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## AUSTRALIAN ARMY JOURNAL

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*A periodical review of military literature*

No. 207, AUGUST 1966

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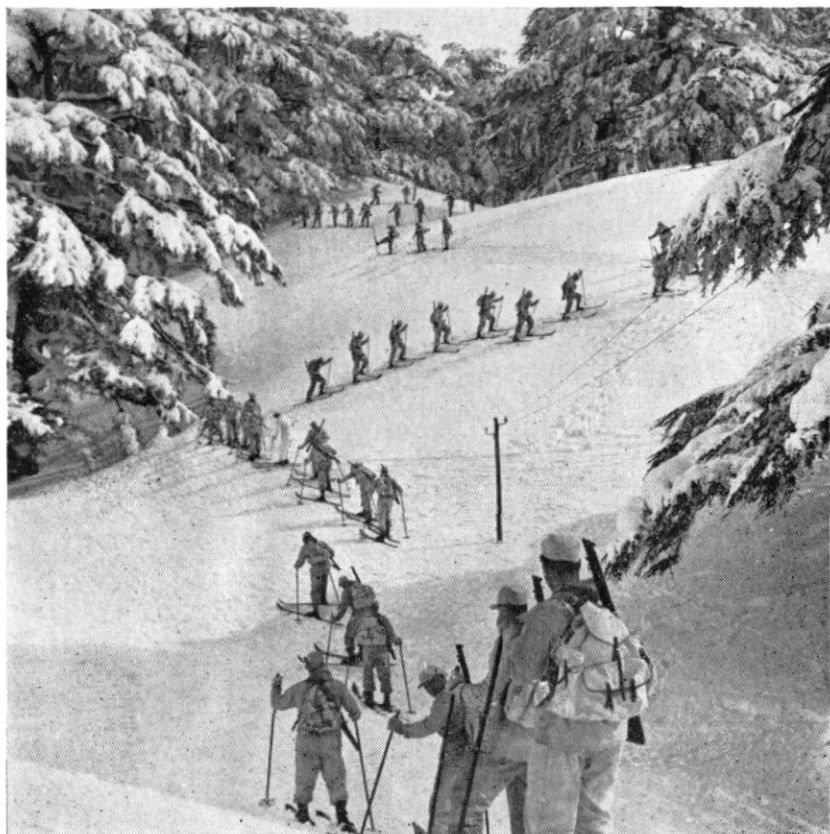
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Australian ski troops training in the Lebanon. In the winter of 1941 a ski school was formed to train Australian troops to patrol, on skis in the winter and as mountain troops in summer, the lofty mountains between the 7th Division round Tripoli and the 6th Division round Baalbek and Damascus. The intention was to form a ski company of about 200 men for each of the three Australian divisions then in the Middle East. Hard training was carried out, but before the course was completed Japan had attacked, and the men were ordered back to their units.

Photo: *Australian War Memorial*

# **General Sturdee and the Australian Army**

*Lieutenant-General Sir Sydney Rowell, KBE, CB,  
Australian Army, Retired*

VERNON Ashton Hobart Sturdee joined No. 2 Electrical Company, Australian Engineers (Militia) as a sapper in 1908 and retired in April 1950 from the highest post the Australian Army can offer, that of Chief of the General Staff. It was inevitable, I suppose, that he should seek a career in one of the Services. His father was a distinguished doctor and volunteer medical officer and his uncle an Admiral of renown in the Royal Navy. As one who had known him from 1915 onwards and who worked in the closest association with him in the last fifteen years or so of his service it is an honour to recall some of General Sturdee's achievements; to emphasize his work for Australia and for the Army, and to establish him as a man whose memory should never be forgotten.

Someone in the Royal Australian Engineers will no doubt feel the urge to write about Sturdee's work with that corps from his first association with it in 1908 until he went into the Staff College at Quetta in 1921. Suffice to say that in World War I he rose from being Adjutant 1st Divisional Engineers with the rank of captain in 1914 to become C.R.E. 5th Division in 1917 as a lieutenant-colonel and was twice decorated. The only higher post he could have achieved in his own corps was that of Chief Engineer of the Australian Corps, and this was held by a distinguished sapper, the late Brigadier-General C. H. Foott. One of the posts Sturdee felt was particularly important was on the General Staff at G.H.Q. for the last six months of World War I, owing to the broad view he obtained of the B.E.F. as a whole. He was one of the very few Australians taken onto the G.H.Q. Staff as a result of pressure from Australia against

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*General Rowell is a graduate of the first class at RMC. He was commissioned on the outbreak of the 1914-18 War and served with the 3rd Light Horse in Egypt and on Gallipoli, until invalided home in February 1916.*

*After occupying various appointments in the peacetime Australian Army, he became GSO 1 of the 6th Division AIF in 1939, and later BGS 1 Corps, serving in Libya, Greece and Syria. He returned to Australia in 1941 to become DCGS to General Sturdee and later commanded 1 Corps and the New Guinea Forces during the critical operations in Papua. He was GOC AIF Details Middle East and ALO GHQ ME Forces in 1943 and from 1944 until the end of the war Director of Tactical Investigation at the War Office. He became Vice Chief of the General Staff at AHQ in 1946, stepping up in April 1950 to become CGS, the first RMC graduate to hold that appointment. He retired in 1954.*

G.H.Q. becoming a close preserve for British officers, and this experience was to help him in later years when there was so much intermingling of British, United States, Australian and other Allied forces.

First impressions are generally lasting. I first met Vernon Sturdee at Malta in August 1915 where we both had been convalescing. He was adjutant of a brand new troopship which was taking a mixed batch of British, Indian and Dominion troops



— Australian War Memorial

General Sturdee, General Wavell, the Middle East Commander-in-Chief, Mr. Spender, the Minister for the Army, and General Blamey GOC AIF Middle East. The photograph was taken during the visit of the Minister for the Army and General Sturdee to the Middle East at the end of 1940.

back to Gallipoli. And I recall the slim figure, the quiet speech and the unruffled efficiency of the man as we were directed to our places on the ship. We were routed to Alexandria via Imbros, which meant that we would have been dumped in vile base camps in Egypt until the system caught up with us. Sturdee, with no small degree of initiative and with the approval of an elderly O.C. troops, bearded the appropriate General at G.H.Q. in Imbros and persuaded him that it would be folly to take

1,500 men back to Egypt when they were so close to their units. And so we were at once disembarked.

Our paths did not cross again until February 1933. In the meantime Sturdee had been to the Staff College at Quetta and had a tour of duty with a C.M.F. division. I was about to say that he was not a sentimentalist. Perhaps it would be more correct to say that he was a realist in the highest degree. I say this because it was during his Staff College course that a story concerning him became a legend with his fellow students. The course had come down from Quetta into India to do an exercise and had stayed one night near Agra. Someone suggested that it would be appropriate to pay a visit to the Taj Mahal. Sturdee said: 'What rot. Why waste time on visiting a cemetery when we can have a game of bridge!'

He went to the War Office on exchange in 1929 for two years, followed by the 1931 course at the Imperial Defence College and a year at Australia House as Military Representative. At this stage of his career he was clearly a marked man. We can be grateful that those in charge of Army affairs at the time had had the wisdom to see his worth and to give him such a splendid and diverse education.

He returned to Australia in 1933 to become D.M.O. & I. at Army Headquarters. I had been in this Branch for a year as a GSO 2, and here was to commence the close association between us which was to last until I succeeded him as C.G.S. in 1950. It is well to remember that the structure of the General Staff Branch then bore little resemblance to that which we have today. The C.G.S. had no deputy and there were only two directors — D.M.O. & I. and D.M.T. Each had a small staff, while there were two or three relatively junior officers representing some of the arms. In essence the D.M.O. & I. was the residuary legatee of everything in the Branch except training matters, and he was truly the one officer at Army Headquarters to whom the C.G.S. looked for advice. With these resources, the problems which faced us were truly formidable. The continued work on the army section of the War Book, so brilliantly initiated by a very distinguished soldier in the person of the late General Wynter; the plan for raising an overseas force; the plan of strategic concentration within Australia; the build-up of the C.M.F. in both men and equipment; the general business of attempting to equip the Army with modern weapons with a pitifully small budget and with the emphasis on Coast Defence and anti-aircraft artillery; the improvement in C.M.F. training depots and in the quarters and conditions of service for Regular Army personnel; and last, but by no means least, an expansion of the Regular Force.

To those of us working with him then, Sturdee displayed those characteristics which he retained all his life. He had a very precise mind — he had a great sense of the need for priorities — he saw the problem very clearly — he was able to give orders which left no one in doubt as to what was wanted and he then left people to get on with the job. When it came to the answer he was kindly and constructive in criticism. But he didn't suffer fools gladly and told them so, while, at the same time, he was unerring in picking out the one who was dragging his feet and who needed encouragement or something stronger. But above all, he knew how to laugh, and thus was a great help to people who, even in that year 1933, were asked to work beyond the normal.

I returned from England early in 1938 after a long period of service there and called in at Army Headquarters on my way to take up a posting in Sydney. I found the General Staff organization not much changed except that there were more people, but I found Sturdee still D.M.O. & I. and still carrying the same load. I recall asking him how long I could expect to stay in Sydney and his reply that anything could happen with things as they were. The outcome of it all was that, on the same afternoon, he told the C.G.S. that he could no longer be expected to do all that was needed with the pressure as it then was, and that the General Staff Branch must be reorganized and a Director of Staff Duties appointed. Next morning I received a telegram telling me to return to Melbourne as soon as I reached Sydney to take over the post of D.M.O. & I.; Sturdee was to become our first D.S.D.

Although only in the General Staff Branch a few months my next post with the Inspector-General brought me into close and everyday touch with the then Director of Staff Duties. There were some curious cross currents at Army Headquarters in those days: great enthusiasm and drive on the lower levels, but some reaction to progress and reform on the higher. There was some opposition to the appointment of the Inspector-General and more opposition to the reforms contained in his report, which, if fully implemented at the time, would have put us in a very much better position than we were at the outbreak of World War II. All the time Sturdee carried the banner of progress, and he never ceased to advise his Chief that there should be ready acceptance of the Squires' proposals which, after all, were only what the Army had strived after for so long.

The outbreak of war in September 1939 forced the belated introduction of the Command System. Sturdee was the logical choice for Eastern Command, rising from colonel to lieutenant-general in one step. With his unerring sense of the correctness



of the first principle of Staff Duties — first things first — he applied himself with great vigor to the problem of recruiting, accommodating and equipping the A.I.F. in his command. Intimately concerned as I was with the A.I.F. at this time, I know what a joy it was to deal with Eastern Command on matters concerning the 6th Australian Division initially and later 1 Australian Corps. We were not always so welcome elsewhere, but that is another story.

Sturdee stepped down in rank to raise and command the 8th Division, but he held the appointment for only two months when he became C.G.S. in August 1940, owing to the death in an air accident of General Sir Brudenell White. My only contact with him in the next year was by occasional letter and a personal meeting at the end of 1940 when he came to the Middle East with the Minister for the Army. But from a survey of the records his major problems were (a) the nourishment in men and material of the A.I.F. overseas; (b), the expansion and improvement in efficiency of the C.M.F.; (c), the general question of equipment manufacture and procurement; and (d) the commencement of planning in the South-East Asian area to meet the ominous threat of Japanese expansion southward from China. He saw very clearly that a critical stage would be reached late in 1941 in maintaining reinforcements for our divisions overseas, and gave us a very blunt reply in the middle of that year to a proposal we put up to form an Australian Army of two corps in the Middle East. This of course was before the 8th Division was fully committed to Malaya and the island chain. With regard to the C.M.F. he faced the problem of lack of continuity in the policy of 'up and down' in the call-up. And the fact that he was advising a government which could be defeated at any time was of no aid to his efforts to gain some stability in Home Defence. Then he was heavily involved in discussions with the United Kingdom and Dutch authorities in the strategic field. His position could not have been easy, as he was the only Australian among the then Chiefs of Staff in office, and there must inevitably have been some conflict on priorities to say nothing of the difficulty of dealing with a foreign power in the Netherlands East Indies, whose home base was under German occupation.

I came back to Australia in September 1941 at General Sturdee's urgent request to become Deputy Chief of the General Staff. After the smooth efficiency of the superb staff at Headquarters 1 Australian Corps I was staggered at the prospect. My predecessor was struggling manfully with the dual role of Commander 1st Armoured Division — then spread over most of Australia — and D.C.G.S. His time at Army Headquarters was necessarily limited. I found all the General Staff directors as

well as the other members of the Military Board sitting, as it were, on the C.G.S.'s doorstep. It was easy to order the directors away, but not so easy to deal with Board members who at times were leaning far too heavily on the C.G.S. Between us all we did something to take off the pressure, for the time was near when he would be called on to make the most serious decisions of his career. I have always thought that it helped him to have someone with a similar standard and scope of professional education with whom he could talk. He certainly gave me his complete confidence.

Almost immediately the Government changed and this meant an additional worry for the C.G.S. who had to accustom himself to a different set of political masters who had been in opposition for nine years. And what a dreadful strategic situation faced them! The first major issue was that of the relief of the 9th Division in Tobruk. Sturdee's view was sought in this matter and he said, I suppose with justification, that the recommendation of the man on the spot (i.e. Blamey) should be accepted and that the relief should take place. I didn't go along with this view, but he was the C.G.S. and that was that. The further worsening of the situation in view of Japan's attitude was a constant worry in spite of the most unwarranted optimism in some political and departmental circles. There were two related problems: first the defence of Malaya and the island chain and, second, the improvement in the Home Defence area. Sturdee steadfastly refused to agree to a complete concentration of the 8th Division in Malaya, and held a brigade group at Darwin while, under great pressure from Commands and from other Branches of the Staff at Army Headquarters, he worked to have the Home Forces order of battle increased and the C.M.F. called up for full-time duty. As he told me, he was once almost thrown out of the Cabinet room for pressing for this increase. As was to be expected, the day after the *Prince of Wales* and *Repulse* were sunk off Malaya there was no limit.

The defence of New Guinea now became increasingly important. By this time agreement had been reached on a British proposal that portion of the A.I.F. be transferred from the Middle to the Far East, but this could not be effective for some months. Sturdee's decision here was to scrape the barrel in Australia to reinforce Moresby to the strength of a brigade group with six months supplies. But he was insistent that there could be no further reinforcement unless and until the security of sea and air communication in the Coral Sea was assured. This was not established until after the Battle of the Coral Sea, by which time the control of operations had passed from the C.G.S. to the C-in-C Allied Land Forces.

Sturdee's biggest decision at this time — and I suppose the most fateful recommendation he had to make in his service — was to urge the Government not to permit the A.I.F., then in ships on the way from the Middle East, to be established in the Netherlands East Indies. In this he was well briefed in a letter written to me by C. E. M. ('Gaffer') Lloyd, who had come out from the Middle East to join General Wavell's staff in Batavia, and who strongly advised against the proposal in view of the complete unsuitability of Java as a base. In the event a brigade of the 6th Division went to Darwin, while the balance staged off a few months in Ceylon. The 7th Division came home, and in retrospect it is as well they did, otherwise New Guinea could well have been lost.

I must stop here for a moment lest someone should say: 'Wasn't Sturdee ever wrong?' Of course he was and he was the first to admit it and to regret that some of the people he had picked to work for him were not just what he expected. But these human frailties were of relatively minor consequence and in no way affect the overall stature of the man.

The change of organization in the Army from Government by Minister and Military Board to the supreme authority of the Commander-in-Chief was accepted philosophically by General Sturdee. I think he was glad that the major responsibility was being shifted to other shoulders. But he did not take kindly to being just another Principal Staff officer, where so many people could by-pass him as C.G.S. and go direct to the C-in-C. And so he was glad to be given the post in Washington in September 1942 as head of the Military Mission. But it is a striking commentary on man's inhumanity to man that, at the height of the crisis in Papua, some circles would have held him responsible for the failure to reinforce Moresby at an earlier date, and this after all that he had done!

I can imagine no one more suited to head the Mission in Washington than he. He had an unrivalled knowledge of the strategy of the area and he knew as well as anyone its needs in men and material. I think that the comments made to me in later years by American and British officers with whom he worked illustrate sufficiently the value of this period of his service.

Sturdee came back to the rather frustrating series of operations controlled by First Australian Army from early 1944 to the end of the war. Any assessment of his worth as a commander in the field is best left to those who served with and under him. They tell of a wise and tolerant commander who gave clear orders and left his subordinate commanders to get on with the job while he did his utmost to see that they were adequately

supported administratively. Indeed the people at Army Headquarters at the time must have realized that he could not be easily turned aside. In one telegram to the C-in-C he said: 'I asked for men and in return received only smooth promises and honeyed phrases.'

Late in 1945 there was a great deal of discussion in high places as to the form the future structure of the Army would take. In the end it was decided to terminate the C-in-C's appointment and revert at an early date to the traditional system of control by Minister and Military Board. I think Sturdee would not have been unwilling to retire at this time, but the Government wisely reappointed him as C.G.S., he being the one man of high rank to whom no exception could possibly be taken at this time.

He saw the Army through the period of demobilization and its next task of raising the Australian Component of B.C.O.F. and the maintenance of the whole British element. He fought our battle for the re-establishment of the Regular Army and C.M.F. and for the proper share of available funds to support us. At this period his standing in government and political circles was never higher. He was never completely at home with politicians, some of whom he liked and some the reverse. But he recognized, as we all must, that in a democracy the political authority of the Minister is paramount, and that it is the Minister and not the General who has to stand up in Parliament and justify his actions or those of the people in the Service. No Minister with whom Sturdee served could ever say that he had been let down by the C.G.S.

I set out to write an appreciation of a distinguished Australian soldier. In the event some may say 'But this is the story of Sturdee, Rowell & Co.' If this should happen, I can only claim that this is almost inevitable in view of our close association in nearly a generation of crises. But it must never be forgotten that whichever member of the company gave advice or whether the advice was good or bad, it was Sturdee and Sturdee alone who had to take the decisions.

What is of much greater significance is that this tribute is itself a brief history of the period. And it is right that this should be so since General Sturdee himself contributed so much to the making of that history. He will always be remembered by those who were privileged to work with and under him as a kindly, humble and simple man who carried out his great responsibilities with a minimum of fuss and without the aid of an extravagant public relations organization. The younger members of the Army and those who will follow should find in his work an inspiration and an example of loyal, selfless and devoted service. □

# ***The Natural Laws of War*** ***or*** ***The Study of Curves***

*Lieutenant-Colonel R. S. Garland, MC,*  
*Royal Australian Infantry*

## **Basic Laws**

I HAVE been doing some idle mental research in an endeavour to establish the natural laws which govern the evolution of warfare as opposed to the Principles of War, which are at best merely a guide to the broad parameter concepts of a military plan, and have reached the conclusion that there are five basic laws, namely:

*Law 1.* There are two extreme forms of warfare, namely positional warfare and fluid warfare.

*Law 2.* The supremacy of positional warfare versus fluid warfare is governed by scientific progress and the allied logistic support.

*Law 3.* The evolution of these two forms of warfare, like time, is curved.

*Law 4.* The two tactical factors which may be used to advantage to upset advantages conferred on an opponent by technical superiority are relative strengths, and undeveloped terrain such as exists in large areas of South-East Asia.

*Law 5.* To be successful in battle the commander must appreciate which form of warfare is ascending in the theatre and apply his available resources accordingly to the problem on the ground.

## **Law 1 — Fluid and Positional Warfare**

There can be little doubt after a quick look at the illustration of the military wheel of fortune accompanying this article that the two extremes of battle are fluid and positional warfare. It is often difficult to label any particular subject as being merely black or white and this law must recognize the existence of transient concepts as the wheel grinds round from one extreme to the other.

The reader may wonder of what use is my conclusion which postulates the existence of the first natural law of warfare. If

popularity and renown, knew well that he was meeting for the first time the greatest commander of the age, and that his own reputation was at stake in the result. He lacked faith in his Army; and believed the help of his trusted and experienced Prussian ally, Blucher, was an essential factor to provide even a chance of victory.

After spending the day in the saddle at Ligny, Napoleon spent the night of 16-17 June at the Chateau de Fleurus. He is said to have been in a state of utter exhaustion, and indeed had been constantly on the move since he left Paris on 12 June. He flung himself on his bed and lay there for hours, motionless. At dawn on the 17th he was still exhausted, and no doubt for this reason delayed seeing Grouchy till 8 a.m. Even then he was in no mood for action, and, at 11 o'clock, drove in his carriage to Ligny, and spent some time walking among the wounded on the battlefield.

On the night of the 17-18 June, at Caillou farm on the Charleroi road three miles north of Genappe, where he had arrived in his carriage on the evening of the 17th, the Emperor walked forward some two miles to La Belle Alliance in the dusk, to see the Mont St. Jean position from that vantage point. It was already raining heavily, and he returned to the farm at 10 p.m. and went to bed. But he was up again at 1 o'clock, and visited the bivouacs and outposts in the rain; back to bed, he was awake again at 3 a.m. An hour later it was light; he got up and walked to La Belle Alliance for another survey of the ground. At 8 a.m. he breakfasted with his Generals, who had been summoned to join him at La Belle Alliance. At 10, he was back at Caillou farm and went to sleep for an hour! At 11.30, he was back at La Belle Alliance.

He spent most of the day on foot, seldom mounting his horse; but at 3 p.m. he left La Belle Alliance, and returned briefly to Caillou farm.

Medical opinion on the exhaustion and restlessness exhibited by Napoleon during these vital three days lays the blame on a severe attack of haemorrhoids, which had been troubling him on and off for the last eight years. The long day in the saddle at Ligny had, it is supposed, produced some prolapse and strangulation, which left him in continuous pain. His return to the Caillou farm during the Waterloo afternoon was no doubt for some palliative treatment by his servants. The opinion goes far to explain the Emperor's lack of mobility during Waterloo.

Napoleon had hoped that Wellington might have continued his retreat of the previous day towards Brussels, or at least to have moved eastwards to draw closer to the Prussian Army.

He was not to know that, since the previous summer, Wellington had chosen this ground as the best position to defend Brussels from attack from the south. The Emperor's own eyes, and the reports of his staff officers sent out to reconnoitre, confirmed that the Army of the Netherlands was in fact posted in force on the Mont St. Jean position; and that the forward localities of Hougoumont and La Haye Sainte must be overrun before he could come to grips with Wellington's main force on the crest of the hill. What did that hilltop hide? Marshal Ney, at Napoleon's elbow, would have bitter memories of the day, nearly five years earlier, when he attacked the crest at the Convent of Bussaco and Wellington's hidden Light Division poured over the hill to drive the French back in confusion. General Foy, with his division facing Hougoumont, and many others present, would have remembered Bussaco that morning.

Napoleon's first step was to send off a message to Grouchy, telling him that the battle would be joined during the day, and to keep moving across westwards, as he pressed the Prussians, to rejoin the Grand Army before Waterloo. Then, most unusual for him, he seems to have summoned all his corps and divisional Generals for a conference at his side, overlooking the ground on which the battle must be fought. Had Marshal Berthier still been with him as Chief of Staff this could hardly have happened. Berthier's orders were always far more precise and well arranged than the Emperor's own, and the Emperor knew it. But Soult was accustomed to command rather than to staff work, and Soult may have urged the Emperor to summon the others and give his orders to them directly.

When they met, some of the Generals were all for thrusting on, for a head-on frontal attack to sweep the English aside and make a dash for Brussels. Others reminded the Emperor of the rain-sodden ground, the heavy going for guns and cavalry, the slow pace of infantry in the mud; they would have preferred a flank attack over ground not already cut up by movement. Still others, no doubt Ney and Foy among them, remembered that the British, on drier ground on the hill top, perhaps even entrenched, would stand firm and rely on their close-range musketry. None seem to have proposed a thrust on the right flank to divide the Prussians from the Army of the Netherlands; and the Emperor appears to have been confident that Grouchy would take care of that, although Prussian vedettes were already in evidence in the distant east.

Having heard them out, Napoleon issued his orders. He would attack head-on, north up the Brussels road. Reille's corps would attack and capture Hougoumont, D'Erlon's would do the

same at La Haye Sainte. These posts overrun, the cavalry would sweep across the crest, supported by Lobau's corps, and, if necessary, by the Guard. But he sent yet another order off to Grouchy, to sweep the Prussians aside and join the Army's right flank. Then he watched his troops move into position, encouraging them with his presence, and receiving the welcome acclaim of '*Vive l'Empereur*' as they passed. He massed his artillery on the La Belle Alliance ridge, and, gunner that he was from his earlier days, gave instructions as to their covering fire for the infantry attacks.

On the top of the hill at Mont St. Jean, the soldiers of the Army of the Netherlands had fared no better than the French soldiers during the night. They had certainly been in their position rather longer, and had had more time to construct bivouacs and fireplaces on the ground where they were deployed. But in the grim and rainy dawn of 18 June, the ground was just as damaged and muddy as that in the French lines, and the morning hours were spent by the soldiers in trying to dry and clean themselves in preparation for the battle.

Wellington had no council of war, but he could not make up his mind how the French would attack him. He had no anxieties about his left flank where he knew that Blucher had promised to come to his assistance. He was assured that, even if the French did make a penetration there, they would eventually be caught between the fires of the Prussian Army and his own.

But he was still nervous that his strong position at Mont St. Jean would be outflanked from the west, and indeed had always felt that the shortest way from Paris to Brussels would be by way of Mons, and that he must be sure of his own protection from his right flank. He decided to leave the 4th Division of the Allied Army at Hal, withdrawing only one brigade from it; and in fact that division, which included four valuable Line regiments of the British Army, was never brought into action on the field of Waterloo, being all day placed in observation to prevent any incursion on the Mont St. Jean position from the west. The two forward defended localities of Hougoumont and La Haye Sainte, were obvious bastions to his position. In the orchards and grounds of Hougoumont he placed reliable Nassau and Brunswick troops, but he also supported them by a brigade of British Guards, some in the buildings themselves, the remainder close at hand. In La Haye Sainte, he posted the light battalions of the King's German Legion, experienced veterans of the Peninsular War.

On the ridge itself, he posted the rest of the Guards 1st Division and the Brunswick Infantry, close to Hougoumont, and





immediately behind them, in reserve, his 2nd Division. Astride the Brussels road he posted his 3rd Division, and to the west of it the 5th Division under Picton. Behind Picton, on the road and in support, was the 10th British Brigade from the 6th Division, and extending Picton's flank to the left were also the Hanoverians of the same division.

Grouped among these infantry brigades, and mostly in front of them so they could see over the hill, were the guns of his artillery, and well behind the line of infantry, in the hollows behind the ridge, the cavalry was formed up under the command of Lord Uxbridge.

The morning on both sides was spent making these dispositions, and neither side seemed in a hurry to start the fight. It is strange that in the tense atmosphere that must have prevailed, there should subsequently have been such doubt as to the time that the first gun of the first cannonade was fired. Wellington in his own dispatch says 'about ten o'clock'; in fact, it seems to have been nearly two hours later than that, General Lord Hill having timed it at 11.50 a.m., and another reliable observer stating it at 12 noon.

The first French attack was directed at Hougoumont. The whole of Reille's corps, led by the divisions commanded by Foy and Jerome Bonaparte, surged up to the wood and orchard enclosures. Nassauers and Hanoverians positioned there were soon overwhelmed by numbers, though they gave ground slowly as the French came on. Before long, the French were attacking the range of buildings surrounding the chateau. Here the hours of preparation during the morning had enabled the defenders to turn the stout buildings into a minor fortress. The Coldstream Guards and 3rd Guards were responsible for this defence and, having withstood the first rush of the French attack, were able to hold the place throughout the day. At times, the fighting was hand-to-hand; parts of buildings were set on fire at times, but the defence held in spite of heavy casualties.

At the first onset, the fire of the French artillery was concentrated on Hougoumont. Then as the fighting came to close quarters, the French gunners shifted their targets to the Allied troops lining the crest of the hill on either side of the Brussels road. To protect them a little from this fire, Wellington drew back his original line some 200 yards behind the top of the ridge.

When the assault on Hougoumont, though well pressed, was not at once successful, Napoleon turned his attention to the other strong outpost of the Allied position, the farm of La Haye Sainte. The French artillery put up a tremendous cannonade

on the La Haye Sainte enclosures; then it was the turn of D'Erlon's corps, about 2 p.m., to launch an assault. Again they met with stout resistance from the defenders, the 2nd Light Battalion of the King's German Legion, veterans of the Peninsular from 1808 through to 1813, with a tradition of marksmanship as became a Light Battalion. They held their fire as the French came on; and then, when the enemy came close enough, poured a withering fire from loopholes in the buildings, and from behind walls.

Once again, the orchards and enclosures of the farm were lost, while the men driven in from them reinforced those in the buildings. The advancing masses of Donzelot's and Marcognet's divisions of D'Erlon's corps surged past La Haye Sainte and up the hill to the crest. There they faced the 79th (Cameron Highlanders), and the 1st Light Battalion of the King's German Legion, who charged down the hill at the advancing French and turned them back in confusion.

Napoleon countered this attack with cavalry. A brigade of Milhaud's Cuirassiers, directed into the confused mass of fighting infantrymen, met with considerable success, riding down more than one battalion on their way to the crest. Lord Uxbridge, who had been over to the right, at the Hougomont fight, without being able to intervene there with his cavalry, arrived at this moment to see the French Cuirassiers topping the hill after riding over a Hanoverian battalion of the Allied 3rd Division.

Uxbridge promptly formed the Union Brigade of Cavalry, Royals, Scots Greys, and Inniskillings, into line, to be ready to counter-charge the French Cuirassiers, and went on to the Household Brigade, Life Guards and Blues, to bring them up too.

But at that moment, Picton was nearer the scene. With Kempt's and Pack's brigades of the 5th Division, he charged into the leading battalions of D'Erlon's corps, and threw them into confusion. Picton himself was shot and killed as the two lines of infantry collided. The eight British battalions of the two brigades gave a good account of themselves in hand-to-hand fighting, and the French were pushed back down the hill. The British battalions were rallied with difficulty in the excitement, and under the threat of the successful first attack of the Cuirassiers.

At this moment, Uxbridge came over the crest with the Household and Union Brigades. These were well-trained squadrons, better horsed than the Cuirassiers. The Frenchmen too had made one attack already, uphill in heavy going. Now the two

British Cavalry Brigades swept into the Cuirassiers; the heavier horses of the British regiments, their lines formed under cover, their riders disciplined and freshly engaged and with the slope in their favour, combined to overwhelming advantage. After the first collision which eyewitnesses described as like the meeting of two walls, the Cuirassiers fled, galloping through and over the French infantry behind them.

The Union Brigade did not meet the Cuirassiers, but, supporting the Life Guards and Blues, galloped straight into the French infantry, which had now almost reached the crest of the hill. The two British cavalry brigades swept down the hill, carrying all before them. Behind them, as they went, Picton's infantry collected as prisoners some 3,000 of D'Erlon's corps. The cavalry galloped on, past both flanks of the still resisting Germans in La Haye Sainte, and up the slope beyond into the French batteries. Some troopers even penetrated to the French artillery ammunition wagons.

Now it was the turn of the British cavalymen to be exhausted after their gallop. Napoleon who observed the action was quick to bring up cavalry to counter-attack. The British troopers were scattered, disorganized; and now fresh French squadrons restored the position. For example, Ponsonby, who commanded the Union Brigade, was not well mounted, and his horse foundered at the valley bottom. He was killed by counter-attacking Lancers of Jacqueminot's Brigade. During the next hour perhaps half the men of the two British Cavalry Brigades struggled back in small groups to their original position behind the ridge. But D'Erlon's corps had lost fully 5,000 men; 15 of his supporting guns lay abandoned in the valley and were not in action for the rest of the day.

Meanwhile the resistance at both Hougoumont and La Haye Sainte continued. Hougoumont was never captured by the French. But the stout-hearted Germans at La Haye Sainte ran out of ammunition some time after 4 p.m.; they were armed with a special rifle, and their reserve supply went astray. Even then the few survivors were not driven from the last house of the farm till 6 o'clock.

At this stage of the battle, the road leading back to Brussels from the Allied position became crowded with soldiers all moving steadily towards Brussels. Some were French prisoners, taken in the first attacks and chiefly by Picton's counter-attack, being escorted to the Allied rear. Many more were Allied soldiers, helping wounded comrades to safety, or carrying them on litters. In this way, the actual casualties became swollen by their removal from the battlefield, there being plenty of men who

were only too ready to get out of range of the French artillery by helping wounded comrades to the rear. There were many, too, who had not even that excuse, and were getting out of the way because they had no stomach for the fight.

So large was the northward flow of apparently active soldiers along the Brussels road that there were many reports, and some of these even reached the Prussians away to the eastwards, that the right wing of the Army of the Netherlands was in full retreat. The people of Brussels, as a result of these reports, for many hours believed that Napoleon was once more victorious and on his way to their city. It was not until the early hours of the 19th that Brussels was sure that the French had been defeated at her gates.

About 4 p.m. Ney launched a determined massed cavalry attack on the centre of the Allied position. He brought forward 40 squadrons, some 4,500 men, Cuirassiers and Light Cavalry of the Guard, into the space between Hougomont and La Haye Sainte. As this mass assembled, the French artillery concentrated a tremendous fire on the Allied position, and the defending infantry were ordered to lie down to reduce its effect. The sodden ground also modified the damage; there was little or no ricochet, and unless the cannon balls struck their targets, they plunged harmlessly into the ground. The cavalry thrust was observed in plenty of time, and each battalion formed in square on the Allied position. The gunners remained at their guns between the squares, but were ordered to leave them at the last possible moment and to run into the protection of the nearest infantry square.

As the French cavalry came slowly on, a diversion was made by ten squadrons to the west of Hougomont on the Allied right. This was met by Grant's Cavalry Brigade with the 7th, 13th and 15th Hussars. This French attack was not pressed home by Pire, its commander, and the Hussars beat it off.

As Ney's cavalry mass, moving steadily up the hill, reached the crest, the Allied guns, double loaded with shot and canister, tore many gaps in the ranks. But they pressed on, and the charge was sounded by the trumpeters of the leading squadrons. Instead of a retreating enemy, as they had imagined, the French troopers found, over the hill, two lines each of nine infantry squares, firmly rooted to the ground and bristling all round with bayonets. This was the 3rd British Division, flanked on the right by the 1st Guards and on the left by Brunswick battalions. Each square held its fire as the cavalry came on to within 30 yards, and then poured a destructive hail of musketry into the mass of men and horses.

The attack went on for more than an hour, the French cavalry circling around and between the infantry squares, but never breaking one of them. Occasionally a few men and horses would thrust, or fall, into the outer rank of the square; but the infantrymen were always able to close up before the square was broken. The ground between the squares became littered with fallen horses and men. If the horsemen withdrew below the crest to re-form, the gunners would run out to their guns and assail them again with canister shot. The attack entirely failed to break the Allied position, and the French horsemen again withdrew, those that were left of them, briefly pursued in some places by sharp attacks of Allied Light Cavalry, which were not pressed beyond the crest of the hill.

About 6 o'clock, Ney prepared another massed cavalry attack, this time bringing up Kellermann's division and Guyot's Heavy Cavalry of the Guard, in all some 37 squadrons. But now the ground over which the attack must move was encumbered with fallen men and horses. This made it even more difficult than before to gain the momentum necessary to break a determined infantry square. This time, however, squadrons of the 1st Cuirassiers of the Guard did pass through the Allied lines. Swinging away westwards past the rear of Hougoumont the survivors eventually returned to their starting point; but of 120 men who started out only fifteen returned, and all were wounded. These Cuirassiers of the Guard were picked men; but they were well beaten by the steadfastness of the Allied squares, and the heavy encumbered ground. Slowly and reluctantly the survivors withdrew, to re-form in the low ground south of Hougoumont.

While these cavalry attacks launched by Ney on the Allied position were continuing without success, Blucher, with the Prussians of Bulow's corps, was pressing ever nearer to the French right flank. The muddy Flanders lanes hampered their progress at every turn; the passage of a single gun would cut up the surface so badly that neither vehicles nor infantry could follow. Try as they would, the Prussians could scarcely make one mile an hour of progress towards the sound of the Waterloo guns.

Marbot, a cavalryman with a distinguished record and recently promoted to General's rank by Napoleon but still without a General's command, was commanding the French 7th Hussars and responsible for the right flank protection of Napoleon's Army at Waterloo. He had been ordered to push out his patrols in the direction of Wavre, and make contact with the expected advance troops of Marshal Grouchy. However, near St. Lambert,

one of his patrols made contact as early as one o'clock with Prussian cavalry, and a little later captured an officer and a few troopers. These prisoners were sent back under escort to the Emperor, and Marbot himself pressed forward to St. Lambert with a squadron. There he found himself facing a large body of Prussians; yet at the same time he received an order from the Emperor that his prisoners could only be Prussian stragglers, and that he must press forward to Grouchy. By this time, Marbot's outposts were being driven in on all sides, and, falling back from St. Amand, he was next engaged with the English protective left-flank cavalry at Frischermont. He managed, in spite of a lance wound in his side, to extricate his regiment, falling back slowly in face of the Prussians, who were advancing steadily from every direction towards the French right flank at Waterloo.

About 5.30 p.m., the Prussian cavalry had joined the Allied left near Papelotte, and Bulow's infantry and guns began to open fire soon after on the French right. But Napoleon still believed that his reserve, the Imperial Guard, could carry the Mont St. Jean position upon which he had seen his cavalry riding for so long. As the Guard marched forward, past La Belle Alliance, the Emperor was in their full view and acknowledged, for the last time as it proved, their cheers of '*Vive l'Empereur*'. His Aide-de-Camp, Labedoyere, rode to each battalion, assuring them that the firing on the right, now plainly heard, was that of the reinforcing troops of Grouchy, and the Guard moved forward in good heart over the casualty-strewn slope up to the Allied position. Napoleon must have known this message to be false, and the survivors of the Guard never forgave either the Emperor or Labedoyere for the lie.

They moved in a solid column, preceded by a line of skirmishers between the Brussels road and Hougomont. And it was 8 o'clock when they topped the crest before Maitland's Brigade of Guards. Wellington was here at this moment, and said to Maitland, 'Now's your time, form line and drive those skirmishers in' (he certainly never said 'Up Guards and at them'). Both battalions of the 1st Guards then attacked the head of the French Imperial Guard.

But two battalions could hardly have stopped the French mass for more than a short space. Fortunately for Wellington, another of his brigade commanders saw and seized a golden opportunity. This was Adam, whose brigade of Light Infantry (52nd, 71st and 95th Foot) probably contained more tried and experienced soldiers than any other on the battlefield. They had spent the day in close reserve behind Hougomont, ex-

pecting hourly to be called to support that place. Apart from doing their share in repelling the French cavalry attacks from well-ordered squares and suffering from plunging shell fire of the French artillery, the men of Adam's brigade had, up to this time, seen little of the battle.

Now Adam led them into the gap between the Hougoumont enclosures and the mass of the Imperial Guard. Running down the hill at the rifleman's quick step, in columns of fours, Adam, at just the right moment, faced them left into a four-deep line opposite the Imperial Guard. The practised rifemen fired point-blank into the mass of French soldiers, and followed up their destructive volleys with a charge. The Imperial Guard hardly waited for the charge, but broke and fled. The 71st and 52nd drove on, right up to La Belle Alliance.

Behind them, through the same gap, now followed the Allied Light Cavalry, Vandeleur's brigade of British 11th and 12th and 16th Light Dragoons, and Vivian's brigade of British 10th and 18th Hussars, and 1st King's German Legion Hussars. They harassed the retreating Frenchmen, and protected the advancing infantry against any raid by French cavalry. Some battalions of the Old Guard, in squares, moved steadily back past La Belle Alliance, but, beyond that point, they too joined the disordered retreat. Both the 52nd and 71st Foot of Adam's Brigade reached Rossomme, about a mile south of La Belle Alliance on the Brussels road by 8.30 p.m. There they were halted, for by now the Prussians too were on the scene. They had fought their way into the French right flank at Planchenoit, a mile east of Rossomme; indeed some of the Prussian gunfire had struck into Adam's brigade during its advance. The French Army melted away from the battlefield, cavalry and infantry, divisions and brigades and regiments, all in complete disorder between these flanking attacks in the gathering dusk. There was little actual fighting. The French were in full but slow retreat, and the Prussians and their Allies too tired to do much more than just plod along after them. Darkness fell on a confused mass, composed of men of all three Armies, moving slowly southwards along the road to Charleroi.

### ***Wavre, 18 June***

While the battle had been raging at Waterloo during the afternoon of the 18th, what had been happening to Marshal Grouchy's part of the French Army before Wavre?

The left flank outposts of the Army of the Netherlands at Waterloo were at Frischermont, about seven miles as the crow flies from the town of Wavre, which lies on the main road north from Namur to Brussels. The valley of the Lasne brook below



and to the east of Frischermont divides the rising ground of the Mont St. Jean position of Waterloo from similar high ground to the east. The Lasne brook itself is not a serious obstacle, and may be crossed by numerous lanes running from east to west, particularly at St. Lambert. The latter village formed the right flank of the Prussian position, which extended some five miles to the east of that point and included the town of Wavre itself. So at the beginning of Waterloo day there was only a gap of two miles, in the Lasne valley, between the Prussian outposts and those of the Army of the Netherlands.

Wavre lies in the valley of the River Dyle, and on the north side of the river; the Dyle is a considerable stream at this point, and can be crossed only at bridges. At Wavre itself, in addition to the bridges on the main highway, there are four other bridges, two to the east and two to the south-west of the town. Two more bridges, two miles to the south-west at Limale, are also important crossings of the Dyle river.

Grouchy's leisurely advance on the 17th had given the Prussians plenty of time to establish themselves in Wavre itself and along the River Dyle to the south-west as far as the bridges of Limale. In point of numbers the Prussian Corps, Thielemann's, posted in defence of Wavre, was less than half the strength of the troops under Grouchy's command; but they were well established in their position, fresh, and eagerly awaiting the enemy's attack.

It was not before 4 p.m. on the 18th that Vandamme's advance-guards had driven the Prussian outposts back into Wavre itself. Vandamme, a rough and ready soldier, was with his leading troops, and quickly employed all his available men in an attempt to get possession of the bridges over the Dyle. The bridges were well barricaded, and Prussian sharpshooters were lining the hedges and buildings along the north bank of the river. All Vandamme's first attacks on the bridges failed, and he had to bring up guns and withdraw his troops to cover to prepare a more considered assault.

Grouchy arrived about this time, and seeing that he could not now disengage Vandamme's corps opposite Wavre, ordered Pajol's cavalry and Gerard's IV Corps to march to his left flank and secure the crossings of the Dyle at Limale. Grouchy at 5 p.m. received a message from Napoleon, sent off at 1.30, telling him that Bulow's corps of Prussians was reported moving westwards at St. Lambert, and ordering him to lose no time in joining the Emperor's right flank at Waterloo. The Limale crossings of the Dyle were the only path by which he could accomplish this movement.

The Prussians at Limale had not barricaded the bridge, and when Pajol saw this, in true cavalry style, he sent a whole regiment of Hussars to charge the bridge. Four abreast only, these cavalymen crossed the bridge at full speed and burst through the Prussians posted at the further end. The passage was forced, and Teste's division was soon across. But by the time they were over, daylight was fading, and the Prussians, still resisting, stopped any considerable movement of the French towards the high ground beyond the river.

At Wavre itself the growing darkness assisted the French assault. Vandamme had to make no less than thirteen assaults on the barricaded bridges; and in at least five of these, Prussian counter-attacks not only stopped the assaults, but also pursued the French back to the other side of the river. The battle continued into the darkness, and it was not until 11 o'clock at night that Vandamme's troops had secured any footing in the houses at Wavre itself on the north bank of the Dyle.

By this time the heavy firing of the battle at Waterloo to the westwards had died out. Grouchy, with all his troops engaged, knew that he could be of no assistance to the Emperor, but consoled himself by believing that he had at least locked up a major part of the Prussian Army by attacks on Wavre. He prepared to follow up his belated success on the following day. Neither side at Wavre that night had any news of the rout of Napoleon's army at Waterloo when the firing at Wavre died out about 11 o'clock.

### ***Retreat to Paris, 19-28 June***

While the French Army melted away from the field of Waterloo, flying south towards Charleroi in the darkness, Marshal Ney, always at his best in a rearguard action, endeavoured to put up some sort of resistance with the few of the Old Guard who still maintained some show of discipline. Ney himself, having had four horses killed under him during the day, marched along the road with the rest, and it was not until 11 at night that somebody gave him a horse. He arrived at Marchienne on the Sambre, west of Charleroi, to quote his own words 'at four o'clock in the morning, alone, without any staff officers, ignorant of what had become of the Emperor, who, before the end of the battle had entirely disappeared'. Napoleon did, in fact, reach the Sambre at Charleroi at 5 o'clock in the morning. Thence he made his way to Philippeville, where, after an altercation with the sentries, who refused to recognize him, he was admitted to the town and found a brief opportunity to rest. During the night the Prussian cavalry in small numbers continued to spread alarm and despondency among the flying

Frenchmen; but no British troops advanced beyond Genappe, and the Prussian infantry, worn out with marching, bivouacked in the vicinity at Quatre Bras.

Meanwhile, Grouchy, before Wavre, was still pushing northwards. It was not until 8 o'clock in the morning of the 19th that definite news of the French rout of Waterloo reached even the Prussian Army at Wavre, and at that time Grouchy had no inkling that he and his troops were out on a limb. Fighting had been going on since early morning between French and Prussian cavalry on the high ground west of Wavre, and the outnumbered force of Prussians could see that a major French attack was developing.

So at 10 o'clock, Thielemann ordered his corps to withdraw, and the Prussians moved slowly northwards, towards Brussels, closely pursued by the French under Vandamme.

Grouchy first heard the news of Napoleon's defeat at 10.30 on the morning of the 19th. The news was brought in by an exhausted staff officer, who rode up to Grouchy with the most disordered and dejected appearance. He could scarcely get his words out, and Grouchy seemed at first to think that the man was mad. Vandamme, who was with him, was all for going on to Brussels, marching round the enemy's rear and making their way to France by way of Lille. There was no doubt that such a course would have delayed the pursuit of Napoleon's army, and have created the greatest alarm in the back area of the Army of the Netherlands. But Grouchy decided against this bold plan; he knew he still would have considerable fighting to get past Thielemann's troops.

But Grouchy's problem was how to withdraw, and in what direction. The messenger must have told him that Charleroi was already in Prussian hands. He therefore decided to withdraw down the main road to Namur where he could escape across the Sambre without opposition. Had he known it, he was already in danger of being cut off from Namur too; for Blucher, on the night of the 18th, had sent orders to Pirch to move towards Namur with the object of cutting off Grouchy's retreat. Pirch's advanced troops had by this time reached Mellery, half way between Quatre Bras and Gembloux, and so were already eight miles south of Grouchy at Wavre. But, at Mellery, Pirch found his troops so exhausted that he had to call a halt.

So Grouchy began his retreat. His first step was to send off Excelmans with his cavalry to secure the bridges over the River Sambre at Namur. Excelmans reached Namur at 4.30 p.m., taking five hours to cover thirty miles through the lanes and

byways broken by the rains, Gerard's corps recrossed the Dyle at Limale and got on to the main Brussels to Namur road; Vandamme's corps moved by lesser roads to the east and eventually arrived at Temploux, five miles west of Namur, by 11 p.m., Pajol's cavalry acting as rearguard, covered the retreat of both the infantry corps, and bivouacked for the night at Gembloux.

Now that they were retreating, the French marched faster and in better order than they had during the advance. Their sudden withdrawal seems to have surprised Thielemann, who did not make certain of it until as late as 6 p.m. on the 19th. Thielemann postponed his pursuit until the following morning.

At daybreak on 20th June, Grouchy's troops were again on the march to Namur. There was a bad mix-up in getting through Namur, and Gerard's and Vandamme's infantry both tried to use the roads and bridges at the same time. However, the French rearguards put up an excellent defence. Teste's division, now only some 2,000 strong, held up the pursuing Prussians, numbering some 20,000, until 9 p.m. In clearing the town in Namur, Teste had time to leave barricades on both roads and bridges, and these effectively checked any Prussian pursuit during that night.

Now Grouchy was committed to retreating southwards along the valley of the Meuse by way of Dinant and Mezieres, and thence south-east to Rhiems on his way to Paris. He managed to retreat unmolested most of the way, and thus created an important menace to the left flank of the Prussian Army moving by Charleroi and Compiègne on Paris. Blucher's way was also barred by the fortresses at Maubeuge, Landrecies, and Avesnes, and he had to reduce these places before he could get on to Paris. The reduction did not take long, but nevertheless delayed the Prussian Army.

There was also some rallying of the troops who had fled from Waterloo. Marshal Soult managed to get some three thousand survivors of Reille's and D'Erlon's Corps into order at Laon by the 24th June.

In the end although he marched fully sixty miles further than the Prussians, Grouchy got to Paris first. Both his cavalry and infantry arrived there on the 28th June, entering along the Marne valley from Meaux. Soult, with the remnants of the Waterloo Army, arrived on the same evening from Senlis. The leading Prussians under Bulow were not far behind, but they found the French Army posted at Paris before they got there. His conduct of this retreat partly restored Grouchy's reputation as a General, but nothing could absolve him from his delays and incapacity on the 17th and 18th June.

### Some conclusions

How brilliantly Napoleon started this campaign! The countryside was alive with tale bearers (they could hardly be dignified with the name of spies) who moved freely among the towns, villages and farms on the frontier between France and Belgium. Yet the Emperor managed to concentrate his striking force, the Army by which he must stand or fall, on the very threshold of his enemies, so swiftly and secretly that neither the Army of the Netherlands nor the Prussian Army had any real news of his movement. Again his concentration was just where it should have been most feared. His army was poised to strike at the classic joint in his enemies' armour, the junction between the two ill-assorted armies of his opponents.

When, in the early morning of the 15 June, the Emperor set his army in motion northwards from the Forêt de Mormal, to strike at the Sambre crossings, he might indeed have felt that the campaign was half won. He had achieved a true surprise. He was at least two weeks ahead of the schedule his opponents had planned for him. His army was concentrated for the thrust! Those of his opponents were scattered and unready. If he could then have maintained the glow of his presence in the hearts of his men, generals and soldiers alike, the spirit of '*Audace, toujours l'audace*', and lifted his Army wholly across the Sambre barrier on that day by his personal leadership, the issue might have been very different.

But the sands began to run out even on 15 June. The little knots of Prussian resistance in the outposts of Zieten's corps made the first check. Surprised as they were in their comfortable farm and village billets, the stolid Prussian soldiers were not easily moved. It took more than a show of attack to discourage them. When it came to close quarters fighting, the Prussians had the advantage of knowing their ground. The less well-trained Frenchmen did not find their first advance so easy as they had been led to expect; a company of Prussians, securely posted, could appear to be a battalion or even a regiment. Waiting for supports, or for guns to be brought up, spoilt the momentum of the French advance; '*reculer pour mieux sauter*' takes time.

The desertion of General de Bourmont may have seemed, at the time, a matter of little importance to the Emperor. At least half of all his army had been in the service of the Bourbon King only a short three months ago. But then, too, a year before, Wellington's Belgians and Dutch troops had been soldiering for the Emperor of the French! If there were to be desertions, they might surely affect both sides. Napoleon can hardly have guessed

at the wholesale distrust of their leaders that the desertion of de Bourmont would spread through the soldiers of the French Army. Yet this was also a result of lack of training, of the haste with which the Emperor had assembled his army, and flung it into battle with so little preparation. His soldiers did not know their Generals, and had not learned, by training, to trust them. The spark of this desertion generated a fire of distrust.

Could Napoleon, on the evening of 15th June, have been fully confident of his choice of Ney and Grouchy as his two 'wing' commanders, as his immediate subordinates? Perhaps he had no other choice; his was an army of expedients, and he was forced to make use of the only men available. Ney was certainly a fighter, a Marshal of repute; yet when riding in a farm cart in civilian clothes he met his Emperor on that day, he had not even a horse to ride; and when he took over the left wing of the army that evening, he had no means of exercising command, without staff or knowledge of his subordinates. Napoleon was demanding a miracle of Ney. And of Grouchy, too; Grouchy at least had a staff, and, with his cavalry experience, was perhaps well placed to command the cavalry corps of Pajol and Excelmans; but he had neither seniority nor experience to back his command of Gerard's and Vandamme's corps. That Napoleon decided on this division, this deputation of command, must have been the result of his own physical failure; his body, tired after five days of exertion since he left Paris, was unable to accept the strain that he had imposed on it. There was a flash of the old Napoleon in the little action at Gilly at the end of the day, but it was a 'flash in the pan', extinguished by the death of General Letort at his side.

On the 16th, at Ligny, the Emperor's genius was again in the ascendant. He fairly and squarely beat the Prussians from their well-chosen position; and if D'Erlon's corps had attacked, as it so nearly did, the rear of the Prussian right flank, the beating should have become a rout. Of all the critical moments of those eventful four days, D'Erlon's decision, at 6 p.m. on 16 June, to obey Ney's order and return to Quatre Bras, was the most fateful. It allowed the Prussian Army to 'live to fight another day'.

So, by 17 June, Napoleon was committed to a division of his effort, to a 'war on two fronts' that he, of all people, knew so well that he must avoid. Neither at Ligny nor at Quatre Bras had he destroyed the comparatively weak opposition before his army. He had to detach 30,000 men under Grouchy to watch the Prussians, while, with his strength thus lowered, he aimed to defeat the Army of the Netherlands. Then came the rain.

What did the Emperor think about, as he wandered around the Belle Alliance ridge in the rain that night? He had frittered away the whole day of 17 June inactively. The morning he had spent with Grouchy on the field of Ligny, and in common with commanders of armies before and since, had had his feelings wrung by the human suffering that is the inevitable aftermath of battle. In pain himself at the time, he was all the more susceptible to the greater pains of his wounded soldiers on the field. The afternoon was spent in movement across to Ney on the Brussels road, movement personally excruciating, no doubt, and ending in a view of his army toiling slowly forward, while his enemies withdrew, almost unharassed, to their prepared position. That position he had viewed for himself in the late dusk, and must have assessed it as a hard nut to crack on the morrow.

He must have been plagued with uncertainty. If he were to try to outflank Wellington to the west, he would be moving farther away from his strong force under Grouchy. If he were to try a 'right hook' to the east by Planchenoit, he would be nearer Grouchy certainly, but also nearer to the Prussians, whatever might be left of them. If he were to strike ahead, up the high road to Brussels, he could be certain, whatever the Waterloo ridge might hide, that he would meet Wellington's concentrated force. As he paced about, unable to sleep for his bodily pain, indecision, so uncharacteristic of the man in his best days, must have become more and more insistent. His solution was to seek other opinions, to call together his subordinates and hear their views.

Again, more waste of time. The Emperor's brief sleep towards dawn delayed his conference till the sun was well up, and the rain stopped. These three factors, some sleep, a little sunshine, no rain, must have put Napoleon into a more optimistic mood. If some of the Generals, like Foy perhaps, voiced unhappy memories of the ridge of Bussaco to dissuade him from the head-on attack, their counsel was disregarded. Gallopers were sent off east to Grouchy, ordering the latter to join forces quickly. Ney got his orders: reduce Hougoumont and La Haye Sainte, and then sweep away the motley Army of the Netherlands with cavalry attack, followed by the infantry, '*audace, attack*', to Brussels. And Napoleon, having heard the first gun of the cannonade, went off to lie down and get some rest from his nagging, continual pain.

Many others heard that first gun near noon on Waterloo day. No doubt old Blucher heard it, or the rumble of its successors, away to the east at Wavre. Bruised and sore as Blucher must have been from his tumble and escape at Ligny, the sound of the guns at Waterloo reminded him of his promise to move

westward to Wellington's assistance. Not that he needed the reminder. Already, since early light, he had been on the move himself. His army was rested, re-collected, revictualled, rearmed. His corps of reserve, Von Bulow's, was already in motion westwards from Wavre. These were fresh troops, had not been engaged at Ligny, eager to prove that they could fight as well as their fellows. At Wavre, along the river Dyle, Thielemann's and Pirch's corps were well posted. The French, to the south of the river, had done little more than make tentative reconnaissance, and there was no sign yet of a serious French assault. Blucher set himself to press the move east, satisfied that Wavre would hold for the rest of the day.

Wellington heard the gun. He had been waiting for it all morning. Each hour that passed in silence, was an hour gained to him. As the sun dried the morning, the Duke's spirits must have risen as did those of his soldiers. Some hot food, drying clothes, clean weapons, the sight of neighbouring regiments well posted on now familiar ground, gave heart to the Duke's heterogeneous army. The orders were simple: stand and fight. As yet there was no enemy to be seen, no fight to be joined. But hour by hour, even after the guns began to play, standing became simpler. There was no sign of any move by the French to either flank. Towards the danger point to the west, away to the right of Hougoumont, all seemed secure and quiet. As long as he would not have to budge from his chosen position, Wellington could feel some confidence that his Army might stand.

Today, meteorologists, with the world's communications at their service, and a century and a half of advancing knowledge of the world's atmosphere to help them, can foretell the weather prospect for commanders of armies with great accuracy. At Waterloo, the unknown factor of the heavy rain before the battle was all important. Its greatest favour was to the Army of the Netherlands, whose commander had given it the prime duty of standing still. When the battlefield was churned to mud, standing still became a great deal more easy than any movement, even of running away. Certainly the rain also delayed the arrival of the Prussian Army, but fortunately, thanks mainly to the personal urging of Blucher himself, it just failed to delay that army too long. To the French Army, the rain was a curse. Toiling up the muddy slope of Mont St. Jean, both horse and man were handicapped by dragging pounds of mud along on their feet. The simple parade ground movements of the little trained masses of men, learned on level parade grounds, bogged down in the sodden fields. Men and horses were exhausted before they came to grips with their enemy. The mass tactics, which were all that Napoleon had been able to teach his army in his short



available time, needed momentum for success. The rain and the mud made momentum impossible.

But it was not only the rain that beat Napoleon and the French Army at Waterloo. Their defeat had two other prime causes, one personal to the Commander, the other inherent in the Army itself. The Emperor failed his army by his own lack of physical fitness; if his army lacked training, so did he. He knew that his personal leadership was the only central unifying force for victory; and his physical failure to endure the long hours in the saddle that he knew the campaign must entail, discounted to nothing that force. This failure accentuated the hollowness of his army's morale, the inherent distrust of his soldiers for the leaders that he had set over them.

In sharp contrast, was the performance of the Prussian Commander-in-Chief on Waterloo day. In his 73rd year, Blucher might well have been the father of Wellington or Napoleon, who were both 46. He had started soldiering in 1757, before either of the other two were born. Known throughout his Army as 'Marshal Vorwarts', he was trusted and admired by his soldiers. Heavily bruised and sore from his fall at Ligny — it had taken six men to roll his horse away and free him, after the Frenchmen had galloped over him — he was tough and fit enough two days later to spend all day in the saddle. The effort, at Waterloo and in the subsequent advance to Paris, no doubt shortened his life, for he died less than four years later. But his strength of body and mind carried him, and indeed did much to carry his army, to victory at Waterloo.

Wellington rightly became the hero of the British nation for his part at Waterloo. He was a man of no charm or presence, with a weak rabbit mouth and a poor seat on a horse, a man who made no friends. He disliked and distrusted his Army of the Netherlands — 'infamous' as he dubbed it — but he patiently set himself to get the best out of it. And having placed it at Waterloo with consummate tactical skill, he moved about the battlefield on the day with an air of calm assurance which he cannot have felt in his heart.

He was extraordinarily fortunate that his great opponent adopted the course, the head-on attack on the Mont St. Jean position, that gave him the best chance of victory. If Napoleon had brought Grouchy across to the Charleroi-Brussels road on the 17th, and had outflanked the Mont St. Jean position either to west or east on the 18th, things must have gone very differently for the Army of the Netherlands, in spite of the rain. The weak force at Hal could hardly have done more than delay a flank attack from the west, while Wellington tried to move

his static main force to face in another direction. Or if Napoleon had thrust, with those additional 30,000 men of Grouchy's, into the gap between the Prussians and the Army of the Netherlands, to the east of Mont St. Jean, and poured his cavalry through towards Brussels, it might have been Wellington's army that had run, and not the French.

Wellington's verdict — almost his only comment on the battle — a few days later, 'it has been a damned nice thing, the nearest run thing you ever saw in your life', was only too true. Of all the 'might-have-beens' of the Waterloo campaign, the most interesting speculation is, what would have happened if General Vandamme had had his way on the 19th, and persuaded Grouchy to march for Brussels from Wavre, across the rear of the Army of the Netherlands? If Murat had been there instead of Grouchy, Murat and Vandamme would have done it. And Pajol's and Excelmans' cavalry, led by a Murat and followed by Vandamme's and Gerard's corps, would have played the devil with the unsteady tail of the Army of the Netherlands.

But even such an adventure would have done little to repair the disintegration of Napoleon's own force, and of Napoleon himself, at Waterloo, and could only have delayed the final issue. Waterloo became a legend for both victors and vanquished. It restored the Prussian Army from its collapse at Jena, and led to 1870, to 1914 and even to 1939, in the trust of the German people in German armed force. It gave the British Army component of the Army of the Netherlands a continuing faith in position, in standing to fight rather than movement in battle, which has beset British military leadership ever since. And the French Army has never recovered the morale of Austerlitz, shaken before Moscow and at Leipzig, and finally destroyed at Waterloo; thus leading to Sedan in 1870, to the mutinies of 1917, to the complete collapse in 1940, and even lately in Algeria. The cry of 'vieux moustache' of the old Guard at Waterloo, who called out to Napoleon 'Do not trust the General, Sire, he'll betray you', still echoes in France after a hundred and fifty years. □

# Malaria

Major B. A. Smithurst,  
*Royal Australian Army Medical Corps*

'I came here to fight Nips not goddam mosquitos.' — famous last words of a US regimental commander on Guadalcanal.

IF there is one Army which should not need to be reminded of malaria it is the Australian Army. A study of the Medical History of the two world wars shows the importance of this disease in the success or failure of Australian military operations. Yet one cannot help feeling uneasy that we have still not learned the lessons of history and may be doomed to repeat its mistakes. Among some soldiers there seems to be a disturbing complacency, a dangerous unawareness about malaria, as if in this modern age of chemotherapy, psychological medicine and intricate heart surgery, the old menace is no longer quite so menacing — something like the common cold and perhaps more easily controlled. Nothing could be further from the truth. It is appropriate to review our present knowledge of malaria, to assess our efforts and methods in its control and very importantly to stress again the role of the regimental officer in malaria discipline.

## **Military Medical History**

A brief review of battles in World War I and World War II in which malaria significantly influenced the outcome would not be out of place. In the Palestine Campaign of 1918, when Allenby and his Desert Army drove the Turkish Armies out of the Holy Land, the Desert Mounted Corps, composed of the Australian and Anzac Mounted Divisions spent the summer in the Jordan Valley. It was intended that this *elite* cavalry corps under Chauvel should spearhead the final hard-hitting offensive against the Turks, harassing them, overwhelming their strongpoints and raiding their lines of communication. Inexplicably, in view of later developments, they were ordered to strengthen and hold the Jordan Valley, known from early times to be unbearably hot, dusty, and more seriously the site of highly endemic malaria — known as such from the times of the

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Crusades. The reasons for this decision were obscure but the result was clearly predictable. During the malarial season in the Jordan Valley area the total number of cases of malaria diagnosed by blood smear in the Desert Mounted Corps was 13,239, or 43 per cent of the force, with a case mortality of 101, and it was considered that these figures were below the actual number of troops infected. In comparison, the battle casualties in the advance were 149 killed, 49 missing and 438 wounded.

In World War II the picture is reproduced but in a larger frame. It was known that New Guinea was a highly malarious island — in World War I when Australia sent a punitive expedition to drive out the Germans and occupy their territory, Cilento stated that initially 90 per cent of the troops were infected with malaria. Later, with good control and discipline, the incidence fell off markedly. Twenty-five years later in World War II battles against the Japanese, two early vital operations were jeopardized because of malarial casualties amongst soldiers and airmen. At Milne Bay the fight against the Japanese was won but the fight against malaria was almost lost. Malarial casualties for the third week of December 1942 were 1,083/12,000 and if this rate had been maintained for 3-4 months, the Milne Force would have been completely incapacitated. It is instructive to analyse the reasons for this high rate of disease and they are best summarized in the War Diary of DDMS New Guinea Force for 4 December 1942.

- (a) There was no deep consciousness in the force that malaria would destroy it as a fighting body and bring disaster to its operations. It was basically necessary that this should be understood by all ranks.
- (b) Malaria discipline was bad and imperilled the success of our army.
- (c) It was necessary that officers should realize their responsibility in regard to malaria discipline and the order should be observed in every detail. No officer was fit to command in a hyperendemic malarial area who did not realize the menace of malaria and take every step to combat it.
- (d) The importance of personal protection was stressed as the most important means of malarial prevention in the field and defaults and omissions in carrying out orders in regard to this were quoted.
- (e) Suppressive quinine treatment [the suppressive drug today is the much more effective paludrine]; its importance in maintaining troops in the field and the necessity for care and speed in distribution; necessity for priority in transport of anti-malarial drugs.

- (f) Preparation of troops for tropical service, supply of mosquito nets before embarkation — important to be able to commence protective measures immediately on arrival.

Again the DGMS stated that patients with malaria transferred from New Guinea had told their physicians that anti-malarial precautions were not being enforced by regimental officers.

In the Buna Campaign and up to the end of December 1942, Australian casualties were 21,600 malarial cases and 6,154 battle casualties, a ratio of 3.6:1, and it was felt the figures were understated as many men developed malaria only on return to Australia — the condition of so-called latent malaria. At the end of January 1943, the rate for areas of operation in New Guinea was 2,496/1,000 per year. Obviously, no army could tolerate such high morbidity rates. Later in the New Guinea campaign there was an improvement and the malaria rate dropped. For example, in the 15th Brigade operations in the Markham and Ramu Valleys, only nine cases of malaria were recognized. However, full control, and what is more important, tight malarial discipline by the regimental officers and NCOs was still not up to the standard required to combat the disease effectively. Fairley, the Director of Medicine, Australian Army, and one of the world's most distinguished malariologists, reported that among forward troops of the 7th Division, 83 per cent of all casualties were malarial and for 9th Divisional troops in battle areas in November 1943, 44 per cent. The malarial rate was then 17.2/1,000 weekly (or 890/1,000 year). Later, with the universal use of atabrin, there was a satisfactory drop in the number of cases, but as the Medical Historian mentions<sup>1</sup> this was not the whole story and it appears that malaria discipline in these two experienced divisions could have been tighter. It is, incidentally, an indication of the seriousness of the threat that an eminent malariologist (Fairley) was appointed Director of Medicine.

Up to the end of the fighting in New Guinea malaria was always the major problem in preventive medicine. However, it was shown again and again that control and discipline could cut down the incidence of infection. In the two theatres where Australian troops are at present engaged, Vietnam and Malaysia, malaria is still a major worry in preventive medicine — witness the outbreak in troops in northern Malaya in 1963 which could be mainly attributed to breaks in malaria discipline, particularly laxity in taking daily paludrine. In Vietnam,

1. Allan S. Walker, *The Island Campaigns* (1957), p.234.

the malaria casualty rate has been rising in a disturbing fashion amongst Americans and is a worry to Australians. There is another potentially serious side to malaria epidemiology in South-East Asia — the emergence of drug resistant strains of the parasite which has led to a resurgence of active research for new anti-malarial drugs. Obviously malaria is still an enemy to be reckoned with — an implacable enemy which invariably finds the weak spots in the soldier's defences.

### **Measures for Control and Prevention**

Therapy is primarily a medical corps responsibility so there is no point in discussing it in detail. Prevention however is unquestionably a responsibility of all ranks in all arms and services. It has been shown repeatedly that the institution and maintenance of an intensive anti-malarial campaign will cut down the attack rate of the disease so that it no longer poses a threat to the well-being and strength of armies. Before elaborating on methods of prophylaxis, a very brief summary of the epidemiology (or behaviour) of malaria is pertinent. The female anopheline mosquito is the vector of the disease — she bites an infected person, the parasite sucked in with the blood develops in her body and then she bites a susceptible individual transferring the organism as she feeds. Blood, either human, animal or avian is necessary for completion of the reproductive cycle in the female.

Not all anophelines carry the disease and some transmit it better than others. Their behaviour also varies considerably — some breed in fresh water, others in brackish water, some in the shade, others in sunlight. Again, some prefer animal blood, others prefer human blood, and some stay indoors after biting while other varieties fly outside to rest. The study of mosquito ecology is one of the most important and fascinating aspects of malariology and new facts are continually being elucidated in their morphology and habits. Climate plays an important role in the mosquito and the parasite life cycle — in general, hot, moist climates are the most favourable, so the disease, although world wide, is particularly prevalent in tropical and subtropical areas. It was thought that malaria occurred mainly at low altitudes — along the New Guinea coastal plains, for example — but recent work has shown that it may also occur at higher altitudes, e.g. in the New Guinea Highlands and the mountain regions of South-East Asia.

The parasite of malaria belongs to the family of protozoa and is of course microscopic. There are four varieties which infect man and two (*P. vivax* and *P. falciparum*) cause the majority of infections. The former causes the so-called benign

tertian malaria with fever peaks in many cases every 48 hours and marked prostration, while the latter causes the much more dangerous malignant malaria, commonly giving rise to cerebral malaria and death if not treated promptly. The organism lives and develops in the red cells and so the majority of signs and symptoms can be attributed to the destruction or sticking together of these cells. Hence, anaemia is a common finding. The parasite may also localize in the liver and cause recurrent attacks.

With this knowledge of epidemiology, a pattern of control can be initiated. It is obvious that the average soldier cannot carry out all the methods to be discussed and it is intended that the one effective method he can employ, personal protection, will be discussed in detail.

### ***Prevention of Breeding and Drainage of Breeding Places***

This is normally the responsibility of the medical corps hygiene personnel, in co-operation with engineer units and local authorities where indicated. Obvious breeding sites like ditches, ponds, irrigation channels, etc., are either drained or sprayed with oil to kill off the mosquito larvae developing in the water. In full-scale malaria eradication programmes this is obviously a long-term task and in the army would normally be carried out in the vicinity of static base depots. Wheel ruts and tyre tracks which collect rainwater were found to be an important breeding place for one of the major New Guinea vectors, *A. punctulatus*, during the campaigns there.

### ***Elimination of the vector (Imagical Control)***

This has to be a long-term task to be really effective for malaria control or eradication. Hygiene teams of the RAAMC are trained in vector control around military installations and in the field but it is obvious that because of the fluid nature of operations an intensive attack on the adult mosquito may not be possible. In the ideal situation the inside of huts, lean-tos, etc., are sprayed with a residual spray of DDT or dieldrin. This residual compound adheres to the walls of huts in villages and kampongs for up to several months, provided that the correct concentration is efficiently applied. As the adult mosquito often rests indoors after biting, contact with the sprayed surfaces will kill or repel the insect. Some mosquitoes, as already indicated, rest in the jungle or undergrowth around human dwellings after biting and the control of these is more difficult. Various fog-spraying devices are used to attempt to kill these outdoor resters. This form of attack should only be undertaken by trained personnel from the RAAMC and the units themselves,

but when efficiently and persistently carried out it has been found to play the major role in malaria eradication. Insecticide resistance by some anophelines has been found to occur and is a potentially serious problem. However, it is not widespread, nor is it found to any crippling degree in South-East Asia.

### ***Personal Protection***

This is the anti-malarial measure which the soldier can carry out most easily and which he must be trained and if necessary coerced to perform. Experience in New Guinea and Malaya has shown monotonously that when cases of malaria occur in troops they are due in the great majority of cases to neglect of personal precautions by the patients. Breakthrough by resistant strains has attributed very little to the occurrence of these cases. The personal precautions the soldiers can take are simple, reliable and effective. They require the inculcation of a habit, a knowledge of how the disease is spread and an assurance that if conscientiously carried out they will not catch malaria. Unfortunately, as in other problems in Public Health, the average man (or woman) co-operates poorly unless forced by law or discipline — witness the continually high rate of cigarette smoking in the general population when it has been shown clearly that the habit leads to carcinoma of the lung and crippling lung disease. Consider the mounting road toll in spite of repeated warnings and extensive propaganda. It is obvious that the Australian soldier will not protect himself against malaria infection unless he is continually supervised. Admittedly he belongs to a selected group of persons, under discipline and trained in jungle fighting and the hazards of living in that environment. He should be more receptive and willing but experience does not seem to bear this out.

### ***Paludrine***

This is the drug of choice for prophylaxis in the Australian Army. It is a safe drug, free of toxic side effects and very effective in suppressing malaria. It will not cure the disease and is not used normally in therapy. It must be taken daily to be effective, as the blood level falls below the required minimum level for prevention of parasitemia after 24 hours. Therefore, one omitted dose leaves the patient open to infection on that day. It cannot be too strongly impressed both on officers and men that malaria drug prophylaxis is a daily routine and that under no circumstances should it be dropped from ignorance, carelessness, exigencies of the situation or any other excuse. There were absurd and unsubstantiated rumours flying around amongst troops, particularly the more unintelligent ones, that



the anti-malarial drug atabrin caused impotence — a similar furphy was that the M.O's were putting bromide in the tea to curb sexual appetite. Such mutterings must be curbed by officers, either by pouring scorn on them or by a simple explanation of the truth — probably both. It must not be expected that soldiers will religiously adhere to the daily tablet regime without supervision. They may forget or grow careless and in some cases may deliberately spit out the paludrine after it has been administered. Many medical officers attest to this behaviour in troops in World War II — a further illustration of the need for unremitting supervision. Nowadays, public health is not so much a function of instrumentalities or governments as of the individual. The State supervises our water supply, attempts to control smog and undertakes compulsory X-rays and in some cases inoculations. If it were left to the individual to care for himself disease rates would still be depressingly high.

The similarity between cigarette smoking and lung cancer and taking paludrine and malaria should be remembered. We cannot force people not to smoke; they still smoke and thus the death rate from carcinoma of the lung in Australia rises each year. When soldiers are not under strict malaria discipline the incidence of malaria rises because the individual in a large proportion of cases will not look after himself unless told to do so.

Nowadays Health Education is a province for psychiatrists and psychologists to study the perverse workings of the human mind. As the MBI/142-10 on malaria control and prevention states, if paludrine is taken as ordered

- (a) Malignant tertian malaria will not develop.
- (b) Attacks of benign tertian malaria will not occur and individuals will remain healthy although a latent infection may exist.
- (c) Individuals will not be capable of transmitting infection to mosquitoes and thereby to infected individuals.

The dose of the paludrine is 100 mgs daily, beginning 24-48 hours before arriving in malarious area and continued right throughout the stay in such an area. The army also recommends a radical cure procedure for malaria on return to Australia. Paludrine, as already mentioned, is a completely safe drug and has no side effects whatever.

### **Nets**

Mosquito nets must be used at night when sleeping. The anopheline mosquito is mainly a night feeder and the hours between dusk and dawn are the periods of greatest danger. It

is essential that the nets be 100 per cent proof against the insects, with no obvious tears and rents and well tucked in all round the soldier without any part of his body outside the nets. Mosquitoes may bite through the mesh so he should not touch the net if possible. Nets should not be discarded, although of course there may be certain exceptional circumstances when a formation commander may allow nets to be dispensed with. It is essential to inspect the nets regularly and to supervise their erection by the soldier. Paludrine will prevent overt attacks of malaria but there is always the chance that if a soldier is bitten he may later develop benign tertian malaria because the parasite may localize in the liver where it is immune to the drug.

### **Clothing**

Trouser legs must be tucked into gaiters and sleeves rolled down to the wrists at night, and bathing must be prohibited between dusk and dawn. There is no excuse for wearing only shorts and boots at night.

### **Repellent**

There is an effective mosquito repellent which must be rubbed on face (keeping it away from the eyes), hands and neck at night and it should be reapplied every 3 hours. It is essential that men carry the repellent at all times and that adequate replacement stores are carried by the units.

### **Sprays, etc.**

These are also on issue and particularly in huts and tents, should be sprayed about to kill the adult mosquitoes. The main task of spraying however, as already indicated, is undertaken by trained personnel.

### **Infected Foci**

Whenever possible and if the tactical situation allows, troops must be kept away from kampongs and villages in malarious areas. These sites are the source of infection in endemic zones and must be avoided as far as possible.

### **Conclusion**

The Australian Army today is a well-trained, efficient force containing a high percentage of specialist officers and men. It is still small and it cannot afford any wastage. Therefore, it would be a great pity if soldiers were lost because of an eminently preventable disease like malaria. No new techniques or radical departures from old and well tried methods of prevention have been presented in this article which has been a review of the current

knowledge of malaria. Drug resistance is undoubtedly a problem but it can be anticipated that this will yield to scientific research on new anti-malarials. No matter what developments there are in entomology, immunology and other fields of research, the soldier must still carry out his personal precautions as he has been directed to since World War I. Malaria should not occur in troops fighting in even a highly endemic area where the strain of parasite is known to be sensitive to chemotherapy. It is still more important in malarious locations where the parasite may be resistant that the soldiers prevent anopheline mosquitoes from biting them. There can be no excuse for laxity in malaria discipline — it is the responsibility of every officer and man to protect himself by day and night, whenever he is exposed to risk. □

#### MALARIA IN WORLD WAR II

It is of interest to look back over the six years during which malaria control played an increasing part in the campaigning of the Australian Armed Services . . . Several features of the constant struggle stand out. The organization of control measures became more and more adequate and complete and rested on two foundations. One of these was the background of science, the other the principle that guidance was the role of the medical services, and that responsibility for carrying out measures for which disciplinary control was necessary rested with the combatant commanders and their deputies. The entomologist supplied information of a peculiarly technical and detailed kind, the malaria control specialist used this and other data in a characteristic mixture of entomology, hygiene and engineering, and the malariologist combined the outlook of the doctor experienced in the pathological and medical aspects of malaria with a first-hand knowledge of military requirements. The clinical research teams patiently applied the complex techniques of combined biological and pharmacological experiment and submitted their results to field trial, the statistical experts collected and analysed figures and corrected unwarranted deductions, and the clinical workers at the bedside gave the benefit of their experience to patients and planners alike . . . We are now better equipped than before in the war against this most destructive of protozoal diseases, but we still have to reckon with the recalcitrance of that possessor of high intelligence, man, who seems bent on destroying himself . . .

— Allan S. Walker, *Clinical Problems of War* (1952)



**FIVE JOURNEYS FROM DJAKARTA**, by Maslyn Williams.  
(Collins, 1966, review copy from F. W. Cheshire, Canberra, \$4.50.)

*Reviewed by Lieut-Colonel C. H. A. East, MBE, Army Headquarters, Canberra, a student at the Indonesian Staff College in 1964.*

THE author-journalist-philosopher Maslyn Williams brings to the reader of this book the same ability to identify himself with the ordinary people of the Republic of Indonesia that characterized his earlier work, *Stone Age Island*, a story of the Territory of Papua and New Guinea.

*Five Journeys from Djakarta* is well worth reading by all Australians for many reasons. The importance of understanding our huge, turbulent and, to many, complex neighbour is of overriding urgency and importance. The topicality of any study of Indonesia at this time is self-evident in view of the changes that began with the abortive *Gestapu* or 30 September coup attempt of last year.

Unlike many of the reports and dispatches that currently arrive from journalist sources, based on official handouts which are then polished in the cocktail bar of the Hotel Indonesia in Djakarta, Maslyn Williams has gone out into the country to meet and talk with people at all levels of officialdom and in all layers of society. As the title of the book indicates, the author ranged outwards on five separate journeys from Djakarta to the outer islands of the sprawling Indonesian archipelago to obtain the feelings of the people towards all manner of things: their attitude to Bung Karno, towards Konfrontasi, the age-old feelings between Sumatran and Javanese, of the approach to Indonesian nationalism by the Hindu population of Bali, the Christians of Minahassa and the Moslem Bugis of Southern Sulawesi, and on his last trip the situation in West Irian in regard to its return and absorption within the ancient kingdom of Madjapahit and the present-day Republic of Indonesia.

Maslyn Williams' ability to obtain and express the emotions and feelings of the average Indonesian is even more remarkable when it is realized that his knowledge of the Indonesian language is scanty. One wonders just how much more illuminating would have been this work if the author had been able to

converse with the people he has depicted in their own tongue, and to interpret the delicate shades of meaning and nuances which are so much a part of Indonesian oral communication.

It was the reviewer's good fortune to know Maslyn Williams briefly in Indonesia and to see him in his daily pursuit of the material for this book during the field exercise referred to in Chapter 20. It was revealing to see how this sympathetic, shy but friendly Australian patiently sought and obtained the trust and affection of the people around him — men, women and children. For the Indonesians to know Maslyn Williams was to be aware of his understanding and kindness.

The author has endeavoured to convey to the reader through the lips of his Indonesian spokesman the many and varied factors which contribute to and make up the Indonesian identity and the Indonesian way of life. His Indonesians bear eloquent testimony to their sense of inferiority, a legacy of 350 years of Dutch bondage and tyranny, and manifesting itself today in national stances and postures which, though they may not appear logical to the West, are a reflection of the pride felt by a nation exulting in its hard-won independence.

Again one reads of the conflicting philosophy and ideologies of the *Pantja Sila* (the five principles on which the Indonesian ideology is based) and the strategic concept of Indonesia which sees itself as entitled to a sphere of influence in South-East Asia — as do we. All this is mixed with the religions of the archipelago, the superstition and supernatural beliefs stemming from animism, plus the burning desire for education which is typical of so many parts of Africa and Asia. Add finally the failure of the economy and the rapidly increasing population problem in Java, and is it any wonder that sections of this neighbour of ours are to many Australians bewildering and difficult to understand.

This book of Maslyn Williams helps to explain some of the reasons for the Indonesian attitude today. It is essential that more Australians take the trouble and make the effort to understand this people whose future destiny is so closely linked with ours. □

**THE RATS REMAIN : TOBRUK SIEGE 1941**, by J. S. Cumpston.  
(Grayflower Productions, Melbourne, 1966, \$6.)

DR CUMPSTON faced no easy task in preparing this pictorial history of the Siege of Tobruk. For one thing there is a dearth of official photographs of the period; for another the original titling, as a rule, was lamentably inadequate.

The author has left no stone unturned to remedy the dearth of official photographs. German and Italian sources have been

tapped through overseas contacts in the Australian diplomatic service; the Imperial War Museum and the New Zealand Historical Publications Branch have each made contributions; the Royal Air Force Station at El Adem has provided vertical shots of existing perimeter posts; best of all Dr. Cumpston has exploited the fairly rich field of the unit photographer. The upshot is a book containing over 500 illustrations, many of them very good indeed — a handsome contribution to the history of World War II, and one which could hardly fail to satisfy those who took part in the siege.

That was one portion of his task. A major problem was to remedy the deficiencies in the original titling. Here Dr. Cumpston has achieved remarkable success, providing wherever possible, an eight-figure map reference, giving the spot from which the picture was taken and indicating the point of the compass towards which the camera was facing, together with a date (sometimes approximate).

If one may feel at times that the captions provided are somewhat speculative, that is not to belittle either the author or his achievement. The feeling simply persists. Take Plate 141 as an example. This arrived from the *Instituto Luce*, Rome, with the brief title 'Rommel at the Front' and has been developed into a 7-line caption, with a date and map reference — a masterly piece of detection considering that the ground features are relatively insignificant, that Rommel spent roughly two years and a half in North Africa and that Tobruk was only one of many 'fronts'.

There are a few inaccuracies, generally in personal details — minor blemishes in a masterly work. Dr. Cumpston served in Tobruk with the 2/23rd Battalion and as an L.O. with 24th Brigade and knows the area well. One wonders sometimes whether this knowledge, this familiarity with people and places, has not at times led him into error through insufficient care. Memory is hardly a dependable enough instrument when dealing for example with such details as initials of officers and men. These count as much as an eight-figure map reference to the people concerned—a fact which has been made clear to the editor of this journal on occasions! A handy guide for officers at any rate would have been one of the 1941 A.I.F. regimental lists—collectors' pieces today, but readily available at the Australian War Memorial—or even the 1946 Gradation List, which (with its successors) is probably the best example of a gradation list published by any Army or any service anywhere. It seems a pity too that the famed Messerschmitt should have been wrongly spelt 'Messerschmidt' throughout.—A.J.S. □

**KURA!** by Cornel Lumiere. (Jacaranda Press, Brisbane, 1966, \$5.25.)

IN MAY 1942 a group of Australian prisoners of war, 3,000 strong, known as 'A' Force, commanded by Brigadier A. L. Varley and drawn largely from the 22nd Australian Brigade, left Singapore in two small, very dirty steamers for parts unknown. On the way north they were joined by other prisoners (British and Dutch) captured in Java and Sumatra and destined like 'A' Force to labour long and hard on the Burma-Thailand Railway. Later, in 1944, groups of the prisoners were shipped to Japan for equally arduous work, in factory, go-down, shipping yard or coalmine. Many, including Brigadier Varley, lost their lives during this movement as a result of American submarine attacks on unmarked Japanese transports.

*Kura!*, a Japanese word which heralded violence towards the prisoners, tells the story of these men through the eyes of the interpreter, Dutchman Erik Leeuwenburg, a name that is somewhat puzzling to one who has studied Brigadier Varley's diaries — tattered, closely-written exercise books, to which the strange musty odour of their jungle burial still clings after all these years.

In Varley's diaries the interpreter's name is written as Punt, and his experiences closely parallel those of Erik Leeuwenburg. Undoubtedly Punt and Leeuwenburg were one and the same person. The book's dust jacket, however, states that the interpreter is in fact Canadian author Cornel Lumiere, 'flushing his wartime experiences from his emotional self'. Thus emerges one man with three names — a literary conundrum to which this reviewer could find no answer, though it seems clear that at least one fictional name was adopted in order to enable Lumiere to write with propriety more freely and frankly about his own achievements.

Whatever the reasons, however, the authenticity of the book is beyond dispute. It is a compelling story, told without bitterness, of the constant fight to persuade the Japanese to accede to the prisoners' requests for more food and medical supplies and to resist the ever-increasing Japanese pressure to work them harder. In this fight, fraught with frustration and danger, the interpreter played an obviously notable part.

Familiar names and faces (skilfully drawn by Sydney artist, Jim Collins) of the prisoner-of-war leaders once more appear — Varley, Anderson VC, J. M. Williams and Captain Ray Griffin — to mention only a few of the many Australians who rose to great heights from the depths of degradation and adversity. We see

also the Australian soldier, emaciated and unkempt, at times almost naked, but with spirit generally undimmed and humour always shining forth.

This was the 8th Division's hardest battle and best victory. It is comical, having read this book and been reminded of these occasions, to recall the opinion, still held by a small group of officers who remained throughout in Changi, that the less said about the Australians' experiences as prisoners the better. Yet more books have been written by Australians about this period than about any other. One wonders whether these selfsame officers are not guilty of seeing their own achievements as larger than life, and those of the prisoners on the Burma-Thailand railway, in Borneo and in other equally harsh regions, more distantly as though through the wrong end of a telescope.—A.J.S. □

#### THE INFANTRYMAN

The rarefied air (in Syria), though bracing in effect, probably added to the perpetual fatigue which weighs down the infantryman between battles. In battle weariness slips away, but when the main need is over, dragging fatigue, the protest of the body against will-power, begins again. Mental and nervous reaction coupled with physical overstrain take their toll. In addition, many nights' sleep are lost altogether, while the remainder are broken by sentry-go and patrolling. Even other servicemen, even engineers of the field companies who frequently plod with the infantry to special tasks cannot fully comprehend this aching lassitude. It fills the infanteer's veins with mud and covers his brain with a fog through which he can see only the words 'I must keep going'. The airman or the sailor when the battle is over has the one his camp stretcher, the other his bunk (and Heaven knows they deserve them!). The infanteer drops in the mud or among the rocks, to be roused an hour or so later by an N.C.O. saying 'Your turn as sentry', or an officer saying, 'We've got to go out on a patrol'. For the officer and N.C.O. there are in addition the long reconnaissances, the difficult patrol, the conference at someone else's headquarters, and the effort of looking cheerful and confident in the face of almost impossible tasks.

— W. B. Russell, *The Second Fourteenth Battalion* (1948).