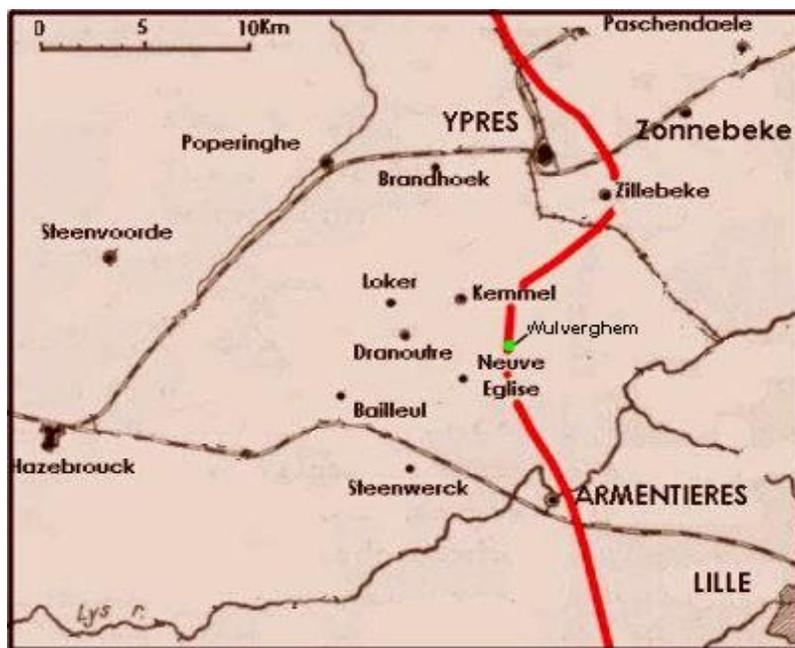
5 MAC continued to evacuate patients from the Ypres Salient until 1<sup>st</sup> April 1916, when the Unit was moved to Bailleul, having been relieved by 11MAC.<sup>xv</sup>

Vincent used his time away from driving to create three miniature working models of a steam engine (see page 14). They were made without the use of a lathe and small enough to be packed away in a kit bag and taken with him in the event of having to move out quickly. It reflects the ingenuity,

At 3.30 am on the morning of 24<sup>th</sup> April 1916 during a German air raid over Bailleul, the Vehicle Park was hit by a bomb which completely destroyed, by fire, seven ambulances and seriously damaged nine others. Within seven days these seven ambulances were replaced from England and the others repaired.<sup>xvii</sup>

An extract from a letter home from Corporal Jones, 5 MAC, to his wife on 30<sup>th</sup> April 1916, gives a sense of what it was like at the front waiting for the call to evacuate casualties:

*I returned last evening at nine, had just got off to sleep when I was awakened by an absolute hellish roar of guns which made the building tremble. Then there was a faint odour of gas which got stronger and stronger till everyone had to put on their helmets at 1am and were called out to go to the first Field Ambulance to find out, if possible, what number of wounded and gassed we should have to evacuate. We carried somewhere between a thousand and twelve hundred mostly badly gassed. The enemy have not gained anything. They got a footing in our front line but were hounded out again.*<sup>xviii</sup>



When the Wytschaete- Messines operations took place on 7<sup>th</sup> June 1917, 5 MAC was employed day and night clearing the field ambulances at Dranoutre, Locre (Loker on the map) and Westoutre (8 miles south west of Ypres). In forty-eight hours the vehicles had carried 2,125 casualties.

5 MAC was congratulated by General Plumer for the efficiency in all ranks of their work, after the operation was completed.

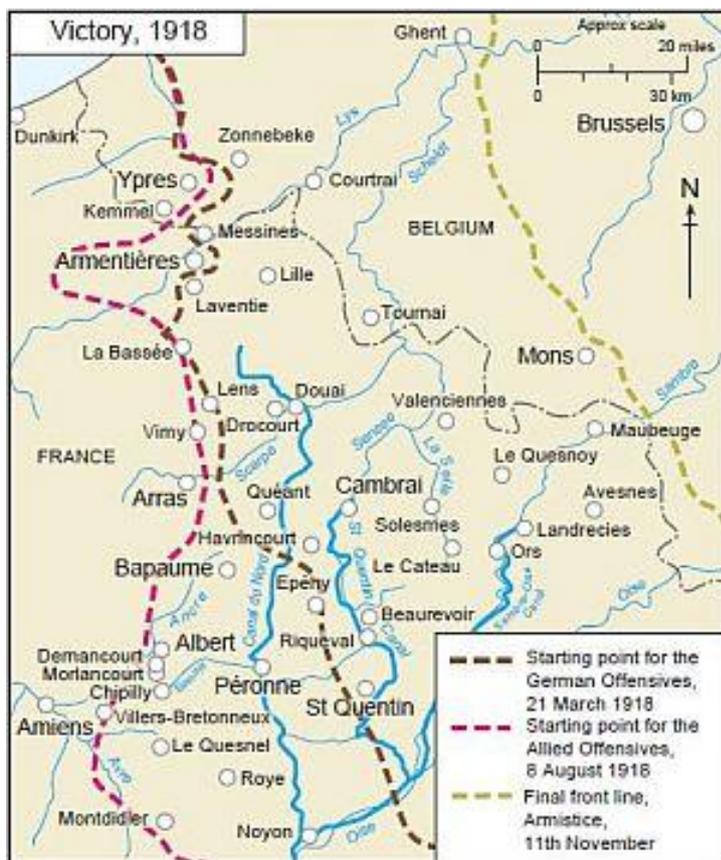
**Map 3: The location of Dranoutre and Locre relative to Bailleul**

During October 1917, Bailleul was being periodically shelled, but fortunately the personnel and vehicles sustained no casualties.<sup>xix</sup>

After the departure of Captain du Cros on 31<sup>st</sup> January 1918, Captain C W Bennett took over 5 MAC. On 13<sup>th</sup> February he presided over the exchange of ambulances with the Motor Transport HQ in Rouen. Half the Panhard ambulances were exchanged for Rover-Sunbeam ambulances and the remaining vehicles when 5 MAC arrived at their new HQ in Staple (see map 5).



**Figure: The Rover-Sunbeam ambulance**

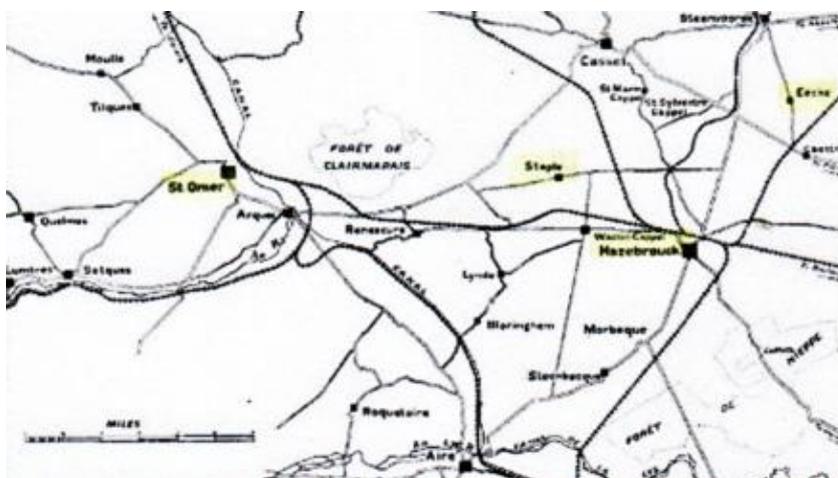


**Map 4: 5 MAC in the face of the German Spring Offensive were called upon to clear casualties to places of safety as the German Army advanced in the Somme area**

Following the move to Staple, the Unit was to work the back areas, but it was not long before it was called upon to help in more active operations again down south. This was as a result of the Spring Offensive by the Germans, bolstered by 50 Divisions freed up from the Russian Front and a last chance effort to break through the Allied lines. As a result, on 21<sup>st</sup> March 1918, twenty ambulances were despatched with haste to be attached to 1MAC, working with the Fifth Army in the Somme area. The ambulances were kept very busy working continuously day and night, the NCO's and drivers carrying out their strenuous duties, often refusing sleep, to get the wounded to a place of safety from the Casualty Clearing Stations at risk from the advancing German Army at Ham, Roye, Noyon, Cerisy, Gailly (17 miles east of Amiens), Villers-Bretonneux, Namps (13 miles south west of Amiens), Montieres (on the north west outskirts of Amiens), Saleux (on the south west outskirts of Amiens), and Picquigny (8 miles north west of Amiens).

At the same time this was happening, another twenty ambulances were despatched to Outersteen (about 3 miles south west of Bailleul) to clear patients from the surrounding district. Just previous to the Great Drive of the German army at Armentieres, 5 MAC had cleared the Bailleul Asylum of all the inmates to the train without mishap.

During the night of 26<sup>th</sup> March, two ambulances were returning through Doullens when hostile aircraft started bombing the town. A bomb was dropped near the ambulances, resulting in one driver being killed and the other wounded.



**Map 5: Showing location of Eecke, St Omer, Staple and Hazebrouck**

On 29<sup>th</sup> April, 5 MAC moved to Watten, (about 6 miles north of St Omer) to work with the Fourth Army. The work undertaken was chiefly the evacuation of the wounded from the Casualty Clearing Stations at Watten to St Omer and Blendecques (4 miles south of St Omer) and also from Esquelbecq (15 miles north east of St Omer) to Bergues (19 miles north east of St Omer).

On 24<sup>th</sup> September 5 MAC moved to Eecke in Belgium (4 miles north east of Hazebrouck) to work with X Corps, clearing the Main Dressing Stations situated at Westoutre (8 miles south west of Ypres) and Zavecoten (23 miles north of Ypres). On October 18<sup>th</sup> the Unit was working from Hollebeke and Gheluveld, both near Ypres, moving on to Dickebush the following day. After three days there, 5 MAC moved to Menin and thence to Lauwe (6 miles east of Menin) on the 28<sup>th</sup>. By this time an epidemic of influenza was spreading throughout the Unit but fortunately there were no mortalities.

On the 4<sup>th</sup> November 1918, 5 MAC moved to Mouscron, Belgium where the news of the Armistice was received. Between October 1914 and 11<sup>th</sup> November 1918, 5 MAC had carried 337,404 casualties in their ambulances.<sup>xx</sup>

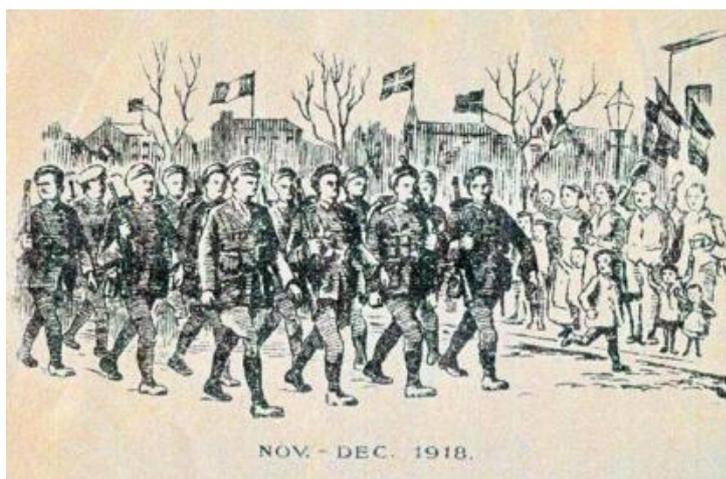


Figure 9: A picture of British troops celebrating Armistice Day on a calendar for November and December 1918 from the archive of Vincent Underhill



Figure 11: Named medal of Vincent Underhill: 'A Symbol of Courage & Services Displayed by Birmingham & District Motor Cyclists who Served in H.M. Forces 1914-1918.'

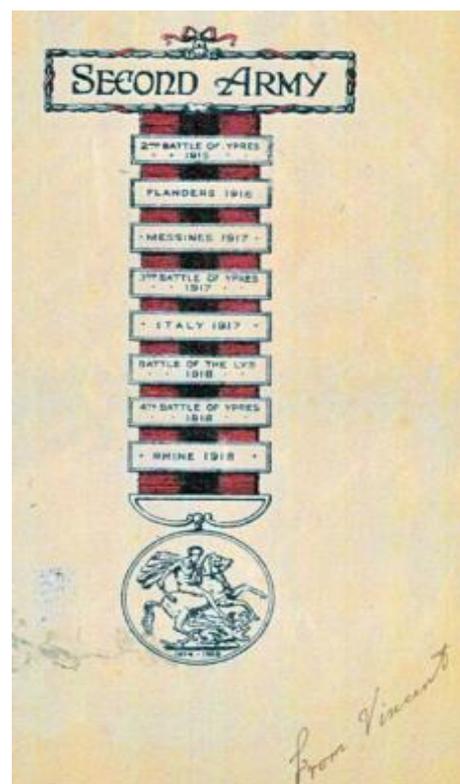


Figure 10  
1918 Christmas card picturing medal with clasps indicating the WW1 Battles fought by the Second British Army

It is possible that Vincent could have been affected by the chlorine gas attacks while collecting casualties in the Langemark to Poelkappelle area north of Ypres from 22<sup>nd</sup> April 1915 and also phosgene gas, first used by the Germans on 19<sup>th</sup> December 1915 at Wieltje, near Ypres.<sup>xxi</sup> From 1917, he could have also been affected, indirectly, by the lingering traces of mustard gas that clung to the skin and woollen uniforms of the casualties he was evacuating from the front line.<sup>xxii</sup> This might explain his ill health when he returned home after the war and his relatively early death at the age of forty-nine from a carcinoma on his right lung. It is now known that mustard gas, which can be absorbed through the skin, can lower the number of white blood cells in the body and as a result cause cells to mutate leading to leukaemia and cancers of the upper respiratory tract and there is some evidence that it can cause lung cancer. It is ironic that, today, derivatives of mustard gas are now used as part of a cocktail of drugs to destroy cancerous tumours.<sup>xxiii</sup>

In Vincent's archive are examples of 'Billets de nécessité', emergency notes issued in Europe, predominantly in France, during and after World War One from about 1914 and up to the early 1920's. They were used in towns and regions in place of coins which during wartime became scarce as the metal was needed for industry. Their use became redundant by the mid 1920s as the economy began to recover following the privations of wartime. On most of them there was an issue date with details of the date and time they could be re exchanged for regular currency issued by the Banque de France or other Central Bank.

There are hundreds of different types, mainly in denominations of 50c, 1 Franc and 2 Francs. They are interesting historic documents.<sup>xxiv</sup>



Also in the archive is the inside page of the 1918 Christmas card sent by Vincent from France after the Armistice.

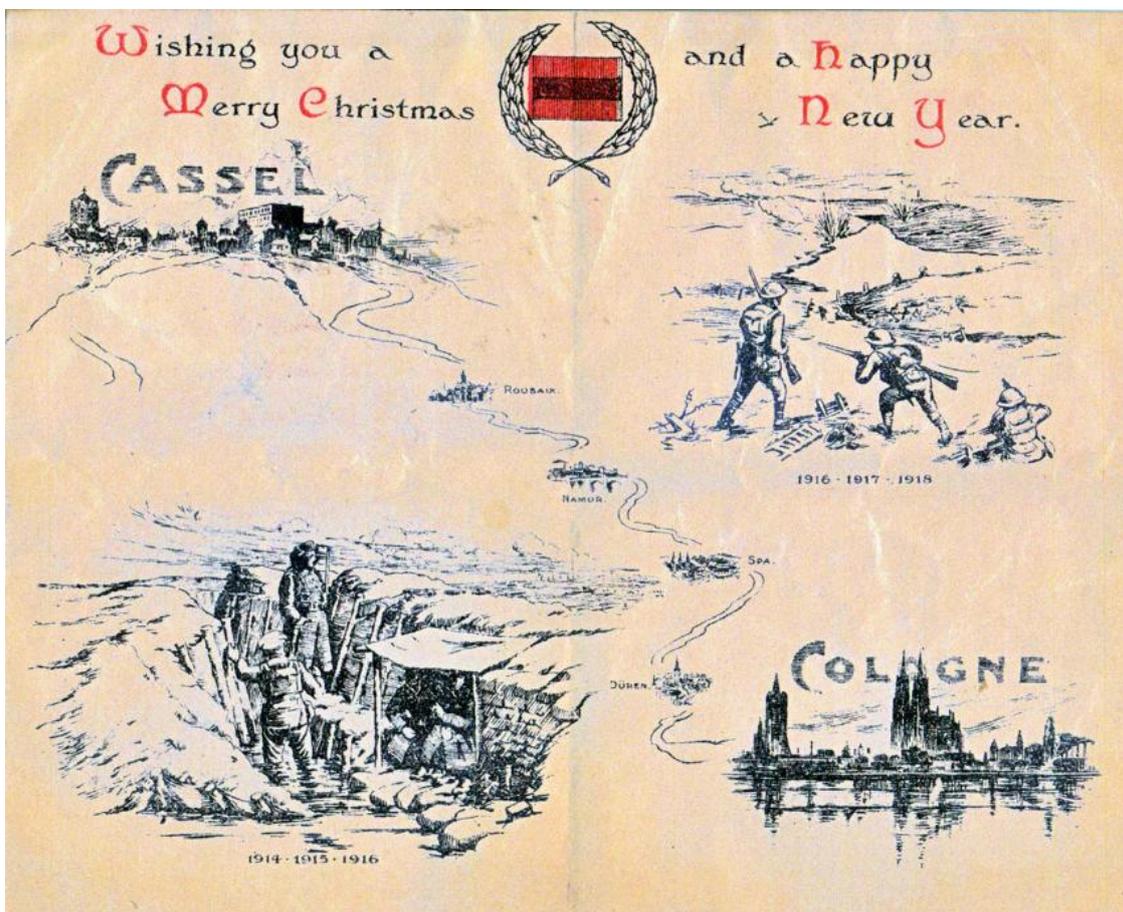




Figure 12. Talbot House (Toc H), Poperinghe

Vincent revealed to his family that during his time in Ypres he was, at one time, a driver for the Reverend ‘Tubby’ Clayton of Toc H fame. This is entirely plausible because in the autumn of 1915, Talbot House, in Poperinghe, about 12km west of Ypres, was founded as a retreat for all ranks to relax and enjoy a brief respite from the horrors of the Front Line. Tubby Clayton, its founder, made frequent trips so that he could minister to the frontline troops in the British sector of the Ypres salient. He would have needed a driver, who knew the roads well, to take him there and back. As Vincent had been moving casualties in the motor ambulance convoys from the evacuating zone around Ypres since 1914 on a regular basis, he would have been ideally suited for this service.<sup>xxv</sup>

Campaign :— 1914		(A) Where decoration was earned.		(B) Present situation.	
Name	Corps	Rank	Reg. No.	Medal when included in any PAGE	
(A) UNDERHILL	5 <sup>th</sup> Motor Amb. Company at S.B.	Pte	M/107650	VICTORY	Rasc. on 10/11/14
(B) T.J.V	--	--	M/10650	BRITISH	do do
Action taken				STAR 10/5/14	
3rd M. Amb. Co. at CRY 1036/10.20.3.22. 6500/10.22.				do do	
reassigned to 1st M. Amb. Co. at S.B.				do do	
642000. 1st M. Amb. Co. at 10.2.25-11/19/4064				do do	
QUALIFYING DATE: 4/11/14.					

Medal record of Thomas John Vincent Underhill



Vincent received the 1914 Star with clasp, the Allied Victory Medal, and the British War Medal 1914-18. The clasp was awarded to all those who served under fire.

Early in 1923 Vincent married Alice Maud Palser. In November 1929, Alice gave birth to a daughter Irene Clara, their only child.

Vincent died on 12<sup>th</sup> April 1938 at his home, 6 Kenwood Road, Shelton, Shrewsbury with his wife at his side.<sup>xxvi</sup>

The 1914 Star with clasp, Allied Victory Medal and British War Medal

Researched and written by Edwina Rees, Moseley History Society.

With thanks to Graham Underhill, Vincent’s nephew, and Jonathan Pitman, Vincent’s grandson, for their contributions to this article.

## Footnotes

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- i Birmingham City Battalions Book of Honour, 1920  
Midlands Historical Data, p 200
- ii Adderley Park Wolseley Works  
<http://www.aronline.co.uk/blogs/cars/wolseley/in-production-adderley-park-wolseley-works/>
- iii Lightauto:The Evolution of the Modern Ultralight Economy Car  
<http://www.lightauto.com/ultrelight13.html>
- iv British Army WW1 Medal Roll Index Cards, 1914-1920  
<http://search.ancestry.co.uk/search/db.aspx?dbid=1262>
- v Arthur du Cros  
[https://en.wikipedia.org/wiki/Arthur\\_Du\\_Cros](https://en.wikipedia.org/wiki/Arthur_Du_Cros)
- vi War Diary of the 5<sup>th</sup> Motor Ambulance Convoy.  
Ref WO-95-340-9\_62.jpg, p 63
- vii See vi, p 63
- viii See vi, p 64
- ix See vi, p 64
- x The Second Army 1914-1918  
<http://www.1914-1918.net/armies.htm>
- xi See vi, p 74
- xii The Royal Army Medical Corps and its Work in WW1: The Motor Ambulance Corps  
<http://www.vlib.us/medical/ramc/ramc.htm>
- xiii See vi, p 64
- xiv See vi, p 65
- xv See vi, p 65
- xvi *The Model Engineer and Electrician*, May 1<sup>st</sup> 1924, pp 483-484
- xvii See vi, p 65
- xviii Extract from a letter written by Corporal M. Jones, 5th Motor Ambulance Convoy, Army Service Corps  
To his sister Marjory, 30th April 1916.  
<http://www.worthpoint.com/worthopedia/ww1-bravery-military-medal-mm-gp-220044273>
- xix See vi, pp 65-6
- xx See xi, pp 73-75
- xxi Some of the problems of this war handled by the RAMC: Gas  
[http://www.ramc-ww1.com/chain\\_of\\_evacuation.php](http://www.ramc-ww1.com/chain_of_evacuation.php)
- xxii First German Phosgene attack on British Troops.  
[https://en.wikipedia.org/wiki/First\\_German\\_phosgene\\_attack\\_on\\_British\\_troops](https://en.wikipedia.org/wiki/First_German_phosgene_attack_on_British_troops)

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- xxiii Hazel, Susan. 27<sup>th</sup> August 2015. Mustard gas – from the Great War to frontline chemotherapy  
<http://scienceblog.cancerresearchuk.org/2014/08/27/mustard-gas-from-the-great-war-to-frontline-chemotherapy/>
- xxiv Touchelay, Béatrice. Les monnaies de nécessité ou la grande débrouille dans le Nord occupé (1914-1918). Ref 89299. Université de Lille3 IRHiS.  
 With thanks to Michael Berry
- xxv *The Story of Talbot House, Popperinghe*  
<http://www.greatwar.co.uk/ypres-salient/museum-talbot-house-history.htm>
- xxvi Death Certificate of Thomas John Vincent Underhill

## Maps

- Map 1 Ypres Salient map from the Commonwealth War Graves Commission site  
[http://www.ourfamilystories.gen.nz/HTML\\_files/Documents/Doc\\_Ypres\\_Map.html](http://www.ourfamilystories.gen.nz/HTML_files/Documents/Doc_Ypres_Map.html)
- Map 2 Position of the Front Line May to August 1916  
[http://www.ossett.net/WW1/Ignatious\\_Jackson.html](http://www.ossett.net/WW1/Ignatious_Jackson.html)
- Map 3 1/4 Battalion Yorkshire Regiment June/July 1915  
<http://homepage.ntlworld.com/bandl.danby/011Bn1915.html>
- Map 4 Victory Map 1918  
<http://ieper.wikispaces.com/WW32+Ludendorff>
- Map 5 The New Zealand Division 1916-1919: St Omer and Hazebrouck  
<http://nzetc.victoria.ac.nz/tm/scholarly/WH1-Fran-fig-WH1-FranP007a.html>

## Illustrations

- Figure 1 Adderley Park Wolseley Works  
<http://www.aronline.co.uk/blogs/cars/wolseley/in-production-adderley-park-wolseley-works/>
- Figure 2 Stellite car poster  
[http://www.gracesguide.co.uk/Electric\\_and\\_Ordnance\\_Accessories\\_Co](http://www.gracesguide.co.uk/Electric_and_Ordnance_Accessories_Co)
- Figure 3 Photograph from the Graham Underhill archive
- Figure 4 Photograph from the Jonathan Pitman archive
- Figure 5 First World War Motor Ambulance  
<http://www.redcross.org.uk/Copyright/First+World+War+motor+ambulance?id=b8abe6f9-d6d1-4966-8dcd-cf57934f5ccc>
- Figure 6 Inside a Motor ambulance  
<http://www.iwm.org.uk/collections/item/object/205213264>, Catalogue Number Q33438
- Figure 7 The Evolution Of Casualty Evacuation In The British Army 20th Century (Part 1) –Boer War To 1918  
<http://jramc.bmj.com/content/148/2/200.full.pdf>, p 203

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Figure 8 Sunbeam Motor Ambulance  
[http://wwi.lib.byu.edu/index.php/Rover\\_Sunbeam\\_Ambulance](http://wwi.lib.byu.edu/index.php/Rover_Sunbeam_Ambulance)

Figures 9, 10 and 11 From the Jonathan Pitman archive

Figure 12 Talbot House from a soldier's sketch  
<http://www.greatwar.co.uk/ypres-salient/museum-talbot-house-history.htm>

Photographs of the three miniature steam engines made by Vincent Underhill

