

The medical service with Lord Methuen's force during the advance on Kimberley 1899 by Lieutenant Colonel C.H. Burtchaell, RAMC

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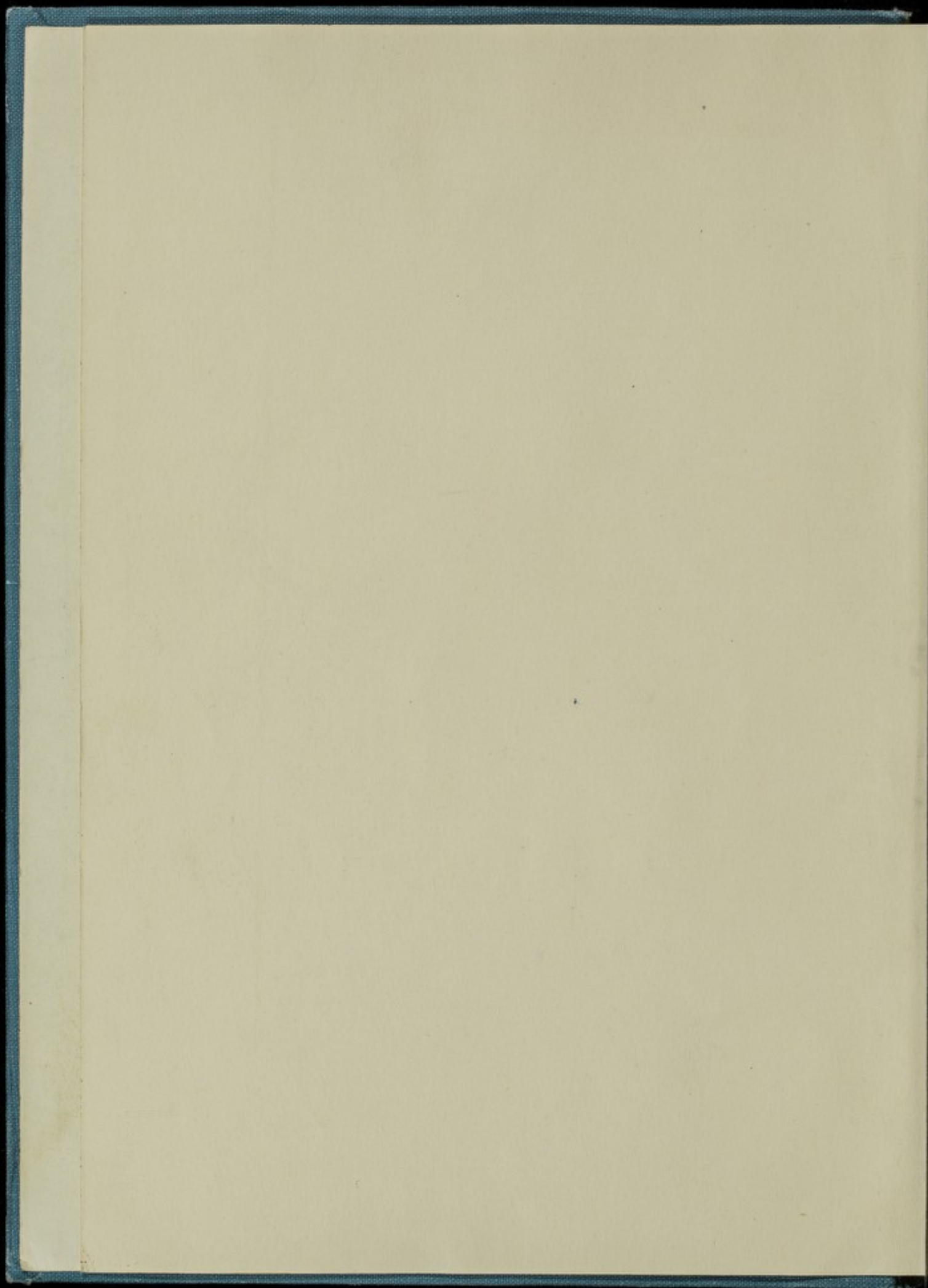
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TEL. 2106.

FLAN HOW,
ULVERSTON,
LANCS.

July 10th. 1950.

The Commandant.
RAME. Depot.

Flan
1117

Dear Commandant -

Your DO/COM/66/50. of June 3rd.

I have recently dug out the enclosed
manuscript by Lieut Charles Burtchell
on the S. African War.

It appeared of course in the Corps Journal
of which you will have a set - but it
seems to me that one of the reprints,
which saves digging out four numbers
of the Journal would be useful.

It formed the basis of many of the
early Medical Staff Tours - which were
just coming into existence - when this
excellent account was written.

Yours sincerely
L. H. How

action of Magersfontein forms the basis of this narrative. That
account has already been published in the "Report on the Medical
Arrangements in the South African War," by Surgeon-General Sir
W. D. Wilson, K.C.M.G. Maps showing the position of the

United Services Medical Society.

THE MEDICAL SERVICE WITH LORD METHUEN'S FORCE DURING THE ADVANCE ON KIMBERLEY, 1899.

BY LIEUTENANT-COLONEL C. H. BURTCHAELL.
Royal Army Medical Corps.

THIS paper is the outcome of an invitation to bring before a meeting of the United Services Medical Society some practical example of the work and tactical dispositions of field medical units. The operations of the force under Lord Methuen's command, during the advance on Kimberley, 1899—the First Division South African Field Force—were selected as suitable for the purpose because: (1) that period was the only phase of the South African War in which a division, and later an augmented division, fought a series of actions with its medical service complete in numbers and composition in accordance with the scale laid down in war establishments of the day; (2) a number of incidents in the medical narrative of those operations sufficiently well indicate principles which must always apply in the working of the medical service in war irrespective of the exact composition or nomenclature of its field units, or the general tactical situations in which those units may be employed; (3) as a matter of purely Corps interest it appeared to be worth while to endeavour to bring into one record the scattered information and references relating to the work accomplished by the officers, non-commissioned officers and men of the Corps who at that time formed part of the First Division, and whose services met with approbation in many diverse quarters; (4) a more or less detailed narrative of this period of the South African War may induce others to put together the history of the work of the Medical Service in other actions in which the Corps did equally useful work.

The official account submitted during the War by Colonel E. Townsend, P.M.O. First Division, of the manner in which the wounded were disposed of from the fight at Belmont up to the action of Magersfontein forms the basis of this narrative. That account has already been published in the "Report on the Medical Arrangements in the South African War," by Surgeon-General Sir W. D. Wilson, K.C.M.G. Maps showing the position of the

medical units during the various actions have not previously been produced, and moreover, the work of the Regimental Medical Service has not been recorded. In order to verify or locate the exact positions occupied by medical units, and to obtain notes of incidents in connection with the Medical Service, of historical or personal interest, a number of officers were written to recently with the result that thirty-three officers of the Royal Army Medical Corps and Royal Navy Medical Service, including fourteen out of the eighteen officers who served with regimental units in the firing line, have contributed to, or confirmed the incidents about to be recorded.

Before relating the events during the advance from Orange River it is desirable to refer to (1) the change which has taken place in the organization of the field medical units since the South African War and (2) the developments on the Cape Town-Kimberley line before the concentration of Lord Methuen's force.

		FIELD AMBULANCE.						BEARER COMPANY AND FIELD HOSPITAL.						
		Rank and file	Buglers	Serjeants	Warrant officers	Quartermasters	Medical officers	Medical officers	Quartermasters	Warrant officers	Serjeants	Buglers	Rank and file	
Bearer Division (three bearer sub-divisions)	36	1	1				1	6						
	36	1	1				1	6	Stretchers	8	1		2	32
	36	1	1				1	6						
	10							10	Amb. wagons	10				10
								Collecting and Dressing Stn.	2		1	4	1	8
127	118	3	3			3			3		1	6	1	50
Tent Division (three tent sub-divisions)	15		4				2			2		1	3	14
	15		4				2		2	1		4		13
	17		2	1	1	2								
65	47	10	1	1	6			4	1	1	7		27	
192	165	3	13	1	1	9			7	1	2	13	1	77

(1) *Changes which have taken place in the Organization of the Field Medical Units since the South African War.*

The above table gives the composition of the present field ambulance and of the old bearer company and field hospital. The

upper portion of the table shows the carrying capacity of the bearer division of a field ambulance and of a bearer company. It will be observed that the former has eighteen stretchers with six bearers each as compared to the eight stretchers with four bearers each of a bearer company. The number of ambulance wagons and personnel to accompany them is the same, but the carrying capacity of the ambulance wagon has been raised as regards lying-down cases from two to four. The bearer company had a definite personnel and equipment for the formation of a dressing-station and collecting-station. The bearer division of a field ambulance has, within itself, no such personnel, which when required has to be provided by a tent sub-division or portion of one. The lower part of the table shows the three tent sub-divisions of a field ambulance and the personnel of a field hospital divided into two. The division of a field hospital into two halves was recognized as a legitimate procedure when necessary. The point to note specially is, that a whole field hospital equals almost exactly two tent sub-divisions of a field ambulance, as it will then be easy to estimate how many tent sub-divisions would have been at work during the various actions to be described, if the present organization had been in existence. Taking the medical units as being in direct relation to the largest formations within a division, i.e., the infantry brigades, and leaving out for the moment the other organizations known collectively as divisional troops, we find that each of the two infantry brigades in the old division had attached to it a bearer company and a field hospital, and in addition to those four units there was one other field hospital available in the division which was known as the divisional troops field hospital.

The present division has three infantry brigades, and three field ambulances which are divisional troops and altogether independent of the brigades. When three brigades were brought together under the old system, as, for example, at the battle of Magersfontein, there were available three such organizations as that shown in the table under Bearer Company and Field Hospital and in addition the field hospital of the divisional troops. Consequently, if the bearer company personnel shown as the collecting station and dressing station be taken down to the blank space in the field hospital part of the table and the deficiency in the hospital (tent) portion of personnel be made up to the present standard from the divisional field hospital, it will be found that the personnel available in the field for hospital or "tent" purposes under the old and the new organizations is approximately the same. But

there has been a large increase in the strength of the divisional troops. So the present division, with the exception of the increase of bearers per stretcher, who are only partially trained men, is relatively weaker in field medical unit personnel than a division made up to a strength of three infantry brigades on the old system.

A collecting station¹ under the old organization was a point to which wounded were carried by stretcher-bearers of the bearer company and from which they were carried by ambulance wagons to the dressing station. A dressing station, where splints, &c., were fixed and restoratives administered, was a half-way house between the collecting station and the field hospital, which, in turn, was supposed to be able to treat and feed the wounded and provide for all their requirements until they were evacuated to the line of communication hospitals. When the field ambulance organization was introduced, the collecting station, as a defined point in the scheme for the removal of wounded from the field, disappeared. It has recently reappeared in the shape of an advanced dressing station, not for theoretical reasons, but because in the medical manoeuvres of 1910, and in nearly all medical exercises in the field, the occasional necessity for some such post was obvious and the only difficulty was to find a suitable term for it.

One other point is worth mentioning. When the present field ambulances were made divisional units, under the direct command at all times of the officer commanding the R.A.M.C. in a division, many officers thought the arrangement a very bad one when compared with the old system of a bearer company and field hospital as brigade units under command of the brigade commander. But under the regulations relating to those units it was optional for a G.O.C. Division to detach them from their brigades and place them at the disposal of the P.M.O. should circumstances make that course desirable. As a matter of fact during all the actions to which this narrative refers the brigade bearer companies and field hospitals were controlled and directed altogether by the P.M.O. so long as fighting lasted and wounded had to be disposed of. This came about automatically in the ordinary course of the work to be done and not on account of the regulations mentioned above. When the wounded had been evacuated the units went back to their brigades. Generally speaking that arrangement had many advantages. It

¹ In the Prussian organization during the Franco-Prussian war, this station was known as the *Sammelplatz*, or furthest point to which it was expedient to bring ambulance wagons.

will be noticed later on that in the first march from Orange River all the medical units marched together, and at the battle of Belmont and the later actions they were in no way tied up under brigade or localized control.

(2) *Developments on the Cape Town-Kimberley line before the concentration of Lord Methuen's force.*

About the middle of September when it was decided to send detachments of troops to Kimberley, Orange River, and De Aar, the equipment of two field hospitals stored at Cape Town was drawn and divided into four sections afterwards known as Nos. 1, 2, 3 and 4 Sections Cape Field Hospital. The personnel was provided by reinforcements of Royal Army Medical Corps which arrived at the Cape during September and partly by the Cape Medical Staff Corps. These sections were not moved from Cape Town until after war broke out.

On September 19, the headquarters and four companies of the Loyal North Lancashire Regiment, detachments of R.G.A., R.E., A.S.C., and Lieutenant C. J. O'Gorman with two serjeants and three privates R.A.M.C. went to Kimberley. The other half battalion of the Loyal North Lancashire Regiment and details and Captain D. D. Shanahan, one N.C.O. and one private R.A.M.C., went to Orange River. De Aar was occupied by a small force about the same time. The medical equipment for the Orange River force was as follows: One pair field medical panniers, one field medical companion, haversack and water-bottle, a box containing extra dressings, medicines and medical comforts, and one ambulance wagon with mules. No tents were provided, and no cooking arrangements were made for the sick. These if required were to be provided by the troops. There were practically no sick, and not a single case of illness was sent to the base prior to the concentration of Lord Methuen's force.

October 11.—The time allowed by President Kruger's ultimatum expired at 5 p.m.

October 14, Nos. 1, 2 and 3 Sections Cape Field Hospital, under Major H. P. Birch and Lieutenants G. B. Crisp and W. H. S. Nickerson, arrived at De Aar, where the garrison had been increased during the preceding few days.

October 14-15.—Railway and telegraph line destroyed North and South of Kimberley, and the garrison there cut off.

October 14-18.—The 9th Lancers arrived at Orange River from

India. As this regiment was equipped on the Indian scale,¹ Captain J. V. Forrest who was in medical charge had with him an assistant surgeon and a native ward servant.

October 15.—1st Northumberland Fusiliers arrived at Orange River from De Aar.

October 17.—No. 1 Section Cape Field Hospital arrived at Orange River: personnel, Major H. P. Birch, 1 W.O., 1 Serjeant, 9 rank and file, R.A.M.C. This was the first hospital of any kind at Orange River. It was established in a few small houses at the back of the railway station, and partly in tents. Beds were improvised out of wooden railway sleepers. There was an ample supply of blankets and medical comforts. The sick were few and the arrangements met all requirements.

October 20.—The South African Field force commenced to embark at Southampton (the Army Reserve was called out on October 7).

November 3.—Colonel Hall's Brigade 18th, 62nd, 75th Batteries Royal Field Artillery arrived at Orange River between October 28, and November 3.

November 4.—No. 2 Section Cape Field Hospital which had been sent to Naauwpoort on October 27, returned to De Aar and there joined No. 4 Section, which arrived at De Aar from Cape Town on October 23. No. 3 Section went to Stormberg on October 27, and did not again return to the western line of rail.

November 6.—Reconnaissance from Orange River towards Belmont by 9th Lancers, 2 Companies M.I. (Northumberland Fusiliers and Loyal North Lancashire Regiment), 2 guns, R.F.A. Medical arrangements.—Captains J. V. Forrest and D. D. Shanahan, R.A.M.C.; four stretcher squads M.I.; two ambulance wagons with wagon orderlies; regimental medical equipment and medical comforts carried in ambulance wagon. The stretcher squads were the only dismounted troops. They were carried in the ambulance wagons, but as the pace was fast and the roads and tracks bad, the mules were completely done up from the heavy weight they had to drag. No casualties.

November 9.—A reconnaissance was made with the same force beyond Belmont to the vicinity of Enslin. Several railway culverts

¹ Several of the squadron stretcher-bearers had been employed on hospital duties in India and were very useful, especially during the later stages of the war when the subordinate medical personnel with mounted columns was very meagre. They were often left alone in charge of wounded at farms, &c., until the wounded could be removed.

were found destroyed. There was no opposition. The force bivouacked near Witteputs. The same medical arrangements were made, but on this occasion the stretcher-bearers were *mounted*, No. 4 carrying the stretcher in a rifle bucket. On the morning of the 10th the enemy, with guns, were met east of Belmont. One officer was killed; three officers (one fatally) and four men were wounded. When in touch with the Boers, the stretcher-bearers dismounted—No. 4 held the horses, and the three other bearers, with a stretcher, kept in touch with the troops. The wounded were carried in the ambulance wagons to the railway, and sent back to Orange River in a train which had brought out reinforcements. The floor of the truck in which the wounded were placed was covered with heather, which made a soft, springy mattress.

CONCENTRATION AT ORANGE RIVER.

On November 9 Lord Methuen, with the headquarters of the 1st Division, First Army Corps, disembarked at Cape Town, and the transports of the Army Corps began to arrive. Owing to the situation in Natal the 2nd Infantry Brigade and the artillery of the First Division were sent on to Durban, and the Guards Brigade, with its field hospital and bearer company, and the Field Hospital of the Divisional Troops, alone remained. Lord Methuen received instructions to organize a new brigade from the infantry battalions already at De Aar and Orange River, and, when ready, to advance rapidly on Kimberley. The 18th, 62nd, and 75th Batteries R.F.A. at De Aar and Orange River were to take the place of his original divisional artillery sent to Natal. This rearrangement of troops naturally caused a general upset in the mobilization allotment of medical units.

On November 12 Lord Methuen arrived at Orange River, and began to organize his force. The new 9th Brigade was formed by the 1st Northumberland Fusiliers, 2nd Northamptonshire, 2nd King's Own Yorkshire Light Infantry, and half of the 1st Loyal North Lancashire Regiment. The Divisional Field Hospital, First Division (Major F. A. Harris) was allotted to this brigade, and a bearer company was provided by withdrawing No. 3 Bearer Company (Major R. G. Hanley) from the Highland Brigade, which was concentrating about De Aar and was not required immediately to take the field. The Divisional Field Hospital thus diverted to what was considered the more important position in the force was replaced by Nos. 2 and 4 Sections of the Cape Field Hospitals, under Major

Greenway, R.A.M.C., and Surgeon-Major J. H. Cox, C.M.S.C., which had been doing the work of a local temporary hospital at De Aar. This field hospital only accompanied the division on the advance as far as Fincham's, where No. 10 Field Hospital (originally mobilized for the Highland Brigade) joined and became the Divisional Field Hospital, First Division. The sections of the Cape Field Hospital then returned (November 22) to Orange River. The medical units withdrawn from the Highland Brigade were replaced by a bearer company manned by the Cape Volunteer Medical Staff Corps under Lieutenant-Colonel E. B. Hartley, V.C., Cape Mounted Rifles, and by the field hospital originally allotted as the Divisional Field Hospital, Second Division. That division was then given the field hospital for Corps Troops, First Army Corps.

No. 3 Bearer Company, which became the 9th Brigade Bearer Company, arrived without its ambulance wagons, which were not embarked on the same transport as the personnel. It had to be fitted out at Orange River with buck wagons converted into ambulance wagons, and it started with only three fully equipped ambulance wagons which were with the regimental units at Orange River before the concentration.

To provide medical officers for the infantry of the 9th Brigade, Captain D. D. Shanahan was posted to the Northumberland Fusiliers; Lieutenant Crisp, from No. 2 Section Cape Field Hospital, to the Yorkshire Light Infantry; and Lieutenant W. Jagger was sent up from No. 1 General Hospital at Wynberg for the half battalion Loyal North Lancashire Regiment. Lieutenant E. L. Munn came out from England with the 2nd Battalion Northamptonshire Regiment, which was one of the battalions mobilized for the line of communication of the Army Corps.

Lieutenant A. H. Benson, Militia Medical Staff Corps, arrived from Cape Town, and was posted to No. 1 Section, Cape Field Hospital, at Orange River.

During the concentration period all regimental stretcher-bearers were instructed daily in first aid.

Commanding officers were directed to ascertain that all officers and men were in possession of a first field dressing.

Officers in medical charge of regimental units were directed to report any deficiencies in stretcher-bearers, stretchers, or medical equipment, and that their units were in possession of field hospital supply cases, i.e., regimental medical comforts.

Divisional orders were published directing that all bright parts of swords (not blades), bayonets, scabbards, and buttons were t

be painted or coloured khaki, and that officers were to be equipped like the men—the equipment to be obtained from casualties. Some of the Royal Army Medical Corps officers with regimental units, who, under this order, wore the regulation equipment, found the pouches useful for carrying an extra supply of bandages.

On November 19, when the general preparations were almost complete, a medical inspection of all officers, N.C.O.s and men was held. Medical officers were directed to take this opportunity to see that everyone was in possession of a first field dressing.

On November 20, the Division was ready, and the troops which had not already done so moved into bivouac on the north side of the Orange River.

Transport was provided for two blankets and one waterproof sheet per officer, and one blanket and half a waterproof sheet per man. No other personal luggage was allowed.

Tents were not to be carried, but field hospitals were allowed half scale for sick, i.e., 13 C.T.D. 112 lb. and 3 C.T.S. 80 lb. tents. Bearer companies and field hospitals also took operating tents.

Arrangements were made to send by rail, when feasible, the full scale of baggage and tents.

ADVANCE FROM ORANGE RIVER.

On November 21, the Division¹ marched at 4.30 a.m. in two lines to Fincham's Farm :—

¹The Brigades and Divisional Troops were composed of the following units :—

1st or Guards Brigade.

3rd Grenadier Guards.
1st Coldstream* Guards.
2nd Coldstream Guards.
1st Scots Guards.
Detachment A.S.C.
Bearer Company.
Field Hospital.

9th Brigade.

1st Northumberland Fusiliers.
 $\frac{1}{2}$ 1st Loyal North Lancashire.
2nd Northamptonshire.
2nd King's Own Yorkshire L.I.
Detachment A.S.C.
Bearer Company.
Field Hospital.

DIVISIONAL TROOPS.

9th Lancers.	18th and 75th Batteries, R.F.A.
2 $\frac{1}{2}$ Companies, M.I.	7th and 11th Companies, R.E.
Detachment New South Wales Lancers.	Rimington's Guides
Detachment A.S.C.	

FIELD HOSPITAL.

* 1st Coldstream Guards did not join until the evening of the 22nd.
62nd Battery R.F.A. † joined during the battle of Modder River.

(1) 9th Lancers, Guards Brigade, 9th Brigade, one company Royal Munster Fusiliers, along the railway line.

(2) The Royal Field Artillery and the S.A.A. carts of the brigades, 2 Bearer Companies, 3 Field Hospitals, Supply and Ammunition Columns, on the Hopetown-Witteputs Road. Distance about 9 miles.

The camping ground was a very good one, with an excellent water supply in a reservoir filled from a well. Owing to information which gave rise to a suspicion that the water supply on this line of advance might be poisoned with cyanide of potassium, the authorities at Cape Town supplied to certain units small tin cases containing the reagents and directions for the Prussian blue test. At Fincham's the Loyal North Lancashire Regiment received an alarming report that the water was poisoned, and Lieutenant Jagger was aroused from sleep and asked to test it. He had not heard of the box of reagents, so, with only visions of Prussian blue but with a definite knowledge of a possible sudden death, he realized the psychological moment of his career had come and that a physiological test was the only thing to save the battalion. He drank the water and retired to sleep.

November 22.—Lord Methuen, accompanied by his Staff, Infantry Brigade Commanders, the C.R.A., C.R.E., the P.M.O. and his secretary, started from Fincham's at 4 a.m. and reconnoitred the enemy's position at Belmont from the top of a kopje close to Thomas's Farm. The General having decided on his plan of attack, Thomas's Farm was noted as a suitable site for field hospitals. Leaving the mounted infantry to hold the ground in the vicinity of the farm, the Staff returned, and arrived at Fincham's at 8 a.m. It was during this reconnaissance that Lord Methuen named the prominent features of the Belmont kopjes, Table Mountain, Mount Blanc, and Sugar Loaf.

About 9 a.m. the enemy opened fire on the mounted infantry round Belmont, and early in the afternoon brought two guns into action. These guns were withdrawn on coming under fire from the 18th Battery R.F.A., which had moved up rapidly from Fincham's. Two men were slightly wounded. They returned to duty after their wounds had been dressed by Major H. L. Battersby, in medical charge R.F.A.

Orders for the attack on the 23rd were issued during the day. The Division moved at 4.30 p.m. to Thomas's Farm, where the head of the column arrived at dusk, but the rear guard with two ambulance wagons, under Lieutenant Fell, did not get in till 9 p.m.

The area available for the bivouac was small, and the medical units, in common with others, had difficulty in finding their places in the dark.

The Naval Brigade, consisting of 18 officers, 384 other ranks with 4 naval 12-pounder guns, joined the Division in the afternoon. Its medical establishment was 3 medical officers, 3 sick berth attendants, 10 stretchers with 40 stokers as bearers. These stokers were picked men from various ships who had been instructed at the Cape in stretcher drill and first aid by Fleet Surgeon J. Porter. The stretcher squads were equipped with field surgical haversacks and a Naval field chest.

BATTLE OF BELMONT, NOVEMBER 23, 1899.

At 2 a.m. the troops were preparing to move from their bivouacs. The Guards Brigade passed the Ganger's Hut about 3.20 a.m., the advance of the 3rd Grenadier Guards and Scots Guards being directed towards Gun Hill. The 9th Brigade crossed the railway line near the station, a little later, the leading battalions, the Northumberland Fusiliers and Northhamptons being directed towards Table Mountain. Just as day was breaking and when the firing lines of the Scots Guards and Grenadier Guards were close to the points of attack, as shown on the map, the enemy opened fire all along the line. Many casualties occurred in the first few minutes, some bullets passing over the leading companies and catching those in rear.

Within 25 minutes the Guards had captured Grenadier Hill and very shortly afterwards the 9th Brigade were in possession of the western crest of Table Mountain. The enemy held on to the far side of that hill for some time and also kept up a fire from Mount Blanc. The Naval guns and R.F.A. shelled that point. Eventually both brigades crossed the valley to the east of Table Mountain. The 1st Coldstream Guards, supported by half the 2nd Coldstream Guards, captured the Razor Back. By 6.10 a.m. the last height was cleared and the enemy's laager was seen trekking away in a north-easterly direction. By 10.30 a.m. the fighting troops were back in the camp at the farm.

The total casualties were:—

	Killed	Wounded	Total
Officers	3	25	28
Other ranks.. ..	50	220	270
	53	245	298

The strength of the troops engaged was about 8,000.

Twenty-two wounded Boers were picked up on the kopjes.

The Grenadier Guards suffered the heaviest loss: 1 officer and 21 men killed, 8 officers and 106 men wounded. The Scots Guards lost 10 killed and 33 wounded, and the Northumberland Fusiliers 12 (2 officers) killed, and 40 wounded.

Regimental Medical Service.—The following description by Captain Profeit, in medical charge of the Grenadier Guards, is more or less typical of what occurred in the other battalions that came under severe fire:

“When orders were received on the 22nd that an attack was to be made on the Belmont position at dawn on the 23rd, I saw that all the medical equipment was packed in the Scotch cart, and the driver placed under my orders. The stretcher-bearers were served out with S.B. armlets and told that as soon as the battalion crossed the railway line they were to remove the stretchers from the cart and fall in. The field companion was to be carried by the corporal, the surgical haversack by another orderly, and the water-bottles by the men in charge of particular stretchers.

“About 3.30 a.m. on the 23rd we moved towards the position, the Scotch cart keeping in close touch with the battalion. When the railway line was crossed the bearers took the stretchers from the cart and fell in under me. Very soon we were over a slight rise in the ground and the Boers at once opened fire, the whole range of kopjes to the left front and right flank seemed alive with fire. Many bullets were flying about, so the stretcher squads were extended and moved up behind the battalion. As the attack developed they further extended to search for wounded and to render first aid. There were many casualties about a thousand yards from Grenadier Hill, which kept me busy till the firing slackened. The orderly corporal remained with me, and I attended to the most severely wounded men, attaching tallies and noting the position and severity of the wounds. Soon, however, I had news that there were a large number of wounded lying under Grenadier Hill. When I got there men seemed to be lying about in scores, and it looked as if there was work for half a dozen medical officers. However, I set to work and rendered what aid I could, applying tourniquets and using up all the dressings in the field companion, and as many first field dressings as could be found. As I tied up the wounds the corporal jotted down on the tallies the kind of wound, and if a tourniquet had been applied. This went on until we had done about twenty cases, then the work

and hurry to get the men off the field necessitated this regulation being given up, and the corporal was sent to render first aid himself, and give many who were shouting for it a drink of water. Writing notes about cases on the field is a waste of time where large numbers of men have to be dealt with, and even attaching different coloured tallies to signify the severity of the wound had much better be done in the dressing stations.

"The two essentials most vividly impressed on my mind were the relief of pain and thirst. Luckily we had plenty of water in the water-bottles to give a sip to those who most needed it. A 2-oz. bottle of morphia solution and a good hypodermic syringe are invaluable.

"Later the bearer company, under Captain Beach, came up with some wagons and began to clear the field near Grenadier Hill. As I was not required he asked me to get on my pony and see if the Coldstream Guards had many wounded, and to tell the medical officers with those battalions that wagons were on their way to remove their wounded. As soon as I had done this, I went back to the bivouac, and then on to the field hospital at Thomas's Farm, where I worked for some hours among the cases there."

When the 1st Battalion Coldstream Guards was extended to attack the Razor Back, a staff officer rode up to Captain Hooper, R.A.M.C., and requested him to send all the regimental bearers to Grenadier Hill. They were sent, and Captain Hooper, with the regimental medical corporal, alone dealt with the casualties in the battalion (nine killed and nineteen wounded), which were later taken over by the Guards Brigade Bearer Company. Three wounded Boers were found near Kaffir's Kop Farm, one a compound fracture of the thigh; two had been dressed by their own side.

Colonel Gough's force, consisting of two squadrons 9th Lancers and some mounted infantry, moved out at 4 a.m., crossed the railway line north of Belmont Station, and advanced at a gallop in an easterly direction. They were soon checked by a strong party of Boers and suffered three or four casualties. These were carried by the regimental bearers to cover under the railway embankment, and Captain J. V. Forrest, R.A.M.C., in medical charge 9th Lancers, sent a mounted orderly to the station for an ambulance wagon. Moving north this force overtook two Boer ox ambulance wagons with two doctors¹ and some sick attendants, but no patients. They were

¹ One of these doctors was an Edinburgh graduate who had served in the Volunteers and was a contemporary of Captain Forrest.

brought back to Belmont but allowed to go soon afterwards. Some wounded mounted infantry were brought in on these Boer ambulance wagons.

The Assistant Surgeon of the 9th Lancers accompanied the mounted troops which went round to the south of the position. There were no casualties.

Medical Units.—All the medical units received verbal instructions¹ from the P.M.O. on the evening of the 22nd as to the general dispositions to be adopted during the fight. The bearer companies were to follow their brigades. The Guards and 9th Brigade Field Hospitals were to open at Thomas's Farm, and the Divisional Field Hospital to stand fast in reserve in the vicinity of the farm.

The 9th Brigade Field Hospital bivouacked at the farm on the night of the 22nd, but the Guards Field Hospital, unable to reach it that evening, owing to darkness and the congested state of the tracks leading to it, did not arrive there until early morning on the 23rd. Both units made all preparations to receive wounded, while the troops were moving out to the attack.

Bearer Companies.—The Guards Brigade Bearer Company followed the brigade to the junction of the road between Thomas's Farm and the Ganger's Hut, and there halted. Directly firing began the whole unit moved to the railway line. The ambulance wagons were unable to cross until a party from the railway construction train came up and filled in some ditches on each side of the line, but the stretcher squads, under Captain Beach and Lieutenant Hodgson, followed the troops. A dressing station was opened at the Ganger's Hut and a collecting station established near the southern point of Grenadier Hill. A good many wounded walked back to the dressing station. The ambulance wagons were at first used between the collecting station, and other positions on the field, and the dressing station. When about thirty wounded were collected at the latter, half of the ambulance wagons were used for conveying them to the field hospitals. Cases which were satisfactorily dressed and did not require further attention at the dressing station were sent straight on to Thomas's Farm.

The 9th Brigade Bearer Company moved off behind the rear battalion of the brigade and halted on the road leading from the farm to the railway station. When Grenadier Hill was captured the enemy were still holding on to some points on the left of their

¹ On the 22nd the Brigade Major 9th Brigade by means of a rough sketch explained to the officers of the bearer company of that brigade the general plan of attack.

position, which made any movement of medical units on that flank unsafe. Colonel Townsend, therefore, ordered (by mounted officer) two ambulance wagons and two stretcher squads to move on to the field via the Ganger's Hut. This party set up a collecting station west of Gun Hill. Shortly afterwards, when the road was safe, the remainder of the bearer company moved up to Belmont railway station, and there opened a dressing station which received wounded from that collecting station and direct from the field. At first wounded were sent from the railway station to the field hospitals at the farm, but, about 8 a.m., when it was evident that there was no danger of a counter attack from the north, the Divisional Field Hospital was ordered to open at the station and take over the wounded already there and those coming in from the field. There was a track fit for wagons from the station to Gun Hill.

Field Hospitals.—At the station, the goods shed, which held about 20 cases on stretchers, and the verandah on the platform were used to accommodate wounded.

At the farm several small rooms were available, and also an adjoining school-house; some of the rooms were used for wounded officers, and one was arranged as an operating room. The first casualties to reach the farm were slightly wounded men, who walked back from the fight and arrived there about 7 a.m. Subsequently, ambulance wagons arrived in rapid succession from the Ganger's Hut and from the railway station. All the field hospital store wagons were off-loaded and sent out to assist in carrying wounded. By 1 p.m. 253 wounded were in the field hospitals, 172 at the farm, and 81 at the station (59 British and 22 Boers). Amongst these there were 14 officers, including Major-General R. S. R. Fetherstonhaugh, commanding the 9th Brigade, at the farm, and one officer and Mr. E. F. Knight, the war correspondent of the *Morning Post*, at the station. Fifteen slightly wounded remained with their units and were not admitted to hospital. The officers of the bearer companies and some of the medical officers of regimental units assisted at the field hospitals which were at work throughout the afternoon and evening. The number of cases of fracture of the thigh was larger than in later actions. At the request of Surgeon-Lieutenant-Colonel Magill the Royal Engineers made a dozen long wooden thigh splints for the Guards Brigade Field Hospital. These splints were specially made thicker and broader than the usual thigh splint, and some of them not used at the time, proved very useful in subsequent engagements.

Several major operations were necessary, including two amputations of the thigh and one through the shoulder-joint.

Medical supplies to replace dressings expended during the day were wired for.

Geneva Convention.—Soon after the troops withdrew from the kopjes, a Boer wearing a Red Cross badge on his arm rode into the dressing station at Belmont Station. He said he had come to inquire how his wounded were getting on, and proceeded to go round the twenty odd cases (Boers) there. A signaller at the station, thinking the visitor was rather casual, signalled the incident to his chief. A reply came back directing the Boer to be brought to divisional headquarters. He was there interrogated and, although at first suspected of being a spy, he was eventually allowed to go. The circumstances are worth noting because the officer in charge of a dressing station or hospital should detain an unknown visitor from the enemy and communicate with the intelligence or other officer competent to deal with the matter.

November 24.—The wounded awaiting evacuation numbered 212 British and 20 Boers, total 232. Of the 253 admitted to the field hospitals 9 were discharged to duty, and 12, including 2 Boers, died.

No. 2 Ambulance Train (Captain C. C. Fleming, R.A.M.C.), which had been wired for and despatched from Cape Town at 2 p.m. on the 22nd, arrived at Belmont at 5.30 a.m. It was loaded during the morning with 5 officers and 107 others—British and Boers—all slight or less severe cases, and some sick. About 1 p.m. it started for Orange River. A wire was despatched notifying its departure and asking for stretcher-bearers to be in readiness to unload it. There was little unnecessary delay at Orange River and the train returned at once to Belmont, where it arrived at 8 p.m. The remaining wounded, nearly all serious cases, were waiting at the station laid out in rows on the platform and in the goods shed. The work of loading was slow and difficult owing to the darkness and the number of bad cases, such as fracture of the thigh, &c.; however, the train got away successfully soon after 10 p.m.—‘line clear’ for Wynberg. It took 14 officers and 106 others, total 120. There was only lying-down accommodation for 96, so there was serious overcrowding up to Orange River, where 18 of the least serious cases were dropped, and the train proceeded to Cape Town with 102 dangerously and severely wounded. One officer and 2 men (wounds of head, abdomen, and spine) died on board next day.

The Division, with the exception of the Scots Guards, two companies Royal Munster Fusiliers, the naval guns, and the

medical units, had moved on at 3 p.m. to Swinkpan, northeast of Belmont, and about 8 miles from Thomas's Farm.

Two ambulance (buck) wagons and two stretcher squads of the 9th Brigade Bearer Company, under Lieutenant Fell, R.A.M.C., accompanied the division, and the 9th Brigade Field Hospital, after handing over its wounded to the Divisional Field Hospital at Belmont Station for entraining, followed the division and reached Swinkpan two hours after dusk.

When the last of the wounded were disposed of, the Guards Brigade Field Hospital and Bearer Company bivouacked at the station with the Divisional Field Hospital and 9th Brigade Bearer Company, and Colonel Townsend decided to march with these units at 2 a.m., when the moon rose, to catch up the division. An earlier start he considered inadvisable as the night was very dark, there was no guide, and the mules, working all day carrying wounded to the station, were not outspanned until 9 p.m. and were already done up. It was after 11 p.m. when the personnel got to rest in their bivouacs after a hard day's work.

The enemy were located during the march of the division to Swinkpan, and about 9 p.m. the Chief Staff Officer told Lieutenant Fell that there would be a fight the next day, and gave him an order directing the officer commanding the 2nd Battalion Northamptonshire Regiment to provide blankets and men to act as stretcher-bearers in case the bearer companies did not arrive in time. Lord Methuen sent a note to Colonel Townsend, by a mounted messenger, asking him to send on blankets and stretchers as soon as possible. Colonel Townsend received this note about midnight. He detained the messenger, and at once issued orders for all the medical units to march from Belmont at 1 a.m.

At this stage of the campaign inspanning at night was a tedious proceeding, and on this occasion it took longer than was anticipated; however, the column was on the move at 1.30 a.m. It consisted of 17 officers, 182 other ranks, 40 vehicles, 20 horses, 310 mules, and a number of native drivers. The N.C.O.s and men were carried in the ambulance wagons. The night was very dark, the road was bad, and the guide, as usual, but slightly acquainted with it, led the convoy on to a wrong track with the result that an ambulance wagon full of men was upset when crossing some rough ground to regain the road.

The bivouac of the division was reached about 4 a.m. The advanced guard had already moved off. The water supply at Swinkpan consisted of two small dams, which contained more

mud than water, and an attempt to water the mules met with but little success, as what water there was many of the animals refused to drink. The result of this, and the difficulty of obtaining water for the water-carts, will be seen later on.

ACTION AT GRASPAN, NOVEMBER 25, 1899.

The Lieutenant-General was greatly pleased at the prompt return of the medical units. He explained the situation and plan of action to the P.M.O. The Naval Brigade, supported by the 9th Brigade, was to attack the south-eastern end of the enemy's position on the Graspán-Rooilaagte kopjes. The Guards Brigade with all the baggage was to move towards the railway line at Enslin.

The advanced guard—Naval Brigade—moved off from Swinkpan at 3.30 a.m., followed by the 9th Brigade, with which went Lieutenant Fell's detachment of the bearer company and the 9th Brigade Field Hospital. The Guards Brigade Bearer Company and Field Hospital rejoined their brigade on arrival at Swinkpan, and the Divisional Field Hospital was ordered to follow the Guards Brigade to Enslin. The 9th Brigade Bearer Company moved on at once to catch up its brigade, which it did shortly before the assault on the kopjes.

The attacking troops were in touch with the enemy about 7 a.m. They had then been marching over three hours across rough ground, there was a scorching sun and the men were parched with thirst. The main attack was carried out and the position captured by the Naval Brigade, the Loyal North Lancashire Regiment and some companies of the Yorkshire Light Infantry. They were exposed to a very hot fire and cross fire from within 700 yards, and the frontal fire continued until 25 yards from the crest of the kopje. The Naval Brigade, which consisted of 10 officers, 190 Royal Marines, and 55 Bluejackets, lost 3 officers killed and 3 wounded (one mortally), 7 men killed and 86 wounded (four mortally). Nearly all the petty officers and N.C.O.s were either killed or wounded. Some who were wounded during the approach were struck again where they fell; some were able to crawl towards an ant-heap or tuft of grass; others when wounded struggled on. Lieutenant Jones, Royal Marine Light Infantry, hit in the thigh, continued to lead his men on to the top of the kopje. The Yorkshire Light Infantry lost 6 killed and 39 wounded, and the Loyal North Lancashire Regiment one killed and 20 wounded. The total casualties were:—

	Killed	Wounded	Total
Officers	3	6	9
Other ranks .. .	14	162	176
	<u>17</u>	<u>168</u>	<u>185</u>

Of the above wounded, 5 were not admitted to hospital, 6 died in the field hospital, and 1 returned to duty in the field. The strength of the troops engaged was about 4,594.

The stretcher squads of the 9th Brigade Bearer Company, under Captain C. W. R. Healy, followed the attacking troops and established a collecting station 1,000 yards east of the point attacked by the Naval Brigade. The rest of that unit opened a dressing station one mile south of the collecting station. When the attack developed the 9th Brigade Field Hospital received orders from Colonel Townsend to proceed to Graspan Siding, and there get ready to receive the wounded and make preparations for entraining them so soon as an opportunity occurred. The wounded unable to walk were brought to the dressing station and sent on in ambulance wagons and off-loaded buck wagons to the field hospital throughout the day. The ambulance mules, after the previous day's work, the night march, the journey on to the field, the work in collecting the wounded and the want of water, were done to a turn, and by the afternoon many of them could hardly keep on their feet.

Consequently, when darkness came on there were still forty-four bad cases at the dressing station which could not be sent to the field hospital. These patients were made as comfortable as possible on stretchers and under cover of the operating tent. Owing to miscarriage of a message and the state of the mules, there was no water and very few rations available at the dressing station. Major Hanley, who was in charge of it, said that for many hours, not having a drop of clean water to dissolve the morphia tabloids for hypodermic injections, he had to place the tabloids under the men's tongues. All he had to supplement the bovril, milk and brandy were three tins of lunch biscuits, which he distributed among the wounded who were crying out for food during the night.

The enemy's guns were brought into action against the armoured train on the railway, and they also fired some shells at the Guards Brigade. This brigade was diverted towards the attack at one period of the day, but did not come into action. A party from the bearer company under Captain Beach helped at the collecting station. The enemy retreated after the capture of their main position, and the troops went into bivouac just north of the pan at Roilaagte and to the west of Enslin Station—the

Divisional Field Hospital and Guards Brigade Bearer Company at the former, the Guards Brigade Field Hospital at the latter. There was a windlass and bucket well at Enslin with a very limited supply of good water.

A Boer hospital, established at a small house south of the high kopje south-east of Enslin Station, was captured. In it were thirty wounded Boers and a man of the Loyal North Lancashire Regiment who was wounded on the 23rd. There were also several Boer medical officers, some hospital attendants, a wagon filled with medical materials and a limber containing surgical and veterinary instruments.

The following accounts of the Regimental Medical Service during the fight and the work of the Field Hospital at Graspan Siding are interesting:—

Fleet-Surgeon Porter and the stoker bearers followed close in rear of the firing line and did their work under the hottest fire. From the top of the kopje (i.e., the point captured by the Naval Brigade) we could see the surgeons and their orderlies already moving amongst the wounded. Already the collecting place for wounded had been formed, and backwards and forwards toiled the stretcher-men in the terrible heat with their human burdens. Coming down, the men lent a hand in getting their messmates to the ambulance. Each man's cry was for water. One man mortally wounded and with one arm smashed, unable to pull out the stopper, had bitten off the metal neck of his water-bottle in the agony of thirst and pain.¹

Lieutenant Walter Jagger, R.A.M.C., Loyal North Lancashire Regiment, described his experiences thus:—

“Having been detained behind when the companies were deploying I had to gallop along the line to get to the battalion. The firing at the moment became exceedingly furious, and my pony was shot. The stretcher-bearers were widely separated, and we had to leave the stretchers, and to apply the first field dressing as hard as we could go. There was absolutely no cover, and the stretcher-bearers were warned to exercise great caution when moving about to render first aid. We had to dress the casualties while lying down ourselves—the fire was very heavy. Immediately we moved we drew fire, and it was impossible for more than one man to go to their aid at a time; consequently we got scattered amongst the K.O.Y.L.I., Northumberland Fusiliers and Loyal North Lan-

¹ “The Naval Brigades in the South African War, 1899-1900,” by Lieutenant W. T. C. Jones, Royal Marines.

cashires, dressing all we could. While splinting and dressing a compound fracture of thigh, I was hit through the haversack. An officer shot in the lung and thigh was unaware of the wound in the lung. I dressed many casualties on the kopje, then returned to help in loading the ambulance wagons of 9th Brigade Bearer Company until all were cleared. There were a few left when an officer with some mounted troops returned from the right flank. He warned us we were not safe as the enemy were near, and offered me an escort. This, of course, I refused (a practical point of great importance), as I knew I was safer without one. He had hardly gone before the enemy fired on us. Later I reported the incident to Lord Methuen. We were fired on from a Cape cart with a Red Cross flag which was going East from Rooilaagte. The Adjutant Loyal North Lancashire had lent me his pony to come in on. I started the last ambulance wagon and mounted to go, when the pony was shot through the shoulder just in front of my knee; I got off and led him back to bivouac dead lame."

Captain J. V. Forrest, R.A.M.C., gave the following narrative:—

"One squadron 9th Lancers and 2 companies M.I., went off north-west and I accompanied this party. My assistant surgeon went with the other party to the north-east. By a circuitous route we got on to the north side of the Boer position and took up a post in some hills about 3 miles south-west of Honey Nest Kloof Station overlooking the vast expanse of veldt which runs almost without a break down to the Modder River. From here we saw the Boer wagons inspan and trek off. We got into helio communication with the other squadrons which had gone north-east. Later, when a serious attempt was being made to cut off our line of retreat, we retired on our line of advance towards a small post formed earlier in the day to provide for this very contingency.

"A party of sharpshooters who had crawled down under cover of the railway embankment accelerated matters, and I soon found myself helping a man with a fractured thigh off his horse. To avoid drawing fire, I sent my pony along with the stretcher-bearers and the squadron, and told the stretcher-bearers to come back when they could. Having extracted the Martini-Henry bullet from the inner side of the man's thigh, I fixed him up with the means at my disposal, using his lance as a long splint (the carbine being on the saddle and the horse gone). On looking up, I found that I was no longer alone, but in the direct line of retirement of a Boer commando. The advanced party was preparing to do a little snap-shooting, when an older warrior shouted out, 'Nit

schiessen' and in a few minutes I was surrounded by a large crowd examining a 'khaki' at close quarters for the first time. As I explained who I was, &c., to the field-cornet, I found the younger bloods were rapidly helping themselves to my spurs and leggings. They were however dropped like hot iron on my appealing to the field-cornet.

Their curiosity being satisfied, the retirement was continued in driblets. They told me that they had shot somebody else, and pointed over the vast plain, and said, "Somewhere about there." Leaving my friend lying, I picked up the monkey-box, and proceeded to search. Eventually I found my stretcher-bearers coming back to look for me. (They still carried their carbines and had had a little scrap on their own on the way.) We opened out to look for the other case, but had to give it up to find the first man again before it got dark. Some kind Boer, knowing how easy it is to miss a certain point on the vast veldt, had taken the lance off the man's thigh, and stuck it in the ground end up as a landmark; and had it not been for that, I should probably have lost him, too, for I noticed the lance well away on the flank of the direction in which we were moving. I had the thigh case carried to the railway line, and sent my orderly along the line into Graspan with a note to the nearest bearer company for an ambulance wagon. This man was not brought in till the following morning. The casualties with the other party were brought in by ambulance wagon sent on verbal requisition. We failed to find the other man next day."¹

Field Hospital at Graspan Siding.—The 9th Brigade Field Hospital arrived at Graspan about 9 a.m., and opened close alongside the railway siding: Operation tent pitched and equipped; staff told off; kitchen got ready; latrines and refuse trenches dug; water-carts refilled from water-tanks, brought up the railway line on trucks. There was no water obtainable locally. The field hospital kitchen was improvised with two iron rails from the railway siding, and answered well, as coal was obtainable at the siding and from the locomotives; hot water was now and then obtainable from a locomotive.

At first only a few, but eventually all, hospital tents were pitched and equipped. There was a certain amount of overcrowding as only half scale of tents was carried.

The wounded were brought in by the bearer company ambulance

¹ The body was found by a patrol about three months later with wounds in the head and abdomen.

wagons and by off-loaded buck wagons of the field hospital which were sent out to the collecting station when it was seen that the ambulance wagons were not sufficient and that their mules were done up. Some empty supply wagons were also sent out by the A.S.C.

By nightfall, when darkness and the state of the mules prevented any further transport of wounded, there were 129 wounded British in the hospital and a few Boers.

There was no difficulty about rations for the wounded, as the field hospital carried two days' supply for its own personnel, and the supply column was within reach.

The disposal of the dead—brought in and died in hospital—was arranged for by the quartermaster (Captain J. W. H. Beach), who had graves dug by a working party, sent on application by one of the battalions. The field hospital picks and shovels were used. Boers were buried apart from British. The names of the dead and the position of the graves were noted. Captain Beach obtained a brief written form of burial service from a passing chaplain.

Sunday, November 26.—The division remained in bivouac at Enslin.

At 7 a.m. wagons sent to assist in removing the wounded still out on the field arrived at the dressing station. The last of the wounded were clear of the site by 9 a.m., and the 9th Brigade Bearer Company moved to Graspan Siding, where it remained until the afternoon, when, after assisting to load a train, it rejoined its brigade at Enslin.

A train composed of some specially arranged trucks, some open trucks and a few passenger coaches was brought to Graspan Siding early in the afternoon. About 10 sick and 30 wounded Boers found at Rooilaagte were loaded on trucks at Enslin and sent down to join the train, which was eventually loaded with a total of 107 patients—97 wounded, 62 British, 35 Boers—and 10 sick. The wounded were provided with blankets and rations and all water-bottles were filled. Captain J. C. Jameson and two privates, 9th Brigade Field Hospital, were placed in charge of the train, which started for Orange River at 8 p.m. Camp kettles, milk and beef-tea already prepared, a field medical companion and some dressings were put on board.

Owing to the composition of the train, Captain Jameson noted that it would be quite impossible for him to be of any assistance, except to those in his own carriage, without stopping the train.

Monday, November 27th.—At 4 a.m. the division moved from Enslin and marched about twelve miles to Witkoplaagte, seven

miles south of the Modder River railway bridge. The Cavalry and Mounted Infantry reconnoitred in the direction of the Riet and Modder Rivers. Two men of Rimington's guides were wounded.

No. 3 Ambulance Train, Major M. W. Russell, R.A.M.C., was dispatched from Cape Town at 3 p.m. on November 25, and arrived at Graspan Siding about noon. This train was loaded up with the remaining wounded, five officers and eighty-nine others, and started for Cape Town at 3 p.m., but was detained on a Siding South of Graspan for two and a-half hours, while trains conveying the 1st Battalion Argyll and Sutherland Highlanders from Orange River to reinforce the division at Witkoplaagte were moving north. Two men died on board the ambulance train between Graspan and Orange River. The ambulance train brought up some medical supplies that had been telegraphed for after the Battle of Belmont. It also brought back from Orange River Captain Jameson and the men sent down in charge of wounded the previous day.

The 9th Brigade Field Hospital moved off from Graspan at 3.30 p.m., and went into bivouac for the night at Enslin Station, under cover of a post that had been established there when the division marched out.

BATTLE OF MODDER RIVER.

THE Argyll and Sutherland Highlanders detrained at Honey Nest Kloof, and joined the Division in bivouac at Witkoplaagte after dark on the evening of November 27. On the morning of the 28th the mounted troops and Royal Field Artillery moved from Witkoplaagte at 4 a.m. The other troops began to move about 4.30 a.m. The general line of advance was in the direction of Modder River railway bridge.

About 5.30 a.m. the cavalry were checked by rifle fire from several points on the banks of the Riet River.

About 7 a.m. a party of the enemy with a gun and a pom-pom was seen about half a mile east of the centre of the north and south reach of the Riet River. This gun was brought into action, but under fire of the 18th Battery R.F.A. retired in an easterly direction. The composition and movement of this party of the enemy coincided with certain portions of the conflicting information the General had received, and tended to confirm his belief that the right bank of the river was occupied—if occupied at all—by only a weak rearguard.

Shortly after 7 a.m. the infantry began to arrive on the battle-

field. The march of the Guards Brigade was directed towards, approximately, the centre of the space between the railway bridge and the point where the Riet River turns sharply to the west. The 9th Brigade was on the left of the Guards Brigade and advancing more or less along the railway towards the bridge.

The Guards Brigade began to deploy when near the road running west from Bosman's Drift, about 2,200 yards from the river bed. Very soon afterwards, at 8.10 a.m., the enemy suddenly and quite unexpectedly opened very rapid rifle fire from their completely concealed positions all along the left bank of the Riet River, supported by gun and pom-pom fire from the right bank.

Two companies of the Scots Guards with a machine-gun succeeded in reaching the bank of the Riet River near the reservoir. They suffered considerably, and the men of the Maxim-gun detachment were all killed or wounded. Four companies of the same battalion were sent to assist this party, and later, the 1st Coldstream Guards moved to the right in support of the Scots Guards. From this force some officers and men crossed the river, by wading chin deep, but they were compelled to recross to the left bank as the river was quite impassable for troops in that neighbourhood.

The Grenadier Guards, 2nd Coldstream Guards, and left companies of Scots Guards gradually advanced to within 1,000 yards of the Boer trenches on the south bank. The 1st Coldstream Guards and the rest of Scots Guards, facing east, held the river from near the bend up stream to the vicinity of the reservoir. The brigade remained in that position all day.

The 9th Brigade crossed the railway line and gradually worked up under heavy fire to points varying from 1,000 to 600 yards from the enemy's position west of the bridge. The hut and farmhouse 300 yards south of the left bank of the river, opposite Rosmead village, which were strongly held by the enemy, were captured by two companies of the Yorkshire Light Infantry about noon. At the same time the ground on the left of the hut was gained by the Loyal North Lancashire Regiment.

Later on, parties of these and other battalions, led by Major-General R. Pole-Carew commanding the 9th Brigade, crossed the river by the dam at Rosmead. They were reinforced by 300 sappers¹ under Major G. F. Levenson in command of the 11th Field

¹ Drawn from the 8th, 11th, and 31st Companies, R.E., which had been kept in rear ready to work on the railway.

Company, R.E., and subsequently, during the afternoon, General Pole-Carew advanced with a force, made up of men from various corps, along the right bank as far as Frazer's Farm. This force had to fall back on Rosmead village owing to want of support.

About 4 p.m. Lord Methuen was wounded when in the area occupied by the 9th Brigade.

When the fight began the 18th and 75th Batteries R.F.A. came into action close to the railway on its eastern side about 2,500 yards from the river. Shortly afterwards they moved up to 1,700 yards, and later on the 75th Battery went forward under heavy fire to the line held by the Guards Brigade, and unlimbered within 1,200 yards of the trenches. The 18th Battery subsequently came up to a position about 200 yards to the left rear of the 75th, and opened fire at 1,400 yards. About 4 p.m. the 75th Battery fell back a few hundred yards, owing to casualties and want of ammunition.

At 10.15 a.m. two guns of the 18th Battery had been sent to support the left flank of the 9th Brigade, and came into action south of Rosmead.

Shortly after 2 p.m. the 62nd Battery¹ R.F.A. arrived and opened fire 1,200 yards from the river on the west of the railway. The 12-pounder 12-cwt. naval guns which had been brought up from Enslin by rail came into action west of the railway, about 3,000 yards from the bridge, and later moved back to about 4,800 yards.

During the afternoon the enemy's fire slackened, and at dusk the situation was as follows :—

The Guards Brigade concentrating near the reservoir; some 1,200 men of the 9th Brigade in and about Rosmead, and the remainder of the brigade under orders to cross the river by the drift at that place; parties of the enemy were seen moving in the direction of Jacobsdaal.

Later in the evening the enemy completely evacuated their positions.

The 1st Battalion Highland Light Infantry arrived on the battlefield, by rail, after dark.

The total casualties were :—

¹ This Battery had marched direct from Orange River, a distance of 52 miles, in twenty-eight hours.

	Killed	Wounded	Total
Officers	3	20	23
Other ranks	66	394	460
	<u>69</u>	<u>414</u>	<u>483</u>

Of the above, five wounded were not admitted to hospital; one officer and eleven other ranks wounded died in the field hospitals, and two officers and eighteen other ranks returned to duty in the field. The strength of the troops engaged was about 10,191.

The casualties were almost equal on each side of the railway line. The Argyll and Sutherland Highlanders suffered the heaviest loss, 15 killed and 101 wounded; the 2nd Coldstream Guards 10 and 59; the Yorkshire Light Infantry 9 and 52; 3rd Grenadier Guards 10 and 50; 1st Scots Guards 9 and 41; Northumberland Fusiliers 11 and 36; R.F.A. 3 and 28; Loyal North Lancashire 3 and 16; 1st Coldstream Guards 0 and 21; the remaining wounded were R.E. and R.A.M.C. 3 each; Remington's Guides 2; 9th Lancers and A.O.C. 1 each.

Regimental Medical Service.

Taking the units from east to west in their position on the map of the battlefield the narratives of the regimental medical officers are as follows:—

9th Lancers—Captain J. V. Forrest: “The cavalry on the right flank were not heavily engaged. They drew a lot of shell-fire but without much damage to the men. Several horses were killed or wounded.”

Scots Guards—Captain S. Guise Moores, R.A.M.C.: “We did not expect to find the enemy entrenched on the Modder and Reit Rivers. The battalion had not long deployed when the Boer rifles belched forth a stream of lead. The rear company had reached the line of the reservoir situated on the left bank of the last-named river when this happened. At the same time the ‘pom-pom’ opened fire, the first shells from which put out of action the maxim gun and its detachment—except the black driver.

“A regimental collecting station was at once formed on the south or protected side of the reservoir embankment, and wounded soon began to arrive there.

“The stretcher-bearers were, at the onset, with their companies; the stretchers had been issued to them that morning before marching. Owing to the flat nature of the field of battle and the absence of cover, except an occasional ant-heap or the low scrub, the stretcher-bearers of the Guards Bearer Company were unable to

render any help to the battalion in the day's proceedings. Any attempts of the stretcher squads or ambulance wagons to move forward brought on them the attention of the enemy, and they had to desist.

"The reservoir collecting station became, as the day advanced, a dressing station for the brigade, and wounded were gradually brought in by the regimental stretcher-bearers who were with their companies. They were mostly brought in by hand. Amongst them were Captain Elwes and Lieutenant Hill, the former with a penetrating shell wound of the skull, and the latter with a pom-pom wound through the biceps near the right elbow. The hæmorrhage from this wound was so great as to require continuous digital compression of the brachial artery for some hours.¹

"About 3 p.m. the Boers got round our right flank and fired into the wounded, then laid out in rows along the base and sides of the embankment. Captain H. C. Lowther, Scots Guards, happened to be near a Maxim which was situated at this spot, and worked it so efficiently as to eventually drive the enemy off, but not before some of the wounded had been hit a second time.

"When the flank attack commenced, the wounded were gradually conveyed into the basin of the reservoir. The enemy, attracted by the energetic movements on our part, directed shell fire at the reservoir. This, though disconcerting, happily did not do much damage, and it was only considered necessary to move a few cases into the keeper's hut, situated on the left bank of the Riet River, and only a few yards from the reservoir.

"By this time the stock of dressings in the surgical haversack and medical companion had given out, and resort was had to the panniers.

"At nightfall the keeper's house was full of wounded, and wounded were also laid out all round the building. "The panniers had been placed in the centre of the largest room, and patients requiring it were re-dressed, Major T. B. Beach, of the Guards Brigade Bearer Company, giving most timely and valuable aid. The spirit stove, 'spirits,' and kettles were produced from the comfort panniers, and during the whole night bovril and cocoa were made and given to the patients.

"This dressing station was not more than a mile from the Boer trenches, and yet it proved to be on the whole a haven of compara-

¹ Captain S. G. Moores was wounded while attending to this officer, but was not incapacitated for duty.

tive, if not actual, safety, in an area in which every movement from the prone position brought an accession of rifle fire.

"Chief points of interest were :—

"(1) The distribution of the regimental stretcher-bearers, who deployed with their companies, and were fortunately the right men in a tight place.

"(2) The regimental collecting and the brigade dressing station being in one, and very close up to the firing line.

"(3) The almost insignificant part which the bearer company took in the removal of the wounded from the collecting station, till the battle was over, owing to the topographical conditions and its close proximity to the enemy.

"(4) The great use of the 'panniers,' and more especially the 'comfort panniers,' in providing dressings and stimulants for the wounded under unexpected and difficult circumstances."

1st Coldstream Guards—Captain Hooper with the regimental stretcher-bearers followed the battalion along the bank of the Riet River, and later on helped at the reservoir, where the regimental bearers brought the wounded whenever opportunities occurred.

3rd Grenadier Guards—Captain Profeit: "When we got well in sight of Modder River, and were under the impression that the Boers had gone, we were suddenly told that the river was strongly held and that the brigade was to deploy for the attack. The stretcher-bearers seized their stretchers and followed in rear of their companies. I had my corporal and orderly with me carrying the companion and haversack. About 1,500 yards from the river, the fire was very hot, my orderly had a bullet through his helmet which rather astonished him, and the stretcher-bearers extended so as to take advantage of any slight cover that could be found. About half a dozen wounded were attended to there, those who could walk were sent back to the field hospital, and those who could not took cover under the nearest friendly ant-heap. The battalion came to a standstill, and lay within about 1,000 yards of the Riet for the rest of the day. Very few wounded were passed back, as no sooner did a stretcher squad, or even a man, move than a hail of bullets was the result. Some, however, filtered away to the dressing station at the reservoir."

Royal Field Artillery: A number of wounded collected about an overturned wagon in the vicinity of the guns in rear of the 2nd Coldstream Guards. They were dressed by Major H. L. Battersby, R.A.M.C. Several less severely wounded were carried back on empty ammunition wagons.

Northumberland Fusiliers—Captain D. D. Shanahan: "The fight was over a level plain. There was no cover with the exception of an occasional ant-heap. Touch with the stretcher squads was lost almost at once. Almost immediately I lost my orderly, who was severely wounded, and then had to carry the field medical companion and water-bottle myself. Later a man who was assisting me to dress a wounded man and bring him under cover was himself wounded, and the wounded man was hit a second time. The field was swept with bullets. I, like everybody else, was compelled to lie as close as possible behind any cover which could be found, and for the remainder of the day only attended to casualties in my immediate vicinity. The wounded had to remain where they were hit, and this was the safest and the best for them. In the part of the field where we were, to ask a M.O. or a stretcher squad to go to their assistance would mean a complete 'mop up' of the whole. The comrades of a wounded man, lying close to him, would not bless you, as it meant a concentrated fire on any spot where a man showed himself.

"It was not till late in the afternoon, when the fire got slack, that one could move with any degree of safety. It was only then that the stretcher squads could get to the wounded, and remove them to shelter, where they could be picked up later by the bearers of a bearer company. Fortunately we were able to collect our wounded before darkness came on, but it was a long time after dark before the last was transferred to the field hospital."

Argyll and Sutherland Highlanders — Captain J. E. Carter, R.A.M.C.: "We advanced in extended order on the west of the railway, forming the second line. Several men were wounded by shell fire at about 3,000 yards range; I got three of them under a culvert and attended to their wounds and then proceeded to join the attacking party about 1,000 yards in advance. All along the fire was very heavy. An absolute hail of bullets came along every few minutes, due to someone exposing himself in front. When this happened I lay flat and pushed on when the fire slackened. I did not see the regimental stretcher-bearers after the wounded were placed under the culvert, but the regimental medical corporal—Mennitt—and Private Carlyle, my orderly, kept close to me throughout. On the second ridge I dressed several wounded, but when anyone lifted his head for a moment he immediately attracted a storm of bullets. I was lying near the 5th Fusiliers on the right of the 91st. A Staff Officer rode along in front of our line attracting fire; when he came opposite us bullets came hailing

round. Later a man came along looking for a doctor. I went with him, running bent double, and found the man shot through the thigh. He got his wound when looking for a doctor for the above Staff Officer, who had been wounded. I saw another man fatally wounded, who had been in the line of fire directed at the Staff Officer. My wounded man told me where this Staff Officer was. I went on to search for him but heard that he had gone back. I realized the utter impossibility of removing wounded from the front while firing was going on, and I directed a wounded man to lie where he was in partial cover and not to expose himself in trying to get back. Towards the evening some water-carts were brought up; the men rushed for them, they could not be kept back, and thus attracted fire; in one party of eight, two were killed and five wounded and one of two Kaffirs. At dusk I went with wounded to the dressing station at the hut on the south bank of the river near Rosmead. The battalion bivouacked near the dam. Bully beef and biscuit were issued about 9 p.m. and later a ration of rum. The men had been without food since noon the day before, when they had their dinner at Orange River—a fast of some thirty-three hours, only broken by a canteen of tea given them by the K.O.Y.L.I. on their arrival at Witkoplaagte the previous evening.”

King's Own Yorkshire Light Infantry—Lieutenant G. B. Crisp, R.A.M.C.: “We were in the front line on the left of the advance, west of the railway. At first we did not have a very great number of casualties, thanks to a convenient slight ridge in the ground which we reached before the Boers opened fire, and then their artillery fire was all going over us. For a long time it was just a question of occasionally groping one's way along behind this ridge, attending to the few casualties as they occurred, making them comfortable as best one could and then lying still again. When word came along that the memorable hut near the river was to be assaulted I went along in the rush with the others. Lieutenant Fox, K.O.Y.L.I., who led the assault, was hit when close to the hut, shot through the arm at short range. His arm though badly shattered was subsequently saved. Near the hut we found Colonel Northcott,¹ just after he had been hit. There was no stretcher near, but I had my two orderlies with me and we carried him into the hut. Other wounded rapidly collected. For a long time after I first got there the hut was under a pretty hot fire, and after this

¹ D. A. A. G., 1st Division. Colonel Northcott died in the field hospital next day.

ceased there was one persistent sniper who went on at it. Finally, with my glasses I spotted him sitting up in a tree on our side of the river. I found three men who were marksmen and lent them my glasses in turn till they had all spotted him, and then I had the satisfaction of seeing them tumble him out of the tree.

"Towards nightfall two ambulance wagons arrived at the hut and took the two wounded officers and some of the seriously wounded to the field hospitals. The whole afternoon casualties were coming in on stretchers, gates, &c., and at night there were about seventy wounded in and around the hut. It had three rooms, very small and dark, with mud walls. An opening in the posterior wall in the direction of the river bank had been used as a 'bolt hole' by the enemy. The rooms were filled with wounded and the rest were laid out all round the outside.

"I had sent for my Scotch cart with the medical pannier, and it arrived soon after dark. The panniers were invaluable and enabled a great deal to be done for those wounded who remained out at the hut all night.

"To turn to the light side of this place of suffering: A man was sent down to the river for water just after dark. He returned in a great fright saying, 'Please, sir, I can't go near it, there's a crocodile there and he's lashing his tail.' It turned out to be a wounded Boer pony."

Loyal North Lancashire Regiment—Lieutenant W. Jagger:—
 "We were on the extreme left of the 9th Brigade, and had some casualties when the enemy opened fire. The difficulty of dressing them was extreme. There was no cover at all. The stretcher-bearers were no help during the trying time before we crossed the river. Good sound, sensible men should be chosen as stretcher-bearers. Though men are plucky with a rifle they sometimes lack determination when unarmed under fire. More attention should be paid to the training of regimental bearers in first-aid. After dressing my wounded I left them in charge of a stretcher-bearer who was ordered to hail the first ambulance he saw. I then crossed the river. After the check to our advance from Rosmead, I recrossed and found my wounded on the south bank had been collected by the bearer company. Some of them we took to the hut, where I spent the whole night with Crisp dressing and nursing wounded of various units.

"We caught some chickens in Rosmead, boiled them and made broth. We gave the meat to those who could eat it, and with bovril, milk and brandy from the panniers, we managed to feed all the wounded at the hut."

11th Company R.E., Lieutenant A. Chopping, R.A.M.C.: "I Crossed the river with the first troops over. Soon afterwards General Pole-Carew sent me back with a message to the O.C. Loyal North Lancashire Regiment. After delivering it I returned and found about fifteen wounded in a cattle kraal at Rosmead. Having dressed these I went on after the troops that had advanced towards Frazer's Farm. I found about twelve wounded up there. It was then getting dark; the cease-fire sounded¹ and the troops fell back on Rosmead, I stopped about twenty men; pulled down the doors of some cottages, and on them carried the wounded back to Rosmead, where they were put into a house which General Pole-Carew gave up for that purpose. About twenty-four wounded were collected at this house; all the bedding and female clothing found in it were utilized to cover them, as there were no service blankets and it was an intensely cold night. The dressings in the surgical haversack and field medical companion were sufficient for all requirements. There were no rations available, but all emergency rations were opened and given to the wounded. There was a plentiful supply of onions. A man who had shot a hare during the battle and was carrying it slung from his rifle was brought along with the stretcher party and his hare was made into soup for the wounded. Four unarmed wounded Boers reported themselves to me. I informed the General and subsequently sent them in next day with the other wounded."

Field Medical Units.—On the march from Witkoplaagte the medical units moved in two lines behind the brigades, bearer companies leading and the Divisional Field Hospital behind that of the Guards Brigade. When the battle began they all came more or less under shell fire and had to retreat. The positions of the dressing stations marked on the map, approximately indicate the relative directions of the march of the bearer companies at that time. The Guards Bearer Company, furthest from the railway, fell back a short distance to a depression, in front of the higher ground along which runs the road from Bosman's Drift, and there opened a dressing station. The 9th Brigade Company moved back to the point where a dressing station is shown near the Ganger's Hut. Its position was fixed by the shells fired at the ammunition column. Shells directed at the naval guns fell mostly in the space between those guns and the road in front of them.

¹ The only time the cease-fire was sounded in the 1st Division during the war.

This prevented the 9th Brigade Bearer Company making any attempt to establish a dressing station in the area immediately behind its brigade and also prevented ambulance wagons moving across the railway line until late in the afternoon. The dressing station of the Guards Bearer Company, although only just over 2,000 yards from the Boer trenches, was protected from rifle fire and, as there was no target for the enemy's guns in its vicinity, it was not disturbed by shells. Both dressing stations were soon at work. Wounded men walked back from the front from the very first and continued to do so all day.

Captain T. B. Beach, with some stretcher squads of the Guards Bearer Company, went forward towards the position occupied by the 2nd Coldstream Guards and the Grenadier Guards. They came under heavy fire and one of the enemy directed a whole clip of cartridges at a squad under Captain Beach's personal control; however, none of the party were hit. A few ambulance wagons went forward to the same part of the field and were subjected to severe pom-pom fire. At that period of the war the ambulance wagons did not carry distinguishing flags and had only a small red cross painted on the body of the wagon. It is quite likely, even if fire was deliberately aimed at them, that the enemy were unable to recognize the moving vehicles as being ambulance wagons.¹

Captain C. W. R. Healy, of the 9th Brigade Bearer Company, went forward with stretcher squads on the left, but the conditions there were even more unfavourable than on the right. In the afternoon Captain Beach and Lieutenant Hodgson were sent to the reservoir collecting station with five ambulance wagons. When half-way across the pom-poms fired at something south of the wagons, whereupon the Kaffir drivers lost control of themselves and the mules and the teams stampeded back to the dressing-station. It was then getting dark, and no further attempt was made to remove the wounded at the reservoir, but Captain Beach and Lieutenant Hodgson remained there all night.

After dark the Guards Bearer Company, carrying about twenty-

¹ These incidents excited a good deal of attention at the time, but most people will agree with the view expressed in *The Times* "History of the War," vol. ii. p. 361: "Like several of the earlier battles of the war, Modder River was followed by mutual charges of wanton firing upon ambulances and stretcher-bearers. The simple fact is that ambulances on both sides ventured into the fire-swept zone, and had to take the consequences. There is no reason for suggesting that the Boer leaders, any more than ourselves, intended to conduct the struggle otherwise than in the fairest spirit."

five wounded in the ambulance wagons, moved back to the site of the field hospitals; a wagon, with rations and cooking-pots, and a water-cart were sent to the reservoir.

When the action began Colonel Townsend ordered the Guards Brigade Field Hospital to move up to the vicinity of the Ganger's Hut, but not to open until the action developed. Its actual position, about 1,000 yards south of the Ganger's Hut, was determined by the most convenient place for entraining as far forward on the railway as it was safe to go without risk of being hit by an occasional extra long range shell. This unit worked as a dressing-station during the morning, and did not pitch tents and open as a hospital until the afternoon. The Divisional Field Hospital opened alongside that of the Guards Brigade.

At Klofontein Siding, about three miles south of the battlefield, there was a good camping site with facilities for entraining and the general conditions were favourable for a temporary concentration of wounded. Colonel Townsend, therefore, decided to place the Divisional Field Hospital at this point, and to send the wounded back to it by rail. The 9th Brigade Field Hospital when last heard of had not disposed of the wounded at Graspan Siding, and was not expected to be available during the battle. The movements of that unit and course of the above arrangements will be seen by the following record kept by Captain J. C. Jameson:—

"After entraining the wounded at Graspan on the afternoon of November 27, we moved to Enslin Station, and, at 4.30 a.m. on the morning of the 28th, we resumed our march to catch up the Division, the position of which was unknown.

"We outspanned about 7.30 a.m., and, moving on again, we marched to the 'sound of the guns,' and arrived on the battlefield at Modder River about 9 a.m., and halted¹ in rear of the naval guns. I was then sent to find the P.M.O., to whom I reported the arrival of the hospital.

"Orders had been given to the Divisional Field Hospital to retire to Klofontein, and open there.

"I was directed by Colonel Townsend to find the Commanding Officer of that unit, give him instructions to remain at Modder River, and then direct the 9th Brigade Field Hospital to return to Klofontein, and to say that arrangements would be made to transfer wounded to that place by train from Modder River.

"The 9th Brigade Field Hospital accordingly returned some

¹ About thirteen miles from Enslin.

three miles to Klofontein, and selected a spot to encamp near the railway, and within easy distance of water. The hospital was opened, and the usual preparations made to receive the wounded.

"As time passed and no wounded arrived, I was instructed to report to the P.M.O., and inquire about the arrival of the wounded.

"I returned to Modder River, and found that the train could not be moved, owing to a 'dead engine' from shortage of water.

"I reported the state of affairs to Major Harris in command of the 9th Brigade Field Hospital at Klofontein.

"As the wounded could not be taken to us, it was obvious that to be of any use we must go to the wounded; so, taking about half the men and the surgical wagon, the officers returned to the battle-field, and arrived there just at dark. There, dividing up into small parties, we did our best to assist the personnel of the Guards Bearer Company and of the Guards and Divisional Field Hospitals, and when all the wounded had been reported as having been dressed, we returned to Klofontein, and remained there until the following morning."

Wounded were arriving at the site of the field hospitals south of the Ganger's Hut all day. Some walked there, others were carried back from the field or the dressing-stations by stretcher-squads or ambulance wagons. They continued to come in for some time after dark. The dressing-station of the 9th Brigade Bearer Company received wounded, who made their way back at various times throughout the night. There was no general movement of ambulance wagons or stretcher parties after dark. A report reached the Guards Field Hospital about 10 p.m. that a number of Highlanders had not been brought in, and that they wanted help. Surgeon-Lieutenant-Colonel Magill, with some men and an ambulance wagon, under Captain Healey, went out and found them under a culvert near the position occupied by the troops during the day. The work of bringing them to the field hospital was difficult, as it was very dark and no lights were allowed.

Making a rough estimate of the position of the wounded at nightfall, it seems probable that there were about 200 in the two field hospitals, 30 in Rosmead village, 70 at the hut south of Rosmead, 60 at the reservoir, about 20 at the dressing station of the 9th Brigade Bearer Company, and the remainder with their units at various points on the field.

Lord Methuen was in the Guards Brigade Field Hospital, and Colonel Northcott in the Divisional Field Hospital.

November 29.—At dawn the troops that had not already done so

began to cross the river by the dam at Rosmead, and later on by the drift to the east of the railway bridge. The 9th Brigade Field Hospital, which was free and ready to move, was sent forward at an early hour from Klofontein; it followed the troops across the river and remained in readiness for any emergency should the enemy reappear. Four ambulance wagons and a party from the Guards Brigade Bearer Company were told off to stand fast on the south bank of the river until the ground in the vicinity of Modder River station was safely occupied. The further movements of the Division were at the time uncertain, and the immediate object of the P.M.O. was to clear the field units of wounded and set them free to follow the troops.

The 9th Brigade Bearer Company started at daylight to bring in the wounded from Rosmead and "the hut" to the field hospitals, and the Guards Brigade Bearer Company sent ambulance wagons and men to clear the wounded from the reservoir. The Rosmead cases were carried across the river at the dam by parties under the command of Lieutenant Fell, 9th Brigade Bearer Company. This was a very risky and trying procedure, and no doubt many of the wounded would have been much better left where they were and removed later to field hospitals at Modder River Station. But at the moment no one knew that the Division would halt, as it eventually did, for more than a week, and the method adopted for dealing with the seriously wounded was apparently the best open to the medical service in the situation as it existed.

Meanwhile arrangements were made to provide trains to carry the wounded from the field hospitals to Orange River. All the available medical personnel was occupied in preparing the wounded and loading them on the trains. The first train, which ran in two sections, started about 1 p.m. It was made up of trucks, some of which were open and some partly covered. It carried four officers and 335 other ranks, sick and wounded. In the open trucks shelters were made with blankets and rifles; all water-bottles were filled, and milk and beef-tea provided for the journey.

The transfer of the wounded from Rosmead and "the hut" to the site of the field hospitals was not completed until 3 p.m. Many of these were very serious cases which required careful handling. The admirable work done at the hut during the night by Lieutenants Crisp and Jagger greatly lessened the time that otherwise would have been taken in evacuating these cases. By daylight all of them had been splinted and dressed in such a way that practically no re-dressings were necessary before they were placed in the train.

The severe cases from the field hospitals were also kept back for the second train, which was not ready to start until after 4 p.m. This train was made up of covered trucks. It was loaded with thirteen officers and eighty-four other ranks. As practically all of these were very severely wounded they were kept on stretchers, and there was great difficulty in loading the stretchers until a saw was procured and suitable openings cut in the sides of the trucks. Owing to the late start extra blankets were provided for each man. Three patients died on this train before it reached Orange River about midnight. Particulars of the cases are not known, and it is not clear why they were entrained, as directions were given by the Principal Medical Officer that wounded unable to stand the journey were not to be sent. Two officers and three or four men whose condition was considered dangerous by those responsible for their care were retained by the field hospitals and subsequently brought across the river. With these exceptions the whole of the wounded were evacuated soon after 4 p.m., and by 5 p.m.—less than twenty-four hours after the cessation of fighting—the medical units were on their way to rejoin the troops on the northern bank of the river, having despatched during the course of the day 436 sick and wounded to Orange River. Of the total wounded, 371 were included in that number.¹

HALT AT MODDER RIVER, NOVEMBER 29 TO DECEMBER 9.

WHEN the Boers retreated on November 28 they left behind a field hospital, which was established at a house close to the drift north-east of Modder River railway station. It was in charge of Dr. A. E. W. Ramsbottom,² M.D., F.R.C.S.I., Principal Medical Officer of the Orange Free State Forces, who had with him four or five medical officers of various nationalities, and about thirty subordinate medical attendants. The house was surmounted by a Red Cross flag with the National flag of the Free State, and the conditions of the Geneva Convention were, apparently, observed in all respects. The only peculiarity in the situation was that the medical attendants seemed to be greatly in excess of the requirements of the half-dozen or so wounded left in their charge.

¹ See p. 27.

² Now the Hon. A. E. W. Ramsbottom, Administrator Orange Free State, Union of South Africa, and late Colonial Treasurer, Orange River Colony.

At that time very little was known about the Geneva Convention, and, contrary to the opinion expressed by Colonel Townsend, the whole of the captured personnel was sent under escort to Cape Town on November 30, and their vehicles were distributed to various units. On arrival at the Cape the authorities at Army Headquarters decided that they had been wrongly detained and sent them back to Modder River. They arrived there on December 9, and left for Jacobsdal the same day.

On settling down into camp at Modder River there was a serious shortage of stretchers, and many men were without first field dressings. Steps were at once taken to get back the stretchers which had been sent to Orange River with wounded after the actions on November 25 and 28, and telegrams were despatched to Cape Town asking for a reserve supply of stretchers and for first field dressings. These are points of importance, as there was always a loss of stretchers when seriously wounded were transferred to the line of communication in railway trucks, and as often as not the number of first field dressings used was much larger than the number of men actually wounded.

In consequence of some correspondence with the enemy on the subject of supposed deliberate firing at ambulance wagons, and as the only distinguishing mark on these vehicles was a small red cross painted on the fore part of the side of the body, large Red Cross flags were made and fixed on poles, which were erected on the wagons.

December 4.—Forty sick transferred to Orange River by ordinary train.

December 6.—Colonel Young, Commissioner for the Red Cross Society, arrived with sixty-eight cases, containing various articles for sick and wounded.

The 12th Lancers (Major T. J. O'Donnell, R.A.M.C.), "G" Battery R.H.A. (Lieutenant G. Delap, R.A.M.C.), and 2nd Battalion Black Watch (Lieutenant H. E. M. Douglas, R.A.M.C.) also arrived.

Two officers and seventy-six other ranks transferred sick to Orange River.

December 7.—The following arrived: 2nd Battalion Seaforth Highlanders (Major Moffit, R.A.M.C., who transferred charge to Lieutenant H. Ensor, R.A.M.C.); Field Hospital (Major W. H. Murray, R.A.M.C.) and Bearer Company (Lieutenant-Colonel E. B. Hartley, V.C., Cape Volunteer Medical Staff Corps) for Highland Brigade.

In the early morning a strong force of the enemy under Prinsloo,

with three guns, attacked two companies 2nd Battalion Northampton Regiment holding Enslin. They destroyed the railway and cut the telegraph wires, but withdrew on arrival of the 12th Lancers and 62nd Battery R.F.A. from Modder River, followed by an armoured train carrying Seaforth Highlanders and half the Cape M.S. Bearer Company. The Bearer Company returned to Modder River with the troops and brought back nine wounded from this fight.

December 9.—At dawn the Naval 4·7-inch gun, under escort of Cavalry and R.H.A., fired on the Boer position at Magersfontein from the Gangers' Hut, three miles north of Modder River. No casualties.

Seven officers—including two wounded on 28th at Modder River action—and sixty-nine other ranks transferred to Orange River.

The 65th Howitzer Battery R.F.A., and 1st Battalion Gordon Highlanders (Captain P. J. Probyn, R.A.M.C.) arrived.

Two officers of the German Army Medical Service, Stabsarzt Dr. Schmidt, Royal Prussian Garde-Füsilier Regiment and Stabsarzt Dr. Krummacher, Kaiser Wilhelm Academie, also arrived and joined the Guards Brigade Field Hospital.

BATTLE OF MAGERSFONTEIN.

When his last reinforcements were ready Lord Methuen decided to continue his advance to Kimberley and attack the Magersfontein Kopje. With this purpose he gave orders for the kopje to be bombarded from 4.50 p.m. to 6.40 p.m. on December 10 with all his guns, including the Naval 4·7 inch. At daybreak on December 11 the southern end of the kopje was to be assaulted by the Highland Brigade, supported by all the guns, their right and rear being protected by the Guards Brigade.¹ The camp at Modder River was to be garrisoned by the half battalion of the Loyal North Lancashire Regiment, details of various corps, and the greater part of the Naval Brigade with its four 12-pounder guns.

The troops to move forward were divided into three columns: No. 1 Column—consisting of the 9th Lancers, Mounted Infantry, "G" Battery R.H.A., 18th, 62nd, and 75th Batteries R.F.A., 65th Howitzer Battery, Highland Brigade, Highland Brigade Bearer Company, 2nd Yorkshire Light Infantry—was to march at 3 p.m. on the afternoon of December 10 towards the southern end

¹ Lord Methuen's despatch, *London Gazette*, March 16, 1900.

of Magersfontein Hill. The main body of Infantry to halt behind Headquarter Hill; the 2nd Battalion Yorkshire Light Infantry to proceed to Voetpad's Drift and entrench there against attack.

No. 2 Column—consisting of the 1st Battalion Northumberland Fusiliers and part of the Naval Brigade—was to move out with the 4.7-inch Naval gun, which from a position west of the railway was to co-operate with the Artillery engaged in the bombardment; Rimington's Guides were to protect the left of this column.

No. 3 Column—consisting of the 12th Lancers, 7th Company R.E., Guards Brigade Ammunition Column, Guards Brigade Field Hospital, Guards Brigade Bearer Company, Highland Brigade Field Hospital, and Divisional Troops Field Hospital—was to be, by 3 a.m. on the 11th, 500 yards to the left rear of the ground occupied by the brigade division of Field Artillery in rear of Headquarter Hill.

The supply column, with five days' rations, under escort of a half-battalion of the Gordon Highlanders, was, at 4 a.m. on the 11th, to follow the route taken by the Highland Brigade for 2 miles.

December 10.—At 3.15 p.m., No. 1 Column moved out of camp in drizzling rain. The Highland Brigade halted near Headquarter Hill. With the cavalry covering the front, the Black Watch advanced in extended order and later on fell back when the guns opened fire. Magersfontein Hill was bombarded for an hour and a half. At 6.30 the guns ceased fire, and the artillery and cavalry fell back to Headquarter Hill. One ambulance under Lieutenant Fell, from the 9th Brigade Bearer Company, accompanied No 2 Column to the Gangers' Hut on the railway and bivouacked there during the night.

The 9th Brigade Bearer Company and Field Hospital remained at Modder River.

The Guards Brigade with its Field Hospital and Bearer Company crossed the drift (north-east of Modder River Station) from the camp on the "Island" after dark and bivouacked on the north bank of the river.

The Highland Brigade and Divisional Troops Field Hospital packed up and prepared to join No. 3 Column.

December 11.—At 1 a.m. the troops of No. 3 Column marched from Modder River for the appointed rendezvous. The night march of the Highland Brigade towards the Boer position commenced a few minutes after midnight in rain and intense darkness. The Bearer Company remained with the guns at Headquarter Hill to await developments.

The brigade marched in mass of quarter columns, the four battalions keeping in touch by using connecting ropes. The Black Watch led, followed by the Seaforth Highlanders, Argyll and Sutherland Highlanders and Highland Light Infantry, in rear. Just before daybreak, about 4 a.m., the brigade was within a few hundred yards of the trenches at the foot of Magersfontein Hill. The leading battalion was thrown into some confusion in the dark by a very thick bit of bush 20 to 30 yards long. The Seaforth Highlanders went round this bush to the right and was getting into its original position behind the Black Watch when the order to extend was given. The Seaforth Highlanders and two companies of the Argyll and Sutherland Highlanders were in the act of doing so when suddenly a severe fire was poured in by the enemy. The casualties were heavy, Major-General Wauchope was killed. The brigade was more or less disorganized, but mixed parties of various battalions got to within 200 to 300 yards of the enemy, lay on the ground and opened fire. Some passing round to the right captured the Scandinavian contingent,¹ and about 100 men of the Black Watch and Seaforth Highlanders got well round the eastern face of the enemy's position. Attempts to advance were unsuccessful and the attack came to a standstill.

At 4 a.m. the 12th Lancers "G" Battery R.H.A. and the Mounted Infantry moved north-east against the enemy's left flank, but were temporarily stopped by fire from the low ridge running from Magersfontein Hill to the Modder River. "G" Battery advanced at a trot under fire. The guns were run up by hand to a position on the reverse slope of Horse Artillery Hill, where they continued in action for twenty-four hours. Two dismounted squadrons of the 12th Lancers and parties of M.I. advanced through the guns, and held the ridge on the enemy's side of the dead ground, immediately in front of the guns.

The 9th Lancers were sent along the river, but could not get beyond Moss Drift.

At daylight the Artillery opened fire on Magersfontein Hill, the Naval 4.7-inch gun from a position west of the railway, near the Gangers' Hut.

The Guards Brigade—No. 3 Column—arrived at Headquarter Hill about 3.30 a.m.

¹ Shown on the map in centre of space between position of 2nd Coldstream Guards and Magersfontein Hill.

The Scots Guards were detailed to act as escort to the Howitzers and Field Artillery and, when it was known that the Highland Brigade attack had failed, the two battalions Coldstream Guards, with the Grenadier Guards in reserve, were advanced towards the low bushy ridge due east of Headquarter Hill. On arrival there they found a strong force of the enemy in front of them.

The 1st Battalion Coldstream Guards on the right extended to within 2,500 yards of the river, from which point the line was prolonged by the 9th Lancers and M.I.

Half a company 2nd Coldstream Guards moved to the left to get into touch with the right of the Highland Brigade, passed the battery at Horse Artillery Hill, and arrived at the ridge beyond about the same time as the M.I. and 12th Lancers entered the dead ground in front of the guns.

At 6 a.m. the 2nd Coldstream Guards, followed later by two companies 1st Coldstream Guards, moved forward towards the right of the Highland Brigade.

The position occupied by the dismounted 12th Lancers and M.I. opposite the enemy on the northern end of the low ridge was later in the day taken up by portion of the 2nd Coldstream Guards, which held it until the next morning.

Two companies of Grenadier Guards reinforced and connected the 2nd and 1st Battalions Coldstream Guards in the firing line extending from near Magersfontein Hill towards the river. On that line many of the Guards, dismounted Cavalry and M.I. were fighting all day at exceedingly short ranges; in some cases only a few hundred yards of bush separated them from the enemy.

About 9 a.m. an attempt to turn the right of the Guards Brigade was checked by the O.C. K.O.Y.L.I., who advanced with five companies towards Moss Drift and held the ground between the left of the Guards Brigade and the river.

From an early hour the Highlanders in front were only able to hold on to their places by the support of the guns, which had the effect of considerably reducing the rifle fire along the centre.

About 11 a.m. four companies of the Gordon Highlanders, followed later by two other companies of the same battalion, began an advance against the trenches and reached positions varying from 300 to 400 yards from the enemy on the west of the south-eastern point of the hill.

About 2 p.m. the Highland Brigade fell back some few hundred yards and lay down, and about 5 p.m. fell back further and

reformed in rear of the guns. Six companies of the Scots Guards took up positions about 1,100 yards from the trenches in front of the 18th and 62nd Batteries R.F.A.

After 5 p.m. there was but little firing, except an occasional skirmish on the right flank. At night the greater part of the troops on the right flank and in front remained in the positions they occupied during the late afternoon.

The 9th Brigade was not engaged during the day.

The casualties during the action, including a few which occurred during the evening of the December 11 and morning of December 12, were :—

	Killed	Wounded	Total
Officers	20	46	66
Other ranks	149	646	795
	169	692	861

Of the above, 7 were not admitted to hospital; 2 officers and 20 other ranks died in the field hospitals, and 21 other ranks returned to duty in the field. The strength of the troops engaged, excluding the 9th Brigade, was about 11,447.

A number of wounded Boers—mostly Scandinavians—probably 25 or 30, were dealt with by the field hospitals. The Highland Brigade, including the Gordon Highlanders, lost 16 officers and 135 others killed, and 32 officers and 534 others wounded—a total of 151 killed and 566¹ wounded. The Black Watch lost 73 killed and 228 wounded; the Seaforth Highlanders, 41 and 146; the Highland Light Infantry, 12 and 85; the Argyll and Sutherland Highlanders, 21 and 71; and the Gordon Highlanders, 4 and 36.

The Guards Brigade lost 11 killed and 81 wounded: 1st Coldstream Guards, 8 and 51; 2nd Coldstream Guards, 2 and 23; 3rd Grenadier Guards, 1 and 5; and 1st Scots Guards, 0 and 2.

The Cavalry, Artillery and Mounted Infantry lost 6 killed and 40 wounded, out of which the 12th Lancers lost 3 and 18, and the 9th Lancers 1 and 10. The remaining casualties, 1 killed and 5 wounded, occurred amongst the Staff and Royal Army Medical Corps.

REGIMENTAL MEDICAL SERVICE.

The Black Watch.—Lieutenant H. E. M. Douglas, R.A.M.C.: When the battalion deployed on the afternoon of December 10,

¹ In some of the published returns wounded who died soon after admission to the field hospitals are shown under "killed."

the regimental stretcher-bearers were told off to follow their respective companies. We soon retired on the main body. There were no casualties.

At midnight of December 10—11 the Highland Brigade moved towards the south-east of the ridge of the kopjes of Magersfontein.

Before marching off for the night attack I detailed the stretcher-bearers to their respective companies, and told them that when the battalion deployed they were to keep in touch with their companies, and if they attended or collected any wounded they were to try and find my position and then to send or bring the wounded to me.

Just before daybreak, as the leading companies of the Black Watch and Seaforth Highlanders were deploying, heavy firing was commenced by the Boers, which caused a certain amount of confusion in the Brigade, resulting in the various units getting mixed up.

Individual efforts were afterwards made to deploy to the left. Marching on the left of the rear company, I was carried to the left in the efforts to deploy in that direction. During the remainder of the day I attended the wounded of the Brigade, at a distance of about 200 to 600 yds. from the Boers. During no part of the day did I get in touch with any stretcher-bearers of the Brigade, but they did their work well, as several of them subsequently received the Distinguished Conduct Medal for their behaviour that day.

The wounded whom I attended to were instructed by me to lie still until the firing ceased or eased off; those able to walk were told to get back to Modder River Station, or if they saw a Bearer Company to go to it; those unable to walk were made as comfortable as possible, and assured that I would return later in the day, and take them to hospital. I did not actually see any squads of stretcher-bearers from the Bearer Company during the day, but I know that they removed some of the wounded, that I had attended to, soon after I had left them. At about 11 a.m. I saw, about a mile in the rear, what I considered to be the dressing station of the Bearer Company; after this I directed all slightly wounded cases to go in that direction.

Before starting, I had made up a concentrated solution of morphia, which I gave hypodermically to all the seriously wounded cases; I told them that I would come back to pick them up as soon as the firing stopped. The morphia appeared to ameliorate their misfortunes considerably.¹

¹ Late in the afternoon Lieutenant Douglas was severely wounded by a shell. He was sent back direct to Modder River in a Scotch cart.

2nd Battalion Seaforth Highlanders.—Lieutenant H. Ensor, R.A.M.C.: On the morning of December 10, 1899, we were warned by Lieutenant-Colonel Hughes Hallett, commanding the battalion, that we were to move out of camp early in the afternoon and march with the Brigade towards the Boer position. The regimental stretcher-bearers, all bandsmen, sixteen in number, with Band-Sergeant Hoare, and a lance-corporal, were under my orders. We marched slowly towards the Boer position, and halted while the artillery shelled the supposed site of the enemy's trenches. This went on until nightfall, when we were ordered to lie down where we were, and get what rest we could until midnight, when the Brigade was to advance to attack the Boer position at dawn. At midnight we fell in, and the Brigade advanced towards the enemy, each battalion in mass of quarter column, the Black Watch leading, followed by the Seaforths, Argyll and Sutherland Highlanders and the Highland Light Infantry. At the first sign of dawn the Brigade was halted, and the leading companies deployed; before the other companies could do so a single shot was fired from the Boer trenches, which we had unknowingly almost walked into. An extremely heavy fire followed. We lay down, and the order was given by Lieutenant-Colonel Hughes Hallett to fix bayonets. This was done, but in a few seconds the men, apparently of their own accord, rose up and extended in a mass to the right and left. In the confusion I lost my stretcher-bearers, and with the exception of Band-Sergeant Hoare did not see any of them during the day. In about half-an-hour it was quite light enough to see everything distinctly, and I did what I could for the numerous wounded who were on the ground. Fortunately before leaving the regimental transport I had filled my own haversack with bandages and packages of lint. These came in very useful, and owing to the wounded all belonging to kilted regiments it was possible to dress injuries of the legs very quickly, as no time was expended in ripping up trousers or taking off putties. The first field dressings carried by the men were extremely useful, and in most cases were all that was required. During the course of the morning I worked along the right of our line, and came upon some mounted infantry mixed up with the Highlanders. Here I found the Cape Medical Staff were doing most excellent work. When I came upon them the stretchers they had at their disposal were already being used for the carriage of wounded to a dressing station about 1,000 yd. in rear, but the men not engaged in carrying were, under the command of one of their junior officers, occupied in dressing the numerous wounded

who had not yet been removed. I arrived at this part of the field about half an hour after the Scandinavian commando had been captured. Having obtained a further supply of bandages from one of the men of the Bearer Company, I returned again along our line and came on Lieutenant-Colonel Hughes Hallett. Near him were two wounded officers, besides several men, many of whom were hopelessly wounded. One of the wounded officers was shot through the body and the jaw, and was almost speechless. I dressed him as well as I could, and also the other wounded. Having noticed a folded stretcher lying on the ground at some little distance I ran to it, brought it up, opened it, and placed the officer on it. I then asked the men if any of them would volunteer to carry him down the slope to a less exposed place. Our men were replying vigorously to the Boer fire at the time. Two men immediately got up, and carried him off under a really hot fire, which, however, did them no harm. Band-Sergeant Hoare took the other wounded officer, Captain Fetherstonhaugh, on his back, and carried him out of fire.

Having done all I could here, I went off to search for more wounded and met Douglas, who was attached to the Black Watch, on the same errand. We separated after a short conversation, and I never saw him again until the second day after, when he was in the hospital train going down to the base, severely wounded by a shrapnel bullet in the face. It was, as a rule, quite hopeless to remove the helpless cases even if we had stretchers and bearers, as the fire was too hot, and to attempt to do so would only have resulted in more casualties. The less severely wounded slowly worked their way to the rear by themselves, in many cases helping each other along. About midday I saw the Seaforth water-cart and the Scotch cart, which carried the medical and surgical panniers, advancing up the slope on the left of one of our batteries which was in action. I went to it, filled my haversack with dressings, and refilled my water-bottle, and then returned to the line where the wounded were. At this time the fire had died down somewhat, and it was possible to move about more freely. The advance of the Gordon Highlanders to reinforce the Highland Brigade then took place, and this revived the action. The day was very hot, and the chief sufferings of the wounded were from want of water, which in most cases it was impossible to relieve. About 3 p.m. the Brigade retired about 1,000 yards, and formed again. At this period the Boers opened fire with their artillery, but their shooting was very poor, and they burst their shells far

too high. I retired with the Brigade, and found that I was again close to the Bearer Company. One of their ambulance wagons came up and advanced towards the Boer position to attempt to get in as many of the seriously wounded as might be possible; with it went Surgeon-Major W. Beevor, Scots Guards, who was then in command of the Divisional Field Hospital, about four men of the Cape Medical Staff, and myself. We soon filled it with wounded, but while engaged in putting in Colonel Downman and Captain Gordon, of the Gordon Highlanders, both of whom were seriously wounded, the Boers opened such a heavy fire that we had to send the ambulance wagon back. After this we separated, going up to the scene of action of the morning to continue the work of dressing as many of the wounded as we could find. A private of the Cape Medical Staff accompanied me, and we dressed many wounded, but their great want was water, and our water-bottles were soon empty. I gave away all the morphia tablets in my dressing-case to the seriously wounded, but what was wanted was a solution of morphia for injection which could be given at once to wounded whom it was impossible to remove and I never afterwards went into action without a supply. While on this duty we got quite near to the Boer trenches, which were full of men; they soon noticed us, however, and drove us away with rifle fire. When it began to get dark we retired, and I rejoined my unit. The next morning the Brigade retired to camp at Modder River, and on arrival all the uninjured medical officers were at once put on duty at the Field Hospital to look after the numerous wounded.

1st Battalion Argyll and Sutherland Highlanders.—Captain J. E. Carter, R.A.M.C.: On the afternoon of December 10 we marched out about three miles from Modder River Station and halted while the guns bombarded the kopjes. It was raining heavily. At nightfall we bivouacked. Orders came round shortly to the effect that at 12 midnight we were to advance in quarter column until close up to the Boer trenches, then extend in double companies, 5 yards interval, A and B in front, C and D behind, and so on; on first approach of daylight, to storm the position with the bayonet. These orders were delivered by our O.C. to the officers.

We ate bully beef and biscuit and cautiously partook of water, as our water-bottles had to last us probably all next day; then we silently lay down and tried to sleep. At midnight we were quietly roused, and fell in, in pitch dark, and cautiously advanced. The regimental stretcher-bearers were ordered to follow the battalion

later. Just then two men fiddling with their rifles loosed them off. Rain was again descending in torrents, a thunderstorm came on, and it was bitterly cold. It was so dark that as we marched we got into some confusion. One had to march touching the man in front. Somewhere about 4 a.m. we came under the Boer position, a high kopje rising up just in front; one could now just see the outline of objects and murmurs went round that we should get extended at once. The Black Watch which was leading received an order to extend, but the order never got to my position; we were the third battalion behind the Seaforths and in front of the Highland Light Infantry. It was generally believed that a red light was now shown on the Boer right, and immediately on its being extinguished a terrific fire was poured into the Brigade. When fired on we were huddled up like sardines. Being on the left rear of the battalion, I could touch the "H.L.I." behind me. Some shouted "Fix bayonets," "Charge," and some of the Black Watch and parties in front did so; others were so huddled up they could not. Some shouted "Lie down;" others "Retreat." In the centre men fell over each other—five and six deep, but being on the left, I was not trodden on.

Soon I got under cover of scrub and found a few men scattered about. By this time the Boers' fire had practically ceased, except for some sniping. I came upon some wounded and dressed them up and sent them back. Our guns shelled the summit of the hill severely and so kept down the Boer fire from the top of the hill on our men who were lying under it. It was then about 5 a.m. and officers were rallying the men by getting hold of those next to them. Many were without rifles, which had fallen or else been knocked out of their hands. That many lost their rifles through no fault of their own is certainly true. My corporal lost the field medical companion, but he was in no way to blame.

Lieutenant Clarke helped with his machine-gun to account for a party of about fifty Scandinavians, killed, wounded, and prisoners; those not wounded got up, threw down their rifles, held up their hands, and ran at full speed up to our men.

The shelling of the hill was being continued all this time, and men, as they were rallied, were advanced up to about 500 yards from the Boer trenches. Here the men lay most of the day and there were many casualties.

I stayed up there until we were ordered to retire, the order being due to the fact that we were being enfiladed by our own men. There were a number of dead and wounded where we had

been. Later, an ambulance went up and took some of the wounded away.

1st Highland Light Infantry.—Lieutenant T. C. Mackenzie, R.A.M.C.: On December 10, Colonel Kelham, commanding the battalion, called all the officers together and told us that he had received orders that the Brigade would march massed in quarter column at about midnight to attack the enemy's trenches at dawn with the bayonet. When we advanced I had with me the regimental "sick corporal" (who was killed), with the surgical haversack. The bandsmen were detailed to act as regimental stretcher-bearers.¹

All officers were dismounted; the horses, water-carts, medical and surgical panniers, &c., being left in charge of the regimental quartermaster. All men carried their first field dressings and emergency rations, and water-bottles were filled. It was pitch dark and raining in torrents.

The battalion was rear of the Brigade, and our orders were to keep close up and follow the battalion in front of us. No talking was allowed, and I could only distinguish the officer marching next to me from the rest of the men by stooping down and seeing the shape of his helmet against the sky.

Just as dawn was breaking and before, as far as I know, any order had come for our battalion to extend, a regular storm of bullets was poured into the Brigade. It was of course a complete surprise, and the Brigade was thrown into confusion and many came back on us. The Colonel and others gave the order to lie down. Those of us who could did so, and were badly trampled on. It was here that a great number were killed and wounded, and the ground was strewn in every direction with men, rifles, helmets and stretchers.

Individual officers collected men as soon as possible, irrespective of the regiments, formed them into lines and advanced in extended formation, and lay down to await reinforcements. The work of getting the wounded back commenced immediately, but unfortunately the stretcher-bearers had got mixed up with everyone else; some had lost their stretchers and picked up rifles instead, and each man went where he thought best.

I lost my helmet and very soon got bowled over by the sun and

¹ Corporal John D. F. Shaul, of the H.L.I. band, was awarded the Victoria Cross for conspicuous gallantry in dressing wounded. With the utmost coolness and deliberation he sat down next a wounded man and attended to him in spite of a hail of bullets which kept raining round him.

want of food and water, and I had no recollection of how I was brought back to Modder River.

1st Gordon Highlanders.—Captain P. J. Probyn, R.A.M.C.: The battalion¹ moved from Modder River at 3 a.m. in rain, forming escort to the supply column.

We reached our rendezvous after daybreak just as the 4.7-in. gun commenced firing. Later on ambulance wagons carrying Highland Brigade casualties began to pass us, and wounded were straggling back in all directions. The Colonel assented to my going forward to give a hand. Taking Corporal Mackay² and the orderly with the Scotch cart to a clump of trees to left of the position of the field batteries, we set up a small aid station.

About 10 a.m. orders were received for half a battalion of the Gordons to move up in support of the Highland Brigade. The men were extended, and worked up to about 400 yards of Magersfontein Hill. The whole of the bandsmen stretcher-bearers (eight stretchers) were brought up in rear of this first half battalion, and were quickly engaged with wounded of the Gordons and other Highland regiments. The stretcher-bearers before long lost touch as they had to take the wounded long distances. The Gordons soon got well in advance of all other corps, but to the left front of them numbers of dead and wounded were lying about.

The regiment had to take whatever cover was available. The firing became very hot, and men were dropping on all sides. Corporal Mackay and myself were kept busy attending to scores of wounded besides the Gordons, and our dressings soon became exhausted. When possible men were directed to crawl back to the clump of trees, from which they were carted by the ambulance wagons of the Cape Bearer Company.

Late in the day, when there was a lull in the firing, Surgeon-Major W. Beevor and myself took two ambulance wagons towards

¹ The whole of the band were trained as stretcher-bearers and in first aid for six weeks before the battalion left Edinburgh in November, 1899, and most of the men were very efficient in those duties. Also before sailing, some £25 were expended in purchasing extra drugs, dressings, &c.—probably under a mistaken impression that the authorized equipment was inadequate for all practical purposes.

² Now Captain J. F. Mackay, V.C. On December 11 "he was absolutely fearless in attending the wounded." Formerly a medical student of T.C.D., Corporal Mackay served with the Gordon Highlanders at Dargai, and later on in the South African War he was awarded the Victoria Cross for conspicuous humanity and brave conduct in attending to wounded at Crow's Nest Hill, near Johannesburg, in spite of being far from cover and within short range of the Boers.

the spot where Captain W. E. Gordon,¹ of the Gordon Highlanders, and Lieutenant Waterhouse, of the Seaforths, both severely wounded, were said to be lying. The Boers did not fire upon us when collecting these and other severely wounded, but soon our 4·7-in. gun burst some shells on the kopje, and just then we got several volleys from the kloof of the hill on our left. Unfortunately some of the bearers were hit. No doubt this was partly due to several combatants taking cover around the retiring ambulance wagons. Previous to this Colonel Downman was wounded; Captain Towse assisted him down to the clump of trees, and a stretcher conveyed him to the field hospitals.

We gave what aid we could to wounded on our extreme right—Seaforths—but owing to the fire there we had to lie perfectly flat.

At first I put the regulation tally on the wounded, but finding this impracticable I threw the book away.

When my dressings were exhausted, I had to return to the Scotch cart for fresh supplies. Proceeding in a direct line, the enemy got one's range and shot close; but going zig-zag, and falling as if wounded, gave a respite from sniping. I do not think the Boers knew I was a medical officer, as the regulation brassard was indistinct at that distance.²

The small aid station near the clump of trees proved to be too close—one of the mules was shot in the leg, and a second was killed near by. The Cape Bearer Company did excellent work; this was the only bearer company we were in touch with.

After the general retirement, late in the afternoon, the Gordons took up a position close to Headquarter Hill for the night.

"G" Battery R.H.A.—Lieutenant G. G. Delap, R.A.M.C.: On December 11, soon after dawn, about 4 a.m., "G" Battery moved out with the 12th Lancers and Mounted Infantry in the direction of the Highland Brigade, and came up to the eastern extremity of a low stony ridge, afterwards known as Horse

¹ Captain Gordon (now Lieutenant-Colonel Gordon, V.C.) reached a point 290 paces from the nearest Boer trench, when he was wounded. He was assisted in the first instance by Lieutenant H. E. M. Douglas, who came across a considerable distance from the right, and was awarded the Victoria Cross for this and other acts of gallantry on the same day.

² "A divisional order had been published (*vide* page 297), directing officers to be dressed like the men, and on this occasion Captain Probyn was attired in a kilt, &c., of the regiment to which he was attached.

Artillery Hill. Just then some stragglers from the Highland Brigade were retiring over it. A few minutes later the battery was in action about 2,000 yards east by south from the south-east corner of the main kopje, with its right flank at the boundary fence separating Cape Colony and the Orange Free State.

The hollow intervening between the Boer positions on the right front and "G" Battery was for the most part covered with scattered clumps of bush, but from the left front of Horse Artillery Hill towards the main kopje the ground was open and bare, except for a few ant-heaps and one or two isolated clumps of bush. It was across this open ground that the Highland Brigade advanced to the attack at dawn, having followed the tracks¹ leading from Modder River Station to Magersfontein Farm (Bisset's) as far as Horse Artillery Hill, where it turned direct towards the south-east corner of the main kopje.

When taken by surprise and thrown into confusion by the heavy fire poured into it at close range, the men scattered all over the open space south, south-east and east of the main kopje; some lay down in the open behind ant-heaps, a few pushed on and actually turned the eastern flank of the kopje and got behind the Boer trenches; a large number made for the bush further to the east in the hollow between Horse Artillery Hill and the Boer positions on the crest of the rise north-east of it. A few fell back behind Artillery Hill, where they eventually reformed, and helped to line that position. Of those who lay down in the open few returned unwounded, and it was there that most of the fatalities occurred, as thus exposed and in full view from the main kopje they were constantly sniped. Those who reached the bush were more fortunate, though not in a position to use their rifles without the risk of shooting comrades lying further out. Many lay out there all day without firing a shot and only retired towards evening or during the afternoon, when an attempt was made by the Boers to turn the right flank of Horse Artillery Hill; this was partially successful in that it caused a retirement of our right, in which the Highlanders again suffered severely.

Comparatively few casualties occurred on Horse Artillery Hill, considering its exposed position, but there were many wounded requiring attention at certain points in the bush in front of it. Owing to the formation of the ground and the fact that the front and crest of Horse Artillery Hill were fully exposed to the enemy's

¹ Not shown on the map.

rifle fire at 2,000 yards, and less, it was inadvisable to take out full stretcher squads, as they were too conspicuous and readily drew fire ; however, at times when the fire slackened, it was feasible to convey a casualty to the rear of the ridge with two bearers to a stretcher, and possibly a third somewhere within hail as a relief, or for one bearer to help a slightly wounded case along. It was necessary at all times to take advantage of every available bit of cover, such as bush or even grass. The moment any one moved out in the open sniping commenced, but immediately ceased or became so erratic as to be harmless on dropping out of sight. The brassard and "S.B." arm bands were, in all probability, one of the first things to catch the eye of Boer snipers, and certainly at 500 to 1,000 yards they must have been frequently seen as something white moving amongst the bushes. Of course the red cross would be invisible at that distance—not that the enemy showed much respect for it when they saw it ; on one occasion immediately after parleying with some members of the Boer ambulance corps (about 600 to 800 yards from the Boer trenches) they warned me that their people would fire on anyone so far out, no matter how occupied, and before they had withdrawn more than a few yards sniping recommenced from the bush close at hand, which they had just left, necessitating a rapid and undignified retreat on my part for the nearest scrub, while they departed at their leisure unmolested across the open.

During the forenoon it was possible to render first aid to a number of casualties out in the bush in front of Horse Artillery Hill. Some were moved into better cover and given a small supply of water when possible. Water was, unfortunately, almost impossible to obtain, or only in very small quantities. "G" Battery water-cart was eventually filled late in the afternoon at the Modder River, $3\frac{1}{2}$ miles in rear, and brought up to the position. But the water was urgently needed for the troops lining the ridge, who had been lying out under a blistering sun all day, and who were relatively worse off than some of the slighter casualties, who had found a certain amount of shade and cover behind bush ; moreover, it would have been quite impossible to distribute water amongst the casualties scattered over so wide and exposed an area till after dark.

There was little to be done with stretcher squads or ambulance wagons in front of Horse Artillery Hill, for, though it was quite possible for single individuals to move from place to place without drawing much in the way of fire, a stretcher squad or ambulance

wagon made too good a target. On one occasion an ambulance wagon was taken out about 500 yards from Horse Artillery Hill along the track leading to Magersfontein Farm (Bissett's), in order to remove five severely wounded cases grouped in an exposed position by a clump of bush west of the track. It came in for little attention on the outward journey, but while loading up and on the way back was heavily fired on, but made the journey without adding to the list of casualties. It was, however, an experiment not to be repeated. A number of casualties from the Scandinavian Corps, which lay some 500 to 800 yards to the left front of "G" Battery, were brought in from time to time as opportunity offered; some were able to walk with assistance, and several were removed on a wounded Boer pony, found loose near by with a saddle on its back. Although this pony had five severe bullet wounds it made several journeys to and fro until it became too exhausted; it was then turned loose and immediately commenced to feed. The Scandinavian casualties were mostly in two or three large groups where attempts to stand had been made, but others were scattered through the bush to the northward on their line of retreat, which had been stopped by parties of Highlanders scattered through the bush far out. The Boer "pom-pom" was put out of action by the right section guns of "G" Battery. The team was left where it fell, 100 yards or so in front of the Boer positions. The dismounted gun was apparently removed in what seemed to be a Boer ambulance wagon, which visited the spot shortly afterwards. One visit to this part of the battlefield while fighting was in progress was sufficient to show that there was little to be done in the way of first aid so near the enemy's lines, as many of the casualties found were dead, some, unfortunately, killed by our own shell fire. It is not advisable that medical officers should, as a rule, undertake such duties, but in the circumstances it was justifiable, as the action was prolonged, and from the nature of the ground the risk to single individuals moving from place to place was more apparent than real; moreover, there was little prospect of the bearer companies being able to render assistance or remove the casualties within reasonable time. Experiences during the engagement showed:—

(1) The possibility of rendering a certain amount of "first aid" in front of the firing line by single individuals, given sufficient cover at intervals to render one invisible to the enemy.

(2) The inadvisability and risk of working in groups, e.g., stretcher-squads, or of taking an ambulance wagon, horse, &c., into exposed or conspicuous positions, particularly near the firing

line, as it tends to disclose the exact position of the firing line to the enemy as well as to draw fire.

(3) Brassards and arm-bands, or anything conspicuous about the person, are a source of danger when moving about in bush, as they are likely to catch the eye of the enemy's marksmen.

(4) Wounded lying in the open, except cases of extreme urgency, should not be attended to or brought in by medical personnel till firing slackens or ceases, except when there is cover close at hand to place the patient behind until he can be removed later.

(5) The extreme value of cover, however slight, and the advisability of selecting for the purpose inconspicuous objects on the landscape, e.g., small bushes or low scrub in preference to large bushes or trees.

12th Lancers.—Major T. J. O'Donnell, R.A.M.C.: On our first move forward from Horse Artillery Hill we found a number of Highlanders—they were lying flat, and it was impossible to take medical assistance to them as any movement drew fire. The dismounted squadron of the 12th Lancers and the mounted infantry, in fairly thick bush about half a mile north-east of "G" Battery, had several casualties—though near the enemy, they could not see them or be seen. A few ambulance wagons and stretcher squads from the Guards Brigade Bearer Company were in rear of Horse Artillery Hill. Some of these were called up and utilized. It was impossible to get anything near the Highlanders in our own vicinity, while it was easy enough, owing to the formation of the ground, to get a wagon quite close to the dismounted lancers and mounted infantry who were nearer to the enemy.

9th Lancers.—Captain J. V. Forrest, R.A.M.C.: Most of the casualties occurred in the early morning of December 11. Nearly all were attended to, except one man who was reported missing and who was found next day with a broken arm pinned to the ground by his dead horse. "C" squadron was sent forward to reconnoitre a part of the ground, about a mile south-east of the kopje, and got badly peppered. Most of the cases were able to ride¹ to the dressing station, including a man who lost the greater part of his heel. Later on in the day the greater part of the regiment fought dis-

¹ Captain Forrest notes that on many occasions during the war wounded Cavalry soldiers, who could not have walked, were able to ride a few miles before their wounds "*stiffened*." Such cases should be started on horseback as soon as possible after being hit.

mounted, but incurred few casualties. Toward evening we were ordered to form up and picket the horses. They had just started to do so when the first Boer shell of the day burst over us and did damage to the four corners of the squadron. One splinter cut a strap on an officer's bridle and the bit fell from the horse's mouth. At another corner one man was hit in the neck by a shrapnel bullet. We moved away from the spot.

R.F.A.—Major H. L. Battersby, R.A.M.C. : The batteries were together during the day. Wounded, including men of other Corps, were dressed at the position, and, if able, they walked to where the ambulance wagons were drawn up in rear. Some were carried on stretchers by the bearers of the Cape Medical Staff Corps Bearer Company attached to the Highland Brigade. I noticed one or more squads of that company marching along the firing line with folded stretchers searching for wounded. At dark the batteries moved to a new position; there was a great demand for water for men and horses. The mules of my Scotch cart were dispatched before dark to be watered and they did not return. Assisted by the Adjutant, who held a lighted candle to enable me to see, I dressed several wounded of all corps, who came in to where the batteries were after dark. I used the first field dressing, as unfortunately my invaluable Scotch cart with the equipment was away somewhere, and to look for it in the darkness was out of the question, but we continued doing what we could for the wounded. What they required most were warm blankets and beef tea, and brandy, &c. Messages came at intervals saying that officers and men were lying wounded in different places. We sent men after them, but except in one or two instances they never returned that night, having been hopelessly lost in the darkness.

3rd Grenadier Guards.—Captain C. W. Profeit, R.A.M.C. : In this fight the battalion was in reserve, only two companies being in the firing line. One man was killed and a few wounded. A disadvantage of concentrating the stretcher-bearers in such circumstances was well brought out. In the afternoon a squad was wanted, so I took one up to where the casualty occurred, but had difficulty in reaching the place, which was very exposed; the men holding it had been greatly worried by a Boer marksman who fired on the slightest movement and but for the cover from fair-sized boulders there would have been many casualties. After this battle the stretcher-bearers marched with their own companies and were always on the spot if required. This prevented a good deal of misunderstanding and kept the bearers well

up in the firing line, as, after all, carrying a rifle and getting a chance of a shot is a very different thing to carrying a stretcher and being a good mark for other people with no chance to retaliate.

1st Coldstream Guards.—Captain A. W. Hooper: Soon after dawn the battalion was in action. The regimental stretcher-bearers were grouped in rear and carried back the first casualties, they did not return near the front line again as the ground was exposed to fire, which made movement difficult—but not impossible. Wounded remained in positions affording cover, as far as possible, during the day until removed by the Bearer Company to the field hospitals or until opportunity enabled them to walk there. After dark Captain Hooper obtained an ambulance wagon from the Guards Brigade Bearer Company and took it to the ground where the battalion had been in action, but, it was very dark and the ground was so broken that movement was difficult. No casualties were picked up, and shouting failed to get any reply, so the ambulance wagon was brought back to the site of the Guards Field Hospital.

The 2nd Coldstream Guards' casualties were dealt with similarly to those of the 12th Lancers and Horse Artillery.

FIELD MEDICAL UNITS.

By 4 a.m. the medical units were situated thus:—

In the vicinity of Headquarter Hill: Guards Brigade Bearer Company, Guards Brigade Field Hospital, Highland Brigade Bearer Company, Highland Brigade Field Hospital, Divisional Troops Field Hospital.

At Modder River Camp: 9th Brigade Bearer Company (less a detachment under Lieutenant Fell at the Ganger's Hut), 9th Brigade Field Hospital.

The units which accompanied No. 3 column from Modder at 12.30 a.m. had a difficult march owing to the extreme darkness, and the Guards Brigade Bearer Company at one time completely lost touch.

Soon after daybreak the Highland Brigade Bearer Company moved forward and opened a dressing station—about 5 a.m.—at Headquarter Hill, about 1,000 yards in advance of the site of the bivouac, and sent forward ambulance wagons and stretcher squads in the direction from which wounded men began to fall back from the Highland Brigade.

The officer commanding Guards Brigade Bearer Company was not aware of the position of the troops, but after the Brigade had

advanced from Headquarter Hill he heard firing on the right front and moved in that direction.

"After going a little more than a mile through scrub, in which we could not get a good view, we came under fire and fell back a short way to a point that appeared to be safe, close to a dry pan. We halted there and did not move again till the next day. We at once opened a dressing station (marked on map about 1,200 yards east of Headquarter Hill) as wounded were already walking back from firing line. This was about 5.15 a.m. Stretcher squads under Captain T. B. Beach went out eastwards and towards Horse Artillery Hill. Ambulance wagons went forward when and where possible, but their movements were altogether governed by enemy's fire and the ground. By 6.30 a.m. a number of wounded had been collected. Few of them could have walked to Modder River, if wounded sufficiently to be allowed to go back at all."

The Highland Brigade Field Hospital was ordered to halt with its wagons parked about half a mile south of Headquarter Hill (see rear field hospital, marked on Map); this unit took no part in the work of taking in wounded during the forenoon. The Guards Brigade Field Hospital and the Divisional Field Hospital halted in advance of the Highland Brigade Field Hospital, nearer to Headquarter Hill.

At 7 a.m., as the wounded were coming in very rapidly, the Highland Brigade Bearer Company and the Guards Bearer Company were ordered by Colonel Townsend, P.M.O., to send fully loaded ambulance wagons to Modder River. At 7.50 these ambulance wagons started with 50 wounded.

At 8 a.m. the Guards Field Hospital personnel was ordered up to help the Guards Bearer Company, and the Divisional Field Hospital was ordered to help the Highland Brigade Bearer Company. The majority of the personnel of the Divisional Field Hospital were used as stretcher-bearers during the morning and early afternoon. It was not known at the time whether the 9th Brigade had been engaged, so a message was sent to Major F. A. Harris, S.M.O., of that brigade, asking him to send out some ambulance wagons of the 9th Brigade Bearer Company if they could be spared. On receipt of this request Lieutenant Fell, R.A.M.C., was called in from the Ganger's Hut and sent out towards Headquarter Hill with about three stretcher squads of the 9th Brigade Bearer Company and

¹ Extract from a report made by Major H. J. R. Moberly in command of Guards Brigade Bearer Company.

nearly a dozen wagons of sorts. He reported himself to Colonel Hartley in command of the Dressing Station at Headquarter Hill, and was ordered to go forward and start a collecting station. This was opened a little later at a point near the road from Modder River to Magersfontein Farm 1,000 yards east of the 65th (Howitzer) Battery, R.F.A. (see Map). Large numbers of unwounded men in addition to wounded collected here and impeded the work. Ambulance wagons came up continually and were filled and sent back to Colonel Hartley at the Dressing Station at Headquarter Hill.

At 10 a.m. the firing had slackened very much. The ambulance wagons sent in at 7.50 a.m. began to arrive back from Modder.

By 1 p.m. the Guards Bearer Company had sent in to Modder River 130, and the Highland Brigade Bearer Company 130—total 260. Most of the ambulance wagon mules had by now done two journeys to Modder River and covered more than 20 miles, not including, in the case of the Guards Bearer Company, the night march out from Modder River. They required rest and had to be fed and watered at Voetpad's Drift, two miles south of Headquarter Hill. This delayed the evacuation.

At 2.30 p.m. the whole front was fairly clear of fire, and as the number of wounded not yet brought in was evidently large it was decided to stop sending the ambulance wagons to Modder River and use them all in front to convey wounded to the dressing stations.

At 3 p.m., the Guards Field Hospital was ordered to move its equipment up to the site of the Guards Bearer Company Dressing Station and open there. The Divisional Field Hospital received a similar order shortly afterwards. The position was a convenient one, situated as it was at the western edge of some thick scrub and trees about one mile east of Headquarter Hill, $2\frac{1}{2}$ miles south of Magersfontein Hill, 2 miles north of the river, $1\frac{1}{2}$ miles west of the advance line of the 1st Coldstream Guards and about $5\frac{1}{2}$ miles (by nearest tracks) from Modder River Station. Owing to the stony nature of the ground it was impossible to pitch tents at points other than in the immediate vicinity of the dry pan where the Guards Bearer Company established its Dressing Station.

At 4 p.m. Colonel Townsend decided to again commence evacuation to Modder River, and some empty supply wagons in charge of an officer, which the Serjeant-Major of the Guards Brigade Bearer Company picked up on the veldt, were loaded and sent in. However, soon afterwards it was apparent that all the medical units would be required to deal with the wounded still out on the

field. There were many to be dressed and fed, and at 4.30 p.m. the Highland Brigade Field Hospital, which up to then had been kept completely in reserve, was ordered to pitch alongside the Guards Field Hospital. In a very short time its tents were filled, and indeed wounded kept dropping in all through the night. A little later the Highland Brigade Bearer Company was ordered to move the wounded from the Dressing Station at Headquarter Hill to the same site, as it was thought desirable to concentrate all the wounded and medical units at the same place for the night and thus get as many as possible under cover.

The combined units acted as an enlarged dressing station. The wounded were given beef tea, milk and in some cases the rations carried for the personnel of the medical units. Wounded at the Guards Bearer Company Dressing Station were retained there after Field Hospitals opened beside it. The Guards Brigade Field Hospital,¹ acting as a dressing station, dealt with a very large number.

The two officers of the German Army Medical Service attached to that unit were untiring in rendering valuable assistance to the wounded throughout the day and night.

Lieutenant Fell, 9th Brigade Bearer Company, returned to his unit at Modder River with the stretcher squads about 6 p.m.; the ambulance wagons he brought out had already gone in with wounded.

About 9 p.m. Lord Methuen told the P.M.O. confidentially that the whole force would probably have to fall back.

Colonel Townsend thereupon decided, with the G.O.C.'s concurrence, to begin immediately to despatch the wounded to Modder River.

The field hospitals (Guards, Highland, and Divisional), and the Guards and Highland Brigade bearer companies, were at once directed to get ready: a mounted messenger² was sent to warn Major Harris, 9th Brigade F.H., S.M.O., at Modder River to prepare to receive convoys during the night.

By 9.30 p.m. the ambulance wagons were being loaded with the more serious cases.

At 10 p.m., the first convoy of ambulance wagons started and at 12 midnight the remaining wagons got away.

December 12.—The Guards Brigade and Divisional Field

¹ The Guards Brigade Field Hospital had carried a supply of boiled water, from Modder River, for surgical purposes.

² Mr. De Witte, a local guide, supplied to Colonel Townsend.

Hospitals were then ordered to get ready five of their transport wagons (buck wagons), and load them up with slightly wounded. They started at 1 a.m., just as the moon set. Surgeon-Major Beevor, who was in charge of these wagons, had great difficulty in guiding them owing to the intense darkness.

At 4 a.m., the ambulance wagons began to arrive from Modder River and were loaded and sent back as soon as possible.

About 6 a.m., before it was finally decided whether the troops should retain the ground gained or retire on Modder River, a messenger bearing a flag of truce from the enemy arrived at the outposts of the Scots Guards. He reported that there was a large number of dead near the point of Magersfontein Hill and asked for medical assistance to be sent to some British wounded lying near the trenches.

Arrangements were at once made to send out medical officers and ambulance wagons, and a party of Royal Engineers to bury the dead. I was sent out in advance to inform the enemy what was being done. The commandant of the trenches at the south-eastern point of Magersfontein Hill agreed to allow the ambulance party to collect the wounded. He said he could not permit a burial party to approach his lines, but that the British General might, if he wished, send out wagons with Kaffir drivers to remove the dead. I reported this to Lord Methuen at Headquarter Hill, and when returning again to the Boer lines with the ambulance wagons one of the enemy's guns opened fire on the Field Artillery position extending across the road along which the ambulance wagons passed. The Boer commandant on being told that our artillery would not reply to his fire so long as the ambulance party was within his lines, said that his gun was only brought into action as a protest against the action of the Naval 4.7-inch gun (the Naval gunners were not aware of the situation) which had just then fired a few shells at the western end of the trenches. He agreed to stop his gun if instructions were sent to the Naval gun to cease fire. This was done, and both sides stood fast while the wounded were being removed. The ambulance party sent to the Boer lines was furnished by the Guards Brigade Bearer Company and consisted of six ambulance wagons, with a supply of medical comforts, dressings, &c., and about twenty N.C.O.s and men under command of Captain T. B. Beach, who was accompanied by Civil Surgeon Croghan.

The wounded to be removed, including Lieutenant Wauchope of the Black Watch, numbered thirty-eight. Some of them were only about 100 yards from the trenches at the foot of the kopje,

and nearly all were well round to the eastern side of it; they had been hit early the previous morning, probably between 4 and 5 a.m. When the ambulance wagons arrived they had been lying where they fell for about twenty-six hours, having been exposed to a scorching sun followed by a bitterly cold night, and their position was directly in the line of fire aimed at the point of the kopje throughout the whole day on the 11th.

All of them were very badly wounded, the majority suffering from fractured legs, amongst which were a number of severely fractured thighs. Captain Beach put up one of these with a rifle splint, but the Boer commandant objected to any rifles being taken away even as splints. The trenches were fully manned with Boers while the work of loading the ambulance wagons was going on. General Wauchope's body was found and sent in to Modder in a wagon after the wounded had been removed. The ambulance party rejoined its unit at Modder River after the retirement.¹

Up to 7 a.m. when the ambulance wagons were sent to the Boer lines it seemed likely that the field hospitals would be cleared in the course of a few hours, but this unexpected detachment seriously interfered with the work of evacuation.

At 7.30 a.m. some ambulance wagons returned to the field hospitals from Modder River, and when they were loaded and despatched the Guards Brigade and Divisional Field Hospitals were clear of wounded. They packed up and prepared to move.

A retirement of the whole force on Modder River had been meanwhile definitely decided upon. There were still fifty wounded with the Highland Brigade Field Hospital and no more ambulance wagons available, so at 9 a.m. Colonel Townsend decided to obtain a party of regimental men to convey these cases by hand. This party, which was furnished by the Highland Brigade, arrived at the

¹ When the last ambulance wagons were starting for our lines I was with a party of Boers about a mile east of Magersfontein Hill where two wounded Highlanders had been found in the Bush. One of the Boers who was interested in the saddlery on my horse, which I had given to a Boer boy to hold, came to the conclusion that my revolver (unloaded), in a wallet on my saddle, constituted a breach of the Geneva Convention. He asked me to come with him to the Commandant some distance in rear. The latter seemed annoyed that I had been detained, but said I had seen too much of their position to be allowed to return. I was sent to Jacobsdaal in the afternoon. After five days in the local jail I was blindfolded, mounted on my horse, and led by two despatch riders to a point some miles east of Honeynest kloof, where I was released, and made my way back to Modder River camp.—C. H. B.

field hospital site at 11 a.m. and they were at once started off carrying the wounded. The last of these bearers was off the ground by 12 noon, at which hour the advanced troops began to fall back on Modder River. Major W. H. Murray, in command of the Highland Brigade Field Hospital, thus described the removal of the last wounded: "Six men were told off to each stretcher, four carrying it while two acted as reliefs. As each hospital tent was emptied it was packed in the transport wagons, so that by the time the last tent was struck the hospital moved off. Ours was the last medical unit to leave the field, and during the time the stretchers were being loaded many shells from a Boer gun fell unpleasantly near, being, I think, aimed not at the hospital, but at some cavalry who would retire through the hospital camp. It was a long and weary tramp back to Modder River Camp, progress being necessarily slow, as the stretcher parties had to halt frequently and relieve one another. During the retirement the Boers sent several farewell shells after the squads, happily without any untoward result, though some of them fell disagreeably near."¹

During the retirement the rearguard was composed of the Cavalry, M.I., and G Battery, R.H.A., with some infantry. One man of G Battery, who received a serious shell wound, had to be carried by hand for about a mile, then the rearmost of the retiring ambulance wagons was overtaken, but only to find that there was no room for a lying-down case. The difficulty was overcome by unfastening the wagon tilt on either side, placing the stretcher transversely between the bales² with the ends projecting on either side and fixing it. The patient was secured to the stretcher by bandages hitched round his shoulders and ankles, and fastened to the handles of the stretcher.

The closing event of the action was a salvo of lyddite from the Howitzer Battery directed on Magersfontein Hill.

By 2 p.m. all the wounded had arrived at Modder River, and at 4 p.m. the rearguard was in camp.

¹ When out of range the bearers lagged a good deal and Surgeon Lieutenant-Colonel Magill and Major W. H. Murray themselves helped to carry the final stretchers.

² This is not desirable for general use, but in cases of emergency it might be possible to so carry five, or possibly six, lying-down cases. The objection to placing stretchers transversely is probably overrated. Projecting handles may be fouled by passing vehicles on narrow country roads, but this is an unlikely accident on open tracks; they do not project much further than the side rails of a G.S. wagon.—G. G. Delap.

EVENTS AT MODDER DURING THE ACTION.

When the troops marched out on December 10, the 9th Brigade Field Hospital took over all the sick—about 200—in the other field hospitals. These had not been disposed of when orders were received early on the 11th to prepare for the reception of a large number of wounded.

As the field hospital had already been encamped for a few days it was practically ready to meet the strain. Food and medical comforts were prepared, the operating tent pitched, and staff told off. As time passed wounded arrived, and it became necessary to make further preparation. When all the hospital tents had been pitched the neighbouring tents belonging to an infantry battalion, which had been left standing, were utilized; consequently it was possible to provide tent accommodation for the whole of the wounded. Some bales of blankets were found and made use of.

The first wounded arrived about 9 a.m. on the 11th; they came in slowly at first, but during the night of 11th-12th the arrival of ambulance and other wagons was incessant, and continued until the afternoon of the 12th. Over 600 were received altogether,¹ and all had to be fed, dressed and prepared for evacuation by rail.

There was no shortage of medical and surgical stores, as a reserve had been laid in by the hospital, and extra supplies had been wired for when troops moved out. The Supply Column was able to furnish all the requirements in the way of food and medical comforts.²

Numbers of the wounded on arrival at Modder River had been many hours without food, some were in a state of exhaustion and even if fit to rejoin their units they had to be fed by the field hospital. For the majority ration biscuits and corned beef alone were useless, and they had to be given beef tea, milk, arrowroot,³ &c. A reserve of these articles, which had been laid in by the field hospital, enabled sudden demands to be met and allowed time to obtain fresh supplies. As at Graspan, iron rails and coal from the

¹ The total wounded admitted to field hospitals numbered 685. On return to Modder River the Highland Brigade Field Hospital took in the last wounded that came in from the field, i.e., about 80 odd.

² A remonstrance arrived from someone in Cape Town that the three months' scale for the whole Division had been exceeded.

³ After Magersfontein the hospital always had a supply of oatmeal and tinned fowl.

railway were used in the kitchen, which had to be enlarged. Additional camp kettles were obtained from various sources. The ordinary pannikins without handles proved very inconvenient for giving hot liquids.¹

At first the disposal of dead was arranged for by the Field Hospital Quartermaster, who was directed by an officer Headquarters Staff to select a site for burial. On return of the troops this work was done regimentally. All funerals here were conducted by a chaplain.

In compliance with telegrams despatched to the Line of Communication, before the action, two ambulance trains—No. 2, Captain C. Fleming, R.A.M.C., and No. 3, Major M. W. Russell, R.A.M.C.—arrived at Modder² River at midnight on December 11-12.

No. 2 Train was loaded up during the early hours of the 12th with 130 wounded³—26 officers, 104 other ranks—and started at daybreak for Orange River. This train was blocked on the south side of the river, and did not get clear away till 9 a.m.

No. 3 Train left a little later for Orange River with 141, including one officer, returned to Modder River, and left again in the evening for Cape Town, with 96 wounded, 36 of whom were dropped at Orange River *en route*.

No. 2 Train also arrived back at Modder River at 6 p.m., and loaded up 104 less seriously wounded, with which it started for De Aar (70 miles south of Orange River) at daybreak on December 13.

Thus 471 of the 680 odd wounded had been despatched by rail or loaded ready to start by midnight on December 12-13.

On the 13th No. 2 Ambulance Train arrived at Modder River from De Aar at 11 p.m. and left on the 14th at 11 a.m. with 137 wounded, dropped 46 at Orange River, and went on to the Cape with the remaining 91.

At 2.30 p.m. the same day a train made up of ordinary passenger coaches left for Orange River with 24 wounded and 127 sick—total 151.

¹ Later enamelled mugs with handles were obtained from the Army Ordnance Department. These could be strung together and carried in sacks.

² The low-level deviation railway bridge (alongside the permanent bridge, in part destroyed by the enemy) was completed, and was in use from December 7, so these trains came up to the railway station platform, adjoining which was the site of the 9th Brigade Field Hospital.

³ Two men died *en route* to Orange River.

On the departure of this train—forty-eight hours after the return of the troops from the action—only ten wounded remained at Modder River out of the 685 admitted to the field hospitals, i.e., six cases of very serious fractures, and two very slight cases remained in the Highland Brigade Field Hospital, and two serious—operation—cases in the 9th Brigade Field Hospital.

TRANSFER OF SICK AND WOUNDED TO ORANGE RIVER.

From November 21 to December 14, about 1,430 sick and wounded—1,010 wounded, including 90 Boers, and 420 sick—were received at Orange River. They arrived there as follows: 170 on November 24, after Belmont, 107 on November 27, after Graspan, 436 on November 29, after Modder River, and 523 on December 12, 13 and 14, after Magersfontein. Smaller convoys, totalling 194, arrived on various dates.

Before the advance began the P.M.O. Field Force was told that Lord Methuen's Division would return immediately after the relief of Kimberley, and that the Orange River line of communication would be closed; consequently no arrangements were made to establish a stationary hospital or other line of communication medical unit north of De Aar. There were no local facilities for hospital improvisation at Orange River, where, in addition to the railway station, there were only a few small houses, and a store kept by the local tradesman. The half field hospital under Major H. P. Birch, and the field hospital under Major Greenway, which were left behind when the troops advanced, were augmented by Major Murray's field hospital which arrived on November 22 to join the Highland Brigade. These units, providing approximately a combined personnel of eleven officers, including two quartermasters, and about eighty-five other ranks, dealt with the sick and wounded from Belmont and Graspan.

On November 24, the day transfers from Belmont were received, Surgeon-General W. D. Wilson, P.M.O. Field Force, and Mr. G. H. Makins, Consulting Surgeon, arrived at Orange River. The Surgeon-General then seeing that the movement towards Kimberley was of a more serious character from a medical point of view than was at first anticipated, telegraphed for some of the Staff of No. 3 General Hospital to come up. Accordingly two officers with thirty-seven other ranks arrived just before the wounded from Modder River came down from the front on November 29.

It was the wounded from this fight that threw the greatest

strain on the medical resources at Orange River, but notice of their arrival was fortunately received in time to permit of all preparations possible being made. No 2 Ambulance Train had taken 92 of the wounded remaining from Belmont and Graspan to the Cape on November 28, and other patients fit to move were sent down to De Aar by ordinary trains. Ten large Ordnance Store marquees were pitched to supplement the field hospital tents; fatigue parties were detailed to be in readiness to assist in unloading the trains; buckets of water were provided at the station, and all officers of the garrison¹ were asked to send lanterns; occupants of verandahs and stoeps were directed to give them up. The trains conveying sick and wounded, 433 patients, arrived after dark. It was raining and unloading trains was difficult owing to want of sufficient lights. Three men died on the journey from Modder River, and a wounded Boer died while being carried from the train. "It was late at night before all were transferred to the tents. Very little could be done for them that night except to provide food, and even that was hardly touched as the men were so dog-tired that they only wanted to be let alone and to go to sleep."² "Only field medical equipment was available, and the wounded lay on the ground packed like herrings in a barrel; dressing them under those conditions was highly unsatisfactory."³ On the following day the Cape Medical Staff Corps Bearer Medical Company (for the Highland Brigade) arrived and helped the field hospitals. The medical personnel at Orange River when this unit came up was about 16 officers, and 170 other ranks. On the same day, November 30, No. 3 Ambulance Train took 115 of the wounded on to Cape Town, and on the next day No. 2 Train left with 116; No. 3 Train returned and left again on December 5 with 97. Thus within a week 328 wounded had been disposed of and happily the unfortunate conditions owing to want of sufficient hospital equipment were not unduly prolonged.

The two ambulance trains certainly saved the situation so far as Orange River was concerned, and but for the very efficient working and control of those units under the command of Major M. W. Russell and Captain C. C. Fleming, D.S.O., the rapid evacuation of the field hospitals, especially after the battle of Magersfontein, would have been impossible or could only have been carried out with great discomfort to the wounded.

¹ The Highland Brigade Staff with the Black Watch were at Orange River, also various details.

² Major W. H. Murray.

³ Major Coutts.

On December 2 and 3 the Highland Brigade Field Hospital and Bearer Company left for Modder River Camp. On December 4 the P.M.O. Field Force returned to Cape Town, and Lieutenant-Colonel W. Donovan, temporarily withdrawn from his duties as P.M.O. of the Cavalry Division, arrived to act as Administrative Medical Officer. Colonel Young, of the Red Cross Society, arrived about the same time with a supply of shirts, pyjamas and other articles which were very useful.

"Shortly before the action at Magersfontein a cypher telegram was received at Orange River warning the P.M.O. to 'look out for the 11th.' All possible tents, bedsteads, and stores of all kinds were at once commandeered and the local shop searched for anything useful. The Ordnance officer, anxious to help, had nothing to give, and in the ordinary course requisitions on Cape Town would not have been complied with for weeks. The local storekeeper offered to get up, at a price, some of the articles required. He did so and was paid many times their value, but at the time they were invaluable to the hospital. No. 3 Ambulance Train, which was about to proceed to Cape Town, and No. 2 Train, halting at De Aar, were ordered to proceed to Modder River on December 11. Some 500 sick and wounded were taken in immediately after Magersfontein, and those not discharged to duty locally were gradually transferred to the base. The wounded did remarkably well, considering the absence of all ordinary hospital conveniences."¹

The following is a note by Mr. Makins, who stayed at Orange River until December 19 :—

"There was plenty of food, also of dressings and drugs. There were practically no beds, a little hay was strewn on the ground covered with a mackintosh sheet and a grass pillow and a blanket were provided for each man. I did not consider that the men were uncomfortable on the ground.

"After Modder River the most unsatisfactory hospital was the one hastily improvised with ten commissariat marquees. These tents blew down the first night after they were erected, but were then fortunately empty. Later they were used and very densely filled. There were a lot of serious injuries of head and neck (ten), paraplegias (eight), wounds of belly (fifteen), wounds of chest, &c. There was almost entire absence of any basins or similar articles of hospital furniture. With the aid of the Red Cross commissioner

¹ Lieutenant-Colonel W. Donovan.

I arranged and furnished a small operating room at the station, and I had to lend people my small stock of utensils to aid in carrying out the ordinary dressings. On the second or third day after the Marquee Hospital came into use a very heavy shower swamped the ground on which it stood, and the patients had to be temporarily removed from the water. I do not think any one was the worse for this accident. The men were, however, fearfully crowded; there were not enough orderlies; it was exceedingly hot, dust blew, and the men got covered with a complete coating of mud. Major Coutts and I spent a good part of a day with sponges and water washing these men, to try and make them a little more comfortable.

"The Royal Engineers and Ordnance Department were very good about making splints and appliances for us; without them I do not know what we should have done to meet the requirements for such necessaries.

"There were only two special tents. In one all the belly wounds were placed for special observation and treatment; I think I had as many as fifteen at a time. These patients were watched till they were considered safe, and the last batch of them went down to Wynberg on December 5. I visited some of the ambulance trains as they went down and removed patients who seemed ill. One was an officer with wound of cæcum, the only intestinal wound that recovered after operation by me. I operated on four other cases, two Boers and two Englishmen, all four on the third or fourth day when they had already severe peritoneal infection, and all died. A stomach case lived about a week, but eventually died from subdiaphragmatic abscess.

"The other special tent I was very keen upon. A big boom was erected in the length of a marquee, and on either side men were arranged in rows with fractured femurs put up in Hodgen's splints. These fractures did well, only one died, whilst those sent direct to Wynberg did very badly.

"My criticism at the time I still hold to. The whole of our troubles depended upon the entire absence in the scheme of a proper 'stationary unit.' If the Marquee Hospital put up had been a segment of one of the general hospitals sent forward properly equipped the wounded could have been properly managed. As it was, the hospital (other than the field hospital) was purely and simply ten commissariat marquees. My view was that the general hospitals should be arranged in sections for this purpose. During my stay at Orange River I made one journey down to Cape Town

to ask that we might have some more satisfactory material sent up. After December 19 I remained for some three months as consultant at the base. My position then was a satisfactory one for a consulting surgeon, as I saw the cases when they came off the field and again at the base, and was often able to afford information and advice, since the whole course of the cases was familiar to me."

GENERAL NOTES SUPPLIED BY VARIOUS OFFICERS.

Captain J. W. H. Beach: (1) The regulation system of disposing of the arms, &c., of wounded brought to field hospitals was found unworkable. To a large extent the arms and equipment of the wounded became separated from the owners, the wounded often being brought in on one wagon and the articles on another at some other time. At Graspan, and more particularly at Magersfontein, wagon loads of arms and equipment were dumped down in the hospital, when the personnel was too much engaged with the wounded to spare time to make any attempt at sorting. As far as possible articles brought in with a wounded man accompanied him to a tent and when he was transferred towards the base. It was impracticable to make out pack store cheques—especially during the night. From Magersfontein numbers of wounded arrived at the 9th Brigade Field Hospital at Modder River in darkness, and many were transferred to ambulance trains at night, and moreover, sick convoys were arranged and despatched too hurriedly to admit of regulation being complied with. In compliance with divisional orders, units removed the arms, &c., which were of any use to them; the remainder were passed on in bulk to the Ordnance Department, who brought them on charge by certificate voucher.

(2) It would be a good rule that empty ambulance trains proceeding to the front should carry a reserve of surgical stores for urgent issue to any field hospital requiring it.

Captain S. Guise Moores: At Belmont, a man of the Scots Guards received a severe wound of the right arm above the elbow. The first field dressing was applied by a comrade, who also put on a pebble-handkerchief-stick tourniquet, which was twisted very tight. When the tourniquet was removed, not long afterwards, bullæ had already formed on the surface of the limb and gangrene set in. The wound was re-dressed and the man sent to the field hospital, but by the afternoon the gangrene had extended to a point near the insertion of the deltoid, necessitating amputation at the shoulder-joint. This case indicated the danger of improvised tourniquets applied by amateurs.

Captain J. E. Carter: After the actions at Modder River and Magersfontein many officers and men of Highland Regiments suffered from severe burns behind the knees, caused by exposure to the sun when lying

prone on the ground for many hours. The skin exposed between the bottom of the kilt and the top of the hose was in many cases badly injured; several men suffered from burns of the second degree. The condition can be avoided by turning up the top of the hose above the knee, but the unusual conditions under which fighting commenced often prevented that being done.

Lieutenant G. B. Crisp: At Voetpads Drift a wounded gunner rode up to me without help, though he had a fractured femur, the fracture being due to a gunshot wound somewhere near the middle of the thigh. One of my stretcher parties brought in a youngster belonging to one of the Guards regiments. He kept moaning and saying, "I have been shot in the back and the bullet is in my stomach, and I've been lying out on the ground all night." With great difficulty could I get him to let me move him at all. I saw there was no hole in his jacket except where a bullet had grazed his shoulder, and finally I found that he was not wounded at all, except for that slight graze. However, he could not be convinced of it. My theory was that when running he got the graze on his shoulder, which probably knocked him over and he thought a bullet had entered his body.

At Belmont I picked up a wounded Boer who had been shot through the knee. The bullet had drilled a clean round hole through the centre of the patella and had emerged exactly in the middle line behind. I had the man carried into a farmhouse near by and thought he would be no more use during the war. Much to my surprise when we took Boshof about four months later, a man who was attending to a lot of wounded Boers in there came up to me and asked me if I did not recognize him. He was my friend of Belmont walking about with a perfectly flexible knee, but he said he had had enough fighting and had donned the Red Cross.

Captain J. V. Forrest: After Graspan, a man, on patrol, was shot in the chest, through the pericardium. He subsequently recovered completely, and wrote of his friends saying that he was making a good thing out of going round the clinics of the hospitals in London.

APPENDIX A.

STATISTICS OF KILLED AND WOUNDED.

IN common with the available statistics of killed and wounded of most wars, no two accounts of the actions under discussion will be found to exactly agree as regards the total casualties or the proportion of killed to wounded. There are many causes of such discrepancies, but the two primary sources of variation are: (1) Slightly wounded reported on regimental and not on medical service returns, and (2) cases that die soon after admission to a medical unit, being entered in one return under "wounded" and in another under "killed."

The total casualties, proportion of killed, &c., in these actions are very completely analysed in Mr. G. H. Makins' book, "Surgical Experiences in South Africa, 1899-1900." The figures dealt with by him, which were supplied in the field soon after the actions were fought, differ very slightly from those in the tables below. The data for these tables have, however, been arrived at by a different method, having been extracted with great care and much labour by Mr. G. Biddiscombe, of the Medical Statistical Branch of the War Office, from the card index of all admissions to hospital during the South African War, and checked with all the available official returns or records of casualties. The particulars required to complete the final results of wounds as regards discharge to duty or discharge from the Service were supplied, in the case of the Royal Navy and Royal Marines, by Fleet-Surgeon Lawrence Smith, R.N., of the Admiralty, and in other instances, not shown in the hospital books, by various regimental record offices.

Tables I, II, and III explain themselves. Men returned as missing, of which there were very few, are excluded. The more correct method of stating the proportion of killed to wounded appears to be that which includes under "killed" moribund cases that die in the field hospitals within forty-eight hours of admission.

Mr. Makins, in his work mentioned above, page 15, says: "From the surgical point of view these men all received mortal injury, and are, therefore, properly included among the fatalities. Their inclusion, moreover, makes an appreciable difference in the percentage proportion of mortal injuries to wounds." In the Russo-Japanese War, 1904-1905, the Japanese returned such cases as "killed."¹

This method was not, however, adopted during the South African War. The total admissions during the whole war for wounds in action were 22,899, and the deaths in hospital from wounds 1,549, or 6.76 per cent of the admissions.² Taking the 3.4 percentage of wounded admitted who died in the field hospitals within forty-eight hours, in the total of the four actions given in Table I, as an approximate index of a probable constant, and deducting it from 6.76, we get a 3.3 death-rate from wounds for the whole war, or a close approach to the actual 4.1 percentage of deaths in hospital from the four actions, moribund cases excluded.

The percentage of deaths from wounds amongst admissions for wounds in the Japanese forces in Manchuria was at least 5.6, or possibly a higher figure, as that percentage is taken from a series of results which at the time they were obtained (1906) left 7.4 per cent of the wounded un-

¹ "Medical and Sanitary Reports from Officers attached to the Japanese Forces in the Field," General Staff, War Office, 1908, p. 308.

² War Office official figures.

TABLE II.—PERCENTAGE OF CASUALTIES AND PROPORTION OF KILLED TO WOUNDED, IF DEATHS WITHIN FORTY-EIGHT HOURS ARE ADDED TO KILLED ON THE FIELD.

	BELMONT			GRASPAN			MODDER RIVER			MAGRESFONSTEIN			TOTAL						
	Officers	Other ranks	Per cent	Officers	Other ranks	Per cent	Officers	Other ranks	Per cent	Officers	Other ranks	Per cent	Officers	Other ranks	Per cent				
	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total				
Total hit ..	28	270	298	9	176	185	4.0	23	460	483	4.7	66	795	861	7.5	1,227	1,701	1,827	5.2 of troops engaged
Killed ..	4	59	63	4	19	23	12.4	4	77	81	16.8	22	169	191	22.2	34	324	358	19.6 = 1
Wounded ..	24	211	235	5	157	162	87.6	19	383	402	83.2	44	626	670	77.8	92	1,377	1,469	80.4 = 4.1

TABLE III.—FINAL DISPOSAL OF WOUNDED ADMITTED TO FIELD HOSPITALS, EXCLUDING HOPELESS CASES THAT DIED WITHIN FORTY-EIGHT HOURS.

	BELMONT			GRASPAN			MODDER RIVER			MAGRESFONSTEIN			TOTAL						
	Officers	Other ranks	Per cent	Officers	Other ranks	Per cent	Officers	Other ranks	Per cent	Officers	Other ranks	Per cent	Officers	Other ranks	Per cent				
	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total				
Total cases ..	22	198	220	5	152	157	95.3	14	383	397	97.1	42	621	663	96.8	83	1,354	1,437	96.6
Returned to duty ..	20	153	173	5	131	136	86.6	14	305	319	80.4	40	499	539	81.3	79	1,088	1,167	81.2
Died ..	2	13	15	—	4	4	2.6	—	18	18	4.5	2	20	22	3.8	4	55	59	4.1
Invalidated as unfit for further service	—	32	32	—	17	17	10.8	—	60	60	15.1	—	102	102	15.4	—	211	211	14.7

accounted for.¹ It seems probable, therefore, that the case results of wounds were more favourable in the British forces during the South African War, and not the reverse, as previous figures may have led one to suppose.²

The ratio of killed to wounded—1 to 4·1—for the total of four actions given in Table II. has an interestingly close resemblance to the estimate made by Longmore, who, when summing up the ratios of killed and wounded in nearly fifty battles and wars up to 1871, wrote; "The mean ratio of the killed to the wounded will be found to be as 1 to 4·1; or, taking the aggregate numbers, the mean ratio of killed to wounded is 1 to 3·77. These ratios give nearly 20 killed and 80 wounded in every 100 casualties; and this, judging from experience gained down to the present time, may be regarded as the approximate average likely to be met with in battles."³

Table IV. shows the final disposal of the total wounded in the four actions compared with figures given for the Crimean War.

We have no information as to whether mortally wounded, not dying at once on the field, were returned as "wounded" or "killed" in the Crimea. Owing to the system of medical aid then in force it is not improbable that the majority of such cases were shown as "killed." We do not know, but giving the Crimean figures the benefit of the doubt by assuming that the death-rate of 15·41 per cent included all cases that were hopeless from a surgical point of view when they came under treatment, we find that the South African cases, from the actions specified, dealt with in a similar way give a death-rate of 7·33 per cent. As stated above, the death-rate from wounds for the whole war—22,899 wounded against 11,515 in the Crimea—was 6·76 per cent. The cause of the lower death-rate may lie between improved surgical knowledge and methods, more efficient medical organizations, change in weapons and conditions of fighting, as affecting severity of wounds, and possibly climate. The possible influence exerted by each of these factors is a point for speculative minds.

The relative reduction in the number of cases discharged as permanently unfit after the South African actions is no less remarkable. It is worth noting that while a much higher percentage of men rejoined the

¹ "Medical and Sanitary Reports from Officers attached to the Japanese Forces in the Field," General Staff, War Office, 1908, p. 305.

² In N. Kozlovski's article, translated by Major G. S. McLoughlin, D.S.O., *JOURNAL OF THE ROYAL ARMY MEDICAL CORPS*, vol. xviii, p. 344, the mortality from wounds in the Japanese Army, 1904-1905, is given as 6·58 per cent, and that in the Russian Army as 4·18 per cent.

³ "Gunshot Injuries," 1877, p. 591.

ranks after those actions, relatively fewer did so direct at the seat of war than in the Crimea. Nearly the whole of the cases sent home from the Crimea were eventually discharged as unfit for further service, but about two-thirds of those sent home from South Africa returned to duty. Was the transfer of such cases to England unavoidable? One of the reasons given for the high rate of invaliding to England was insufficient hospital accommodation at the Cape, and perhaps that factor had a legitimate influence during the early stages of the war.

TABLE IV.—ULTIMATE RESULTS OF WOUNDS INFLICTED.

	CRIMEA*		ACTIONS AT BELMONT, GRASPAN, MODDER RIVER AND MAGERSFONTEIN			
	No.	Per cent	Mortally wounded brought in to field hospitals included in admissions		Mortally wounded brought in to field hospitals excluded from admissions and included in killed	
			No.	Per cent	No.	Per cent
Number of wounded admitted into hospital	11,515	—	1,487	—	1,437	—
Died in field hospitals within 48 hours	1,758	15·27	109	7·33	50	3·36
Died in L. of C. hospitals ..			—	—	59	4·11
Discharged to duty at seat of war	6,439	55·91	764	51·38	764	53·17
Invalided to England	3,318	28·81	614	41·29†	614	42·72
Died on passage home	18	·11	Nil	Nil	Nil	Nil
Died in hospitals in England ..	4	·03	Nil	Nil	Nil	Nil
Discharged to duty in England ..	290	2·52	403	27·10	403	28·04
Discharged from the Service ..	3,011	26·15	211	14·19	211	14·68
Final disposal at seat of war and in England—						
Died	1,775	15·41	109	7·33	59	4·11
Discharged to duty	6,729	58·44	1,167	78·48	1,167	81·21
Discharged from the Service	3,011	26·15	211	14·19	211	14·68
Total	11,515	100·00	1,487	100·00	1,437	100·00

* Longmore's "Gunshot Injuries," pages 619-620, "formed from information in different parts of the official "Surgical History of the Crimean War."

† Of 22,899 admissions for wounds during the whole South African War, 7,417, or 32·39 per cent., were invalided to England or Colonies. The final disposal of these cases is not known.

Applying the rates per cent in the various categories under "final disposal" in the case of the Crimea to the four South African actions, the actual results in the latter, with respect to the total of 1,487 wounded, represent a gain over the Crimean results of:—

(a) One hundred and twenty lives saved.

(b) Two hundred and ninety-eight more men returned to duty.

(c) One hundred and seventy-eight less men discharged as permanently unfit.

As regards (c), 178 men discharged on account of wounds would cost the State approximately £5,000 per annum in wound pensions.¹

TABLE V.—SHOWING THE RATE OF RETURN TO THE FIELD OF MEN DISCHARGED TO DUTY IN SOUTH AFRICA.

	BELMONT		GRASPAN		MODDER RIVER		MAGERS-FONTEIN		TOTALS	
	To duty	Per cent	To duty	Per cent	To duty	Per cent	To duty	Per cent	To duty	Per cent
Percentage returned to duty in South Africa of total admissions, excluding those who died within forty-eight hours	46·8		61·1		52·1		54·0		53·2	
Period in hospital:—										
Under 1 week	12	11·7	7	7·3	31	15·0	38	10·6	88	11·5
Over 1 week and under 1 month..	68	66·0	38	39·6	89	43·0	158	44·1	353	46·2
" 1 month and under 2 months	17	16·5	23	24·0	71	34·3	117	32·7	228	29·9
" 2 " " 3 "	3	2·9	6	6·2	15	7·2	41	11·5	65	8·5
" 3 " " 4 "	—	—	2	2·1	1	·5	4	1·1	7	·9
" 4 " " 5 "	1	1·0	—	—	—	—	—	—	1	·1
Period undefined	2	1·9	20	20·8	—	—	—	—	22	2·9
Totals	103	100·0	96	100·0	207	103·0	358	100·0	764	100·0

Table V shows the rate of return to the field of men discharged to duty in South Africa.

Of 1,437 admitted during the four battles, *i.e.*, excluding those who died within forty-eight hours, 764, or 53·2 per cent, were returned to duty from hospitals in South Africa. The rate of return is shown in the Table; but if the total returning to the ranks is taken in relation to the total admissions, we find that:—

88, or 6·1 per cent had returned within one week.

441, or 30·7 per cent had returned within one month.

669, or 46·6 per cent had returned within two months.

22, or 1·5 per cent, returned at various periods unknown. These were mostly men of the Naval Brigade, of whom no records are available, but probably 19 of these, or 1·3 per cent., should be added to the above figures as having returned to the field within two months, bringing the total in that period up to 688, or 47·9 per cent of the total admissions.²

¹ Calculated from the actual amount paid in wound pensions per annum for four years to 100 average cases taken from the 211 men shown in the Table as discharged from the Service.

² Troussaint states that in the Russo-Japanese War 82 per cent of the Japanese wounded and 35 per cent of the Russian wounded had returned to duty in forty days. "La Direction du Service de Santé en Campagne," p 224.

Table VI is introduced to show the relatively high ratio of wounds of the lower extremity in the fights at Graspán and Belmont. In those actions the troops attacked upwards over rough rocky ground against the enemy posted on the top of the kopjes. The number of fractured thighs at the battle of Belmont was quite remarkable. Longmore pointed out that the legs and thighs of soldiers are not infrequently wounded by projectiles which have rebounded from hard ground or stones, and that the number of wounds, which might be expected from an estimate of the superficial area exposed to the direct shots of the enemy, in the lower extremities thus become increased. The only instance mentioned by Longmore in which the ratio of wounds of the lower extremity is higher than that of Graspán and Belmont is in connection with the battle of Tauberbischofsheim, in 1866, where, out of 297 wounds, the lower extremity ratio was 535.3 per 1000. That engagement was fought over ground presenting somewhat similar conditions. On the other hand, Longmore also pointed out the high proportion of wounds of the upper extremity in the New Zealand War and in the Ashanti War, 1873-74, where fighting took place through dense fern or bush which concealed the lower parts of the body. The very high proportion of wounds of the upper extremity, and the small figure for the lower extremity, in the case of Russian Army in Manchuria 1904-05 may be due to the operations of that army having been mostly of a defensive nature in which trenches protected the lower extremities.

TABLE VI.—TABLE SHOWING RELATIVE PROPORTION OF WOUNDS OF THE PRINCIPAL REGIONS OF THE BODY.

	Number of wounds specified	RATIO PER 1,000			
		Head, face, neck	Trunk	Upper extremity	Lower extremity
Average various wars up to 1870, in which fighting chiefly took place in the open field*	..	117.8	190.6	271.1	420.5
Crimea (British)*	7,525	215.0	153.6	298.6	332.8
New Zealand War*	463	144.7	198.7	343.4	313.2
Sedan (French)*	579	91.5	214.2	253.9	440.4
Belmont	202	153.0	144.0	218.0	485.0
Graspán	144	104.0	132.0	257.0	507.0
Modder River	354	99.0	153.0	318.0	430.0
Magersfontein	578	99.0	149.0	307.0	445.0
Last four actions combined ..	1,276	108.0	148.0	289.0	455.0
Russian Army, Manchuria, 1904-05†	151,944	151.0	175.0	377.0	297.0

* "Gunshot Injuries," Longmore, p. 600.

† N. Kozlovski: translation by Major G. S. McLoughlin, D.S.O., JOURNAL OF THE ROYAL ARMY MEDICAL CORPS, vol. xviii, p. 341.

Table VII shows the number of men admitted to hospital who received one, two, or more wounds and the regional distribution of the

TABLE VII.

Battle	Admitted to hospital	ONE WOUND																	TWO OR MORE WOUNDS, VARIOUS REGIONS					
		Head	Face	Neck	Chest	Abdomen	Back	Shoulder	Arm	Elbow	Forearm	Wrist	Hand	Buttock	Thigh	Knee	Leg	Ankle	Foot	Unclassified	2 wounds	3 wounds	4 or more	
Belmont ..	230	12	5	14	18	6	5	6	12	5	9	2	10	14	44	6	17	6	11	—	—	26	2	—
Graspan ..	163	11	2	2	5	12	2	7	18	2	4	—	6	2	25	5	26	2	13	—	18	1	—	
Modder River ..	409	20	7	8	15	19	20	31	35	11	14	2	19	20	39	14	32	10	37	1	49	5	1	
Magersfontein ..	685	31	13	13	34	26	26	43	57	6	22	7	42	18	87	19	66	14	53	1	90	16	1	
Totals ..	1,487	74	27	37	72	63	53	87	122	24	49	11	77	54	195	44	141	32	114	2	183	24	2	

		Percentage																						
1 wound		Head	Face	Neck	Chest	Abdomen	Back	Shoulder	Arm	Elbow	Forearm	Wrist	Hand	Buttock	Thigh	Knee	Leg	Ankle	Foot	Unclassified	2 wounds	3 wounds	4 or more	
Belmont ..	(202) 87.8	5.9	2.5	6.9	8.9	3.0	2.5	3.0	5.9	2.5	4.5	1.0	4.9	6.9	21.8	3.0	8.4	3.0	5.4	—	11.3	.9	—	
Graspan ..	(144) 88.3	7.6	1.4	1.4	3.5	8.3	1.4	4.8	12.5	1.4	2.8	—	4.2	1.4	17.4	3.5	18.0	1.4	9.0	—	11.1	.6	—	
Modder River ..	(354) 86.6	5.6	2.0	2.3	4.2	5.4	5.6	8.8	9.9	3.1	4.0	6	5.4	5.6	11.0	4.0	9.0	2.8	10.4	3	12.0	1.2	.2	
Magersfontein ..	(578) 84.4	5.4	2.2	2.2	5.9	4.5	4.5	7.4	9.9	1.0	3.8	1.2	7.3	3.1	15.1	3.3	11.4	2.4	9.2	2	13.1	2.3	.2	
Totals ..	(1,278) 86.0	5.8	2.1	2.9	5.6	4.9	4.1	6.8	9.6	1.9	3.8	.9	6.0	4.2	15.3	3.4	11.0	2.6	8.9	.2	12.3	1.6	.1	

single wounds only. The records do not contain sufficient information to permit of any classification into wounds of soft parts—fractures penetrating and non-penetrating, &c.

Perhaps the most interesting point in the table is the extraordinary similarity in the percentage of one, two, three and four or more wounds in the total to the figures given in the records of the Russian Red Cross Society's Hospital at Port Arthur.¹ Of 1,616 wounded patients treated in that hospital 85·3 per cent received one wound, 11·0 per cent two wounds, 1·9 three, and 1·8 four or more wounds. In the latter category there were patients with eight, nine, twelve, nineteen, twenty-seven and forty wounds.

TABLE VIII.—SICK TRANSFERRED TO THE LINE OF COMMUNICATION FROM LORD METHUEN'S FORCE DURING SIX WEEKS. DURING THE FIRST FOUR WEEKS THE FORCE WAS MARCHING AND FIGHTING, AND DURING THE LAST TWO WEEKS IT WAS IN CAMP AT MODDER RIVER.

Week ending :—	Nov. 24, 1899	Dec. 1, 1899	Dec. 8, 1899	Dec. 15, 1899	Dec. 22, 1899	Dec. 29, 1899
Average weekly strength ..	8,906	9,298	11,752	14,381	14,381	14,381
Total sick transferred during the week	82	89	112	260	33	97
Average daily	11·7	12·7	16·0	40·0	4·7	13·9
Percentage daily loss on total strength	·13	·14	·14	·28	·03	·09

APPENDIX B.

EXTRACTS FROM DESPATCHES AND OTHER DOCUMENTS RELATING TO THE MEDICAL SERVICE AND THE WOUNDED OF LORD METHUEN'S FORCE.

Despatches from Lieutenant-General Lord Methuen, *London Gazette*, January 26, 1900 :—

(1) Engagement at Belmont, November 23, 1899 :—

By 10.30 p.m. my Division was in camp; by 1 p.m. all my wounded were in a comfortable house being carefully tended; by 5 p.m. next day the hospital train conveyed the less severe cases to Orange River, the graver cases to Cape Town. This is the most perfect work I have ever heard of in war, and reflects the highest credit on Colonel Townsend.

(2) Engagement at Enslin, November 25, 1899 :—

I again draw attention to the exceptional organizing power of Colonel Townsend at Swinks Pan. At 11.30 p.m. I was informed that owing to all the ambulances having been used for taking

¹ Russo-Japanese War, Medical and Sanitary Reports from officers attached to the Japanese Forces in the Field, General Staff War Office, 1908, p. 281.

the wounded to the train at Belmont, I had scarcely a field hospital mounted officer, only three ambulances and three stretchers. I knew I had to fight next morning, so got together fifty blankets in order to carry wounded with help of rifles. I also sent to Colonel Townsend to make arrangements for wounded by 3 a.m., a messenger having to ride seven miles to him. He met me on the field with full supply of ambulances, and I never saw anything more of him or the wounded, because he had a train ready for them between Graspan and Belmont. His only complaint is that there is not much of his mules left, an observation which applies equally to men and animals.

(3) Action at Modder River :—

(a) Again I call attention to the splendid hospital arrangements, for at 4.45 p.m., on the day after the fight, all my wounded were on their way to Cape Town.

I am glad to have been slightly wounded, because in no other way could I have learnt the care taken of the wounded, and there was nothing officer or private soldier required that was not provided at once, and the medical officers never tired in their endeavour to alleviate suffering.

(b) Referring to Colonel A. Paget, commanding the 1st Scots Guards, Lord Methuen's despatch states: "He draws attention to Captain Moores, Royal Army Medical Corps, who, although wounded in the hand, said nothing, but continued his duties."

London Gazette, March 16, 1900: On the action at Magersfontein.

. . . . Major O'Donnell and Lieutenant Delap, Royal Army Medical Corps, were indefatigable in attending wounded under fire.

. . . . Corporal Bartlet, 2nd Battalion Coldstream Guards, under a very heavy fire, went 1,000 yards to get a stretcher for Major Milton.

. . . . Corporal Munro and Lieutenant Hore-Ruthven, of the Black Watch, carried the Marquis of Winchester out of action after he was hit.

. . . . No. 4050 Serjeant McDonald (Highland Light Infantry), gallant behaviour specially brought to notice for carrying messages to guns and to medical officer under heavy fire.

. . . . No. 3113 Corporal Shaul, Highland Light Infantry, brought to notice for several specific cases of bravery when in charge of the stretcher-bearers of the battalion.¹

. . . . Captain E. B. Towse² (Gordon Highlanders), recommended for special reward by his Commanding Officer for his gallantry and devotion in assisting the late Colonel Downman when mortally wounded in the retirement, and when close up to the front of the firing line. He endeavoured to carry Colonel Downman on his back, but finding this not

¹ V.C., *London Gazette*, September 28, 1900.

² V.C., *London Gazette*, July 6, 1900.

possible supported him till joined by Colour-Sergeant Nelson and Lance-Corporal Hodgson. The conduct of these non-commissioned officers is described as admirable.

. . . . Band-Sergeant Hoare (Seaforth Highlanders), conspicuous for his coolness and gallantry during the day in helping Dr. (Lieutenant) Ensor (R.A.M.C.) to succour wounded. Personally carried Captain Fetherstonhaugh (wounded) on his back, some 800 yards, to the dressing station.

. . . . Lieutenant Douglas, Royal Army Medical Corps, showed great gallantry and devotion, under a very severe fire, in advancing in the open and attending to Captain Gordon (Gordon Highlanders), who was wounded; also attending to Major Robinson and other wounded men under a fearful fire.¹

. . . . Captain A. Campbell, Argyll and Sutherland Highlanders, displayed great coolness throughout the day and helped to dress the wounds of Captain Gordon under a hot fire.

. . . . Private A. Bettington, Cape Mounted Rifles, attached to Cape Medical Corps, and Private Johnson, Argyll and Sutherland Highlanders, were instrumental in removing a wounded Highlander from the front under a heavy fire.

Despatches relating to the Naval Brigade under Lord Methuen's Command, up to the battle of Graspan, forwarded to the Admiralty by Rear-Admiral Sir Robert H. Harris, K.C.M.G., Commanding-in-Chief on the Cape of Good Hope and West Coast of Africa, were published in the *London Gazette* of the March 30, 1900.

Admiral Harris, in forwarding Captain Protheroe's despatch, said:—

"I am glad to say that the wounded officers and men are doing well; most excellent work is being done at the Naval Hospital, the medical officers of which derive great assistance from Mr. Elliott, torpedo gunner, who has the Röntgen apparatus. Captain Protheroe reported to me verbally that Fleet-Surgeon Porter, on the field of Graspan, was well up to the front with his bearers, and did very fine service for the wounded."

Extract from the report by Captain A. E. Marchant, R.M.L.I., who commanded the Naval Brigade at Graspan after Captain Protheroe was wounded:—

"Fleet-Surgeon James Porter, who was with the firing line, and

¹ Extract from the *London Gazette*, March 29, 1901: "The King has been graciously pleased to signify his intention to confer the decoration of the Victoria Cross on the undermentioned officer, whose claims have been submitted for His Majesty's approval, for his conspicuous bravery in South Africa, as stated against his name:—

"Lieutenant H. E. M. Douglas, Royal Army Medical Corps. On the 11th December, 1899, during the action at Magersfontein, Lieutenant Douglas showed great gallantry and devotion under a very severe fire in advancing in the open and attending to Captain Gordon, Gordon Highlanders, who was wounded, and also attending to Major Robinson and other wounded men under a fearful fire. Many similar acts of devotion and gallantry were performed by Lieutenant Douglas on the same day."

Surgeon Beadnell, with the guns, did excellent service under trying conditions, under fire nearly the whole time."

Extract from the report by Lieutenant F. W. Dean, R.N., who commanded the Naval guns on the left flank at Graspan:—

"On Friday night I found Surgeon Beadnell at Belmont Station; he had been invalidated by a Medical Board that day and was waiting for the hospital train. Though in bad health he gladly accepted my order to remain with the guns in view of the pending engagement, and on Saturday he rendered invaluable aid to our wounded, working close up to the guns, where shrapnel balls were showering every other minute.

The Report of the Royal Commission, presided over by Lord Justice The Right Honourable Sir Robert Romer, appointed to consider and report upon the care and treatment of the sick and wounded during the South African Campaign, referring to Lord Methuen's advance, pp. 19 and 20 states:—

" . . . It appears from the evidence of Surgeon-General Wilson that Lord Methuen's force was accompanied by the full complement of bearer companies and field hospitals, each with a complete equipment."

" . . . The manner in which the wounded were tended on the field and removed by the bearer companies was considered by the witnesses who gave information on this point to have been particularly good, and great credit is given to the Medical Officers attached to Lord Methuen's column."

" . . . On the whole we consider that the medical arrangements in connection with this advance were well devised and well carried out. There seems, however, to have been some delay in establishing stationary hospitals at Orange River and at Modder River. This was probably due to the fact that these hospitals had to be organized in South Africa. Still, there does not seem to have been any considerable degree of pressure, as, owing to the excellent service of the hospital and other trains, and the free power of evacuation which they afforded, the field hospitals were never during this advance used for purposes for which they were not intended. In this respect, Lord Methuen's advance had a great advantage over that of Lord Roberts, which, during the greater part of it, had no line of railway as a communication with the base, and where, accordingly, the field hospitals were of necessity for considerable periods used as fixed hospitals."

The German official account of the War in South Africa prepared in the Historical Section of the Great General Staff, Berlin, in commenting on the battle of Magersfontein, p. 120, says:—

"The splendid services of the Royal Army Medical Corps still remain to be noticed; the officers, non-commissioned officers, and bearers had traversed repeatedly, with the greatest coolness, the fire-swept zone, which was nearly a mile in depth. On December 11 they brought in, partly from the firing line, 500 wounded, dressed their wounds, and

brought them down to Modder River Station, whence they were evacuated by rail to Cape Town. In some isolated instances wounded men remained unseen in the bush, or lay helpless for more than twenty-four hours close in front of the Boer trenches, but the bearer companies were not to blame on this account, as the wounded in question had either not been noticed or else they were too far removed from help. Nor was it only in the British ranks that these men gave their services, for they did the same when asked by the enemy for aid."

Colonel Nicholas Senn, M.D., Ph.D., LL.D., Surgeon-General of Illinois, Chief of the Operating Staff with the Army in the Field during the Spanish-American War, Professor of Surgery, Rush Medical College, in a paper on the "First Dressing on the Battlefield," presented to the Military section of the Madrid International Medical Congress, p. 352, Volume xiii, *Journal of the Association of Military Surgeons, U.S.A.*, said: "At Magersfontein five hundred wounded were dressed on the field and transported to the rear during the heat of battle, exposed at a distance of a mile to the fire of the enemy, with results that will always be a credit to the Medical Service of the British Army."

The Officers of the German Army Medical Service who had been attached to the Guards Field Hospital wrote, on February 20, 1900, to Surgeon-Lieutenant-Colonel Magill:—

"As we are about to leave this country, going home, we would like, for the present, to say good-bye to you and once more to thank you for all the kindness you have shown us. If our stay there has been a profitable and a pleasant one, this is due to the spirit of good comradeship with which the English Medical Officers have on every instance received us.

"But most of all it came out in the time of closer intercourse that we spent attached to your hospital, which we shall always cherish as one of the most interesting and pleasant periods we spent out here.

"We wish that the Royal Army Medical Corps may further on show itself the efficient and well-organized Corps it has proved itself up to now, and for which we offer our most hearty congratulations."

APPENDIX C.

STAFF AND REGIMENTAL UNITS UNDER THE COMMAND OF LIEUTENANT-GENERAL LORD METHUEN, K.C.V.O., C.B., C.M.G., DURING THE ADVANCE ON KIMBERLEY, BETWEEN NOVEMBER 21 AND DECEMBER 12, 1899, WITH THE NAMES OF MEDICAL OFFICERS ATTACHED OR ALLOTTED.

*Head-Quarters First Division
First Army Corps*

Colonel E. Townsend, C.B. (1), P.M.O.
Major C. H. Burtchaell, Medical Officer and
Secretary to P.M.O.

Naval Brigade.
(Captain R. C. Protheroe, R.N.,
wounded at Graspan, and replaced by
Captain Bearcroft, R.N.)

Fleet-Surgeon J. Porter, H.M.S. "Doris" (2).
Surgeon C. M. Beaduell, H.M.S. "Power-
ful" (3).
Surgeon E. P. Mourilyan, H.M.S. "Doris" (4).

Mounted Troops.

9th Lancers	Captain J. V. Forrest.*
12th Lancers	Major T. J. O'Donnell† (5).
G. Battery R.H.A.	Lieutenant G. G. Delap.*†
Mounted Infantry (Northumberland)	Lieutenant R. S. Rodger (6) (replaced by
Fusiliers Loyal N. Lances Regt. and	Lieutenant J. E. Hodgson at Modder
King's Own Yorks Lt. Inf.)	River).
New South Wales Lancers	
Rimington's Guides	

Royal Field Artillery.

Brgde. Div. R.F.A. (Lt.-Col. F. H. Hall)	
18th, 62nd, 75th Field Batteries	Major H. L. Battersby (7).
65th (Howitzer) Battery	

Royal Engineers.

(Lieut.-Colonel J. B. Sharpe)	
7th and 11th Field Companies	Lieutenant A. Chopping.*
8th Railway Company	
30th Fortress Company	

Field Hospital Divisional Troops.

No. 3 Field Hospital (No. 8 Company	Major S. C. B. Robinson (8).
R.A.M.C., N.E. District, York)	„ H. J. Peard (9).
	Lieutenant N. J. C. Rutherford.*
	„ H. D. Packer.*
	Qmr. and Hon. Lt. J. C. B. Whitehorn (10).

1st (Guards) Brigade.

(Major-General Sir H. E. Colvile, K.C.M.G., C.B.).

3rd Batt. Grenadier Guards	Captain C. W. Profeit.*
1st Batt. Coldstream Guards	„ A. W. Hooper.*†
2nd Batt. Coldstream Guards	„ A. F. Heaton (11).
1st Batt. Scots Guards	„ S. G. Moores (12).

No. 1 Bearer Company.

18th Company R.A.M.C. Home District	Major H. J. R. Moberly (13).
	Captain T. B. Beach (14).
	Lieutenant J. E. Hodgson.* (Replaced at
	Modder River by Civil Surgeon J. G.
	Croghan).

No. 1 Field Hospital.

18th Company R.A.M.C. Home District	Surg. Lt.-Col. J. Magill (15), Cold. Guards.
	Surg.-Major E. N. Sheldrake (16), Gren. Gds.
	„ W. R. Crooke Lawless (17),
	Coldstream Guards.
	„ W. C. Beevor (18), Scots Gds.
	Qmr. and Hon. Captain T. Phillips (19).
	Attached during action at Magersfontein:—
	Stabsarzt Dr. Schmidt, Royal Prussian
	Garde—Füsilier Regiment.
	Stabsarzt Dr. Krummacher, Kaiser Wil-
	helm Academie.

3rd (Highland) Brigade.

Major-General A. G. Wauchope, C.B., C.M.G.

2nd Batt. R. Highlanders	Lieutenant H. E. M. Douglas*† (20).
1st Batt. Highland L.I.	„ T. C. Mackenzie.*†
2nd Batt. Seaforth Highlanders	„ H. Ensor.*†
1st Batt. Argyll and Sutherland Highlndrs.	Captain J. E. Carter.* (21)
1st Batt. Gordon Highlanders	„ P. J. Probyn.*†

Bearer Company.

„ A ” Company Cape Medical Staff Corps	Lieut.-Col. E. B. Hartley, V.C. (22) (Cape
	M. Rifles).
	Lieutenant Spencer, C.M.S.C.
	„ Temple Smyth, C.M.S.C.
	Qmr. M. Varder, C.M.S.C.

<i>Field Hospital.</i>	
No. 3 Company R.A.M.C., Aldershot (mobilised as Divisional Field Hospital, 2nd Division)	Major H. W. Murray (8). " G. Coutts (7). Lieutenant G. H. Goddard* (21). " R. A. Cunningham.* Qmr. and Hon. Lt. A. Finlay (23).
<i>9th Infantry Brigade.</i>	
(Major-General R. S. R. Fetherstonhaugh wounded at Belmont and replaced by Major-General R. Pole-Carew).	
1st Batt. Northumberland Fusiliers	Captain D. D. Shanahan* (24).
Half Batt. 1st Loyal N. Lanc. Regiment	Lieutenant W. Jagger (25).
2nd Batt. Northamptonshire Regiment	" E. L. Munn (26).
2nd Batt. King's Own Yorkshire	Captain G. B. Crisp.*
Light Infantry (2 Coys. Royal Munster Fusiliers attached at Belmont)	
<i>No. 3 Bearer Company.</i>	
No. 1 Company R.A.M.C., Aldershot, (mobilised as the 3rd Highland Brigade Bearer Company)	Major R. G. Hanley (27). Captain C. W. R. Healey (28). Lieutenant M. H. G. Fell.*
<i>No. 7 Field Hospital.</i>	
No. 19 Company R.A.M.C., Chester (mobilised as Divisional Field Hospital, 1st Division).	Major F. A. Harris (29). " R. P. Bond (7). Captain J. C. Jameson.* Qmr. and Hon. Lt. J. W. H. Beach (30).
* Now Major.	† D.S.O.

- (1) Now Surgeon-General Sir E. Townsend, K.C.B., C.M.G., retired pay.
- (2) Now Surgeon-General (with the relative rank of Vice-Admiral) Sir J. Porter, K.C.B., K.H.P., Director-General of the Medical Department of the Navy.
- (3) Now Fleet-Surgeon.
- (4) Now Deputy Inspector-General of Hospitals, retired list.
- (5) Now Colonel, Assistant Director Medical Service, Tidworth.
- (6) Afterwards Captain, Reserve of Officers.
- (7) Now Lieutenant-Colonel, Retired pay.
- (8) Now Colonel, retired pay.
- (9) Afterwards Lieutenant-Colonel, died at Middleburg, Cape Colony, August 18, 1903.
- (10) Now Honorary Captain, retired.
- (11) Now Captain, Reserve of Officers, Royal Army Medical Corps.
- (12) { Promoted Major for distinguished service.
- (12) { Now Lieutenant-Colonel. Wounded at Modder River November 28, 1899.
- (13) Afterwards Colonel. Died in London February 9, 1912, when on retired pay.
- (14) { Promoted Major for distinguished service.
- (14) { Now Lieutenant-Colonel.
- (15) Now Colonel, C.B., retired pay.
- (16) Now Surgeon Lieutenant-Colonel, Reserve of Officers, Grenadier Guards.
- (17) Now Surgeon Lieutenant-Colonel Sir W. R. Crooke Lawless, Kt., C.I.E. Reserve of Officers, Coldstream Guards.
- (18) Now Lieutenant-Colonel, C.M.G., Royal Army Medical Corps.
- (19) Now Honorary Major, retired pay.
- (20) V.C. Wounded at Magersfontein December 11, 1899.
- (21) Severely wounded at Paardeburg February 18, 1900.
- (22) Now Colonel, retired, late Principal Medical Officer Cape Colony Forces.
- (23) Afterwards Honorary Captain. Died at Perth, Western Australia, on April 20, 1910.
- (24) { Promoted Brevet-Major for distinguished service.
- (24) { Severely wounded near Kleinfontein October 24, 1901.
- (25) Afterwards Captain. Resigned his Commission November 22, 1902.
- (26) Wounded at Belmont November 23, 1899. Died at Boshof, Orange Free State, May 23, 1900.
- (27) Afterwards Lieutenant-Colonel. Died at Bloemfontein, January 29, 1912.
- (28) { Promoted Major for distinguished service.
- (28) { Now Lieutenant-Colonel.
- (29) Afterwards Lieutenant-Colonel. Died at Bletchingley, Surrey, September 27, 1906.
- (30) Now Honorary Major.

The first part of the book is devoted to a general introduction to the subject of the history of the United States. It covers the period from the discovery of the continent to the present time. The author discusses the various factors that have influenced the development of the country, including the role of the different states, the influence of foreign powers, and the impact of the American Revolution.

The second part of the book is a detailed account of the American Revolution. It begins with the outbreak of hostilities in 1775 and follows the course of the war through the decisive battles of the Yorktown campaign. The author provides a clear and concise summary of the events, highlighting the key moments and the contributions of the various leaders of the revolution.

The third part of the book is a study of the early years of the new nation. It examines the challenges faced by the young republic as it sought to establish a stable government and a strong economy. The author discusses the role of the Constitution and the early presidents, as well as the development of the federal system and the growth of the nation's territory.

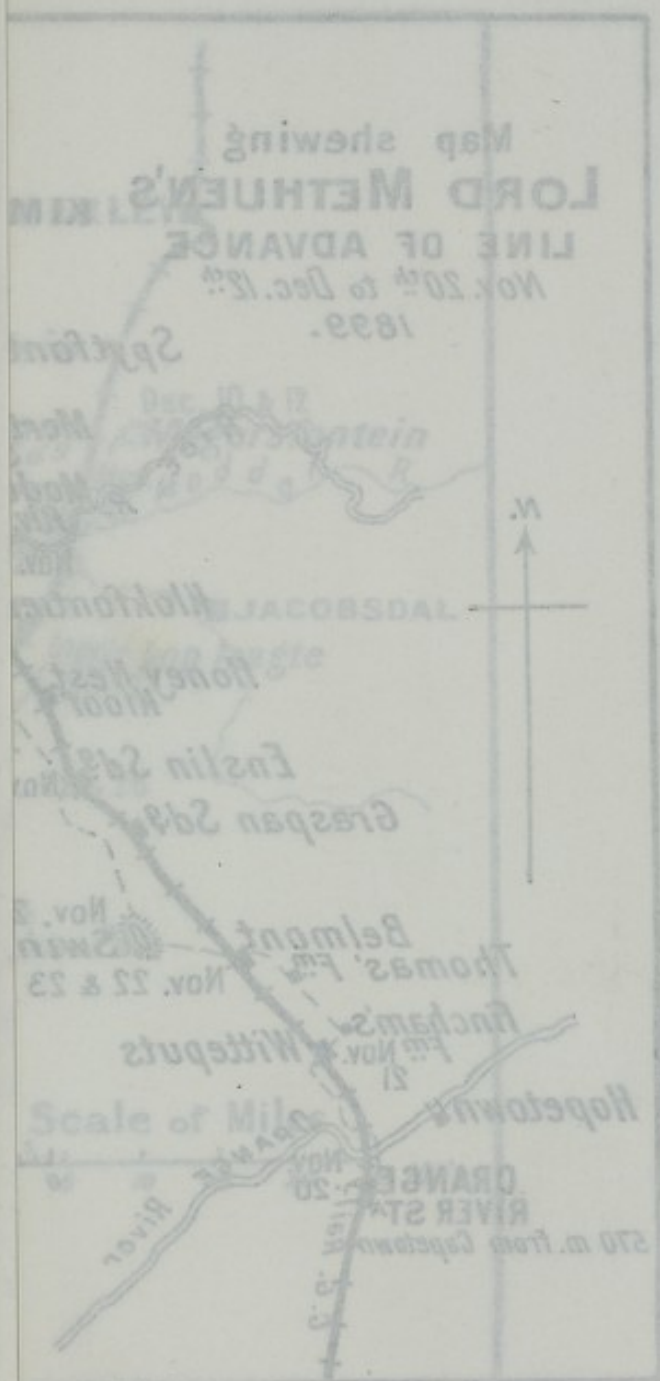
The fourth part of the book is a history of the United States from the end of the American Revolution to the present. It covers the period of the early republic, the expansion of the nation, the Civil War, and the Reconstruction era. The author provides a comprehensive overview of the major events and trends of this period, including the rise of industrialization, the growth of the middle class, and the emergence of the United States as a world power.

The fifth part of the book is a study of the United States in the twentieth century. It examines the country's role in the world during the two world wars, the rise of the Cold War, and the social and economic changes of the post-war period. The author discusses the impact of the New Deal, the rise of the civil rights movement, and the challenges of the Vietnam War.

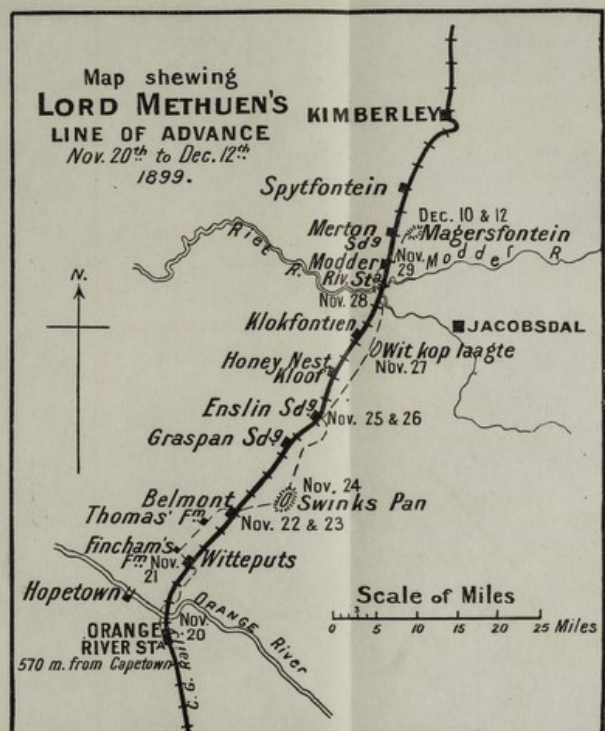
The sixth part of the book is a study of the United States in the twenty-first century. It examines the country's role in the world during the post-9/11 era, the rise of the digital age, and the challenges of globalization. The author discusses the impact of the 2008 financial crisis, the rise of the Tea Party movement, and the challenges of climate change.

The book concludes with a final chapter on the future of the United States. The author discusses the challenges that the country will face in the coming decades, including the impact of technological change, the challenges of a globalized world, and the need for a renewed sense of national purpose.

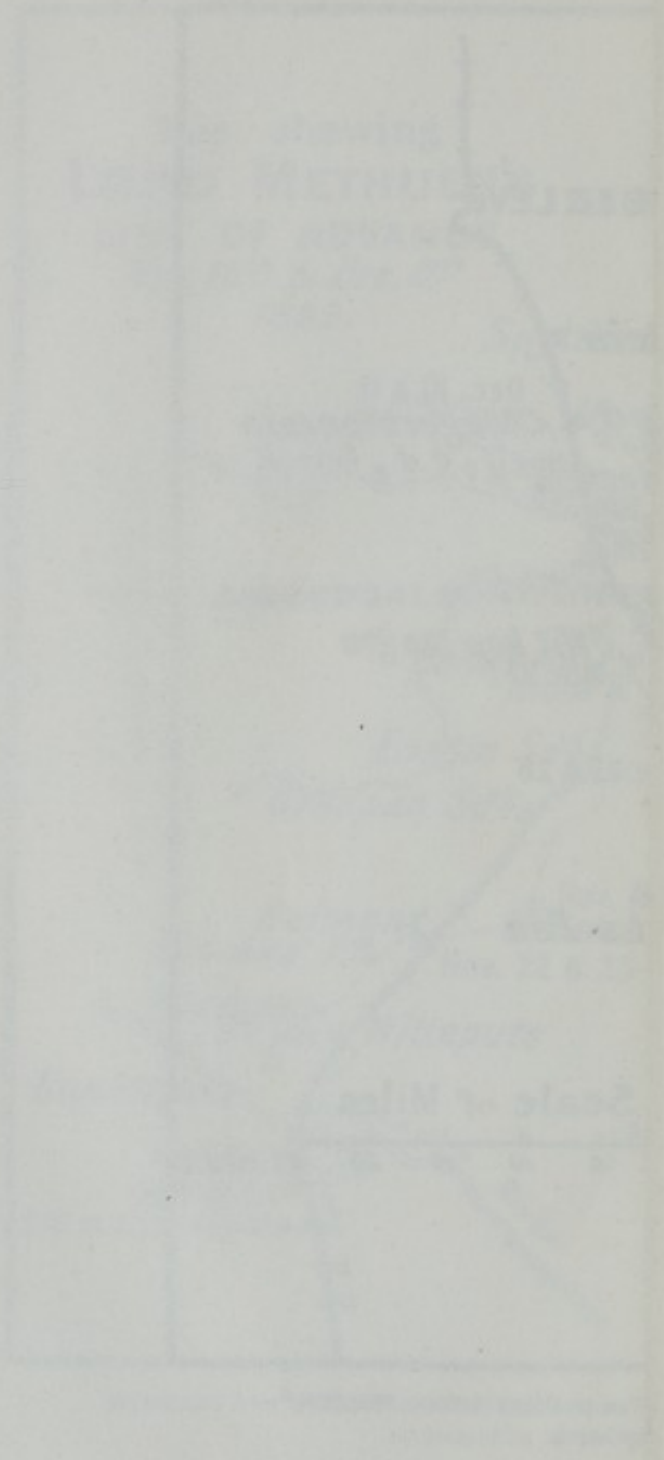
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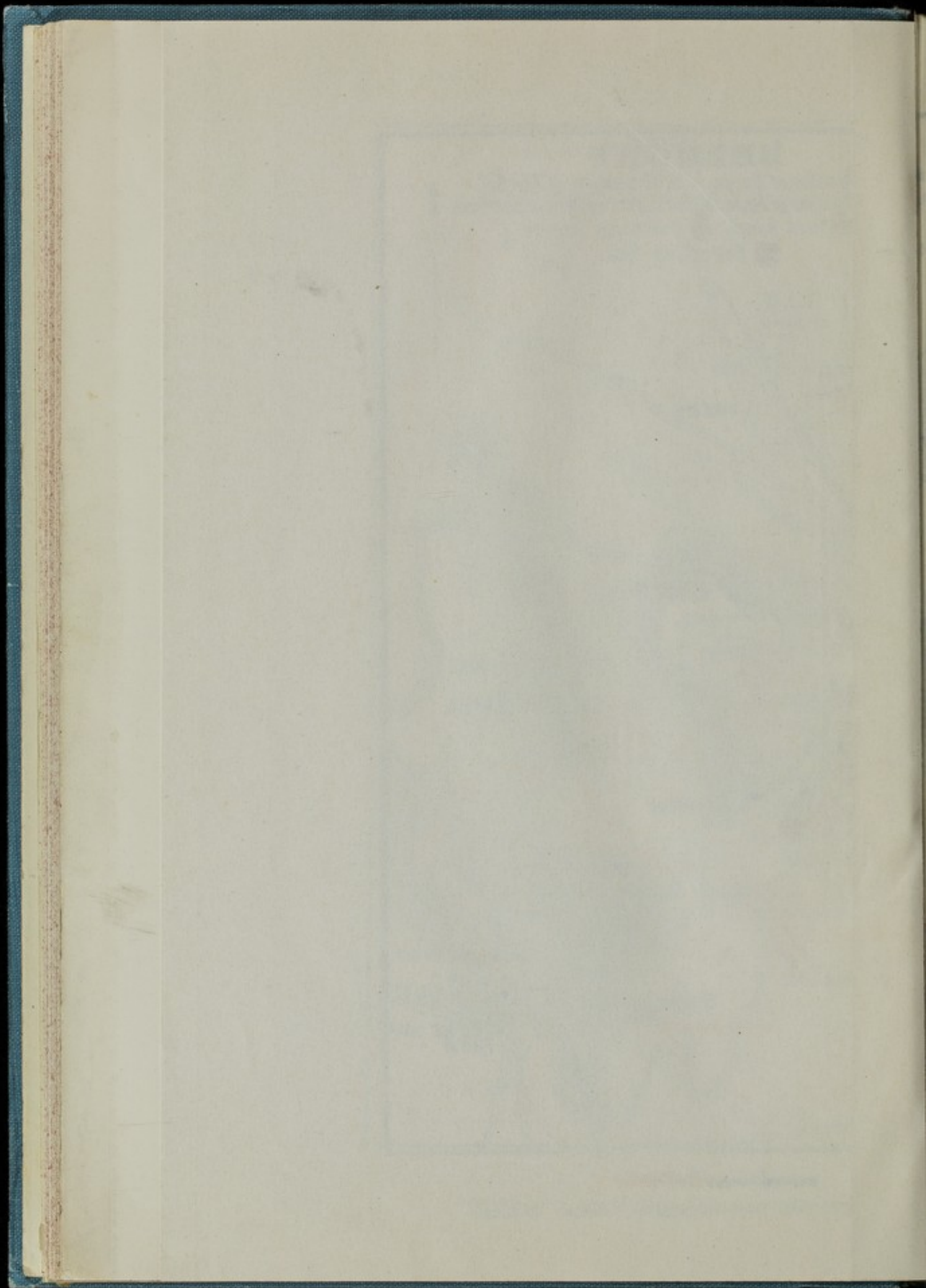


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GRASPAN

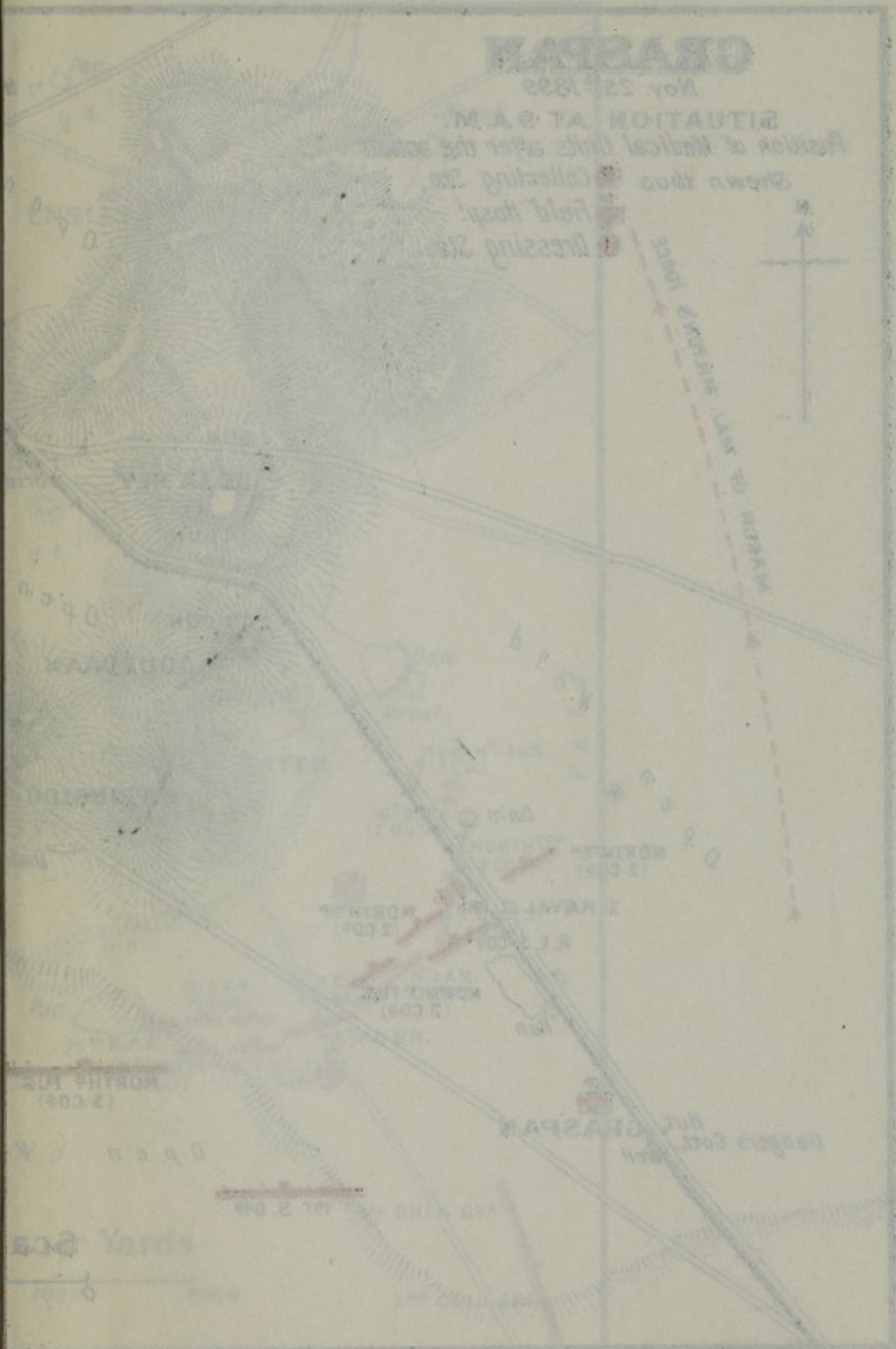
Nov. 25, 1899

SITUATION AT 9 A.M.

Position of medical units after the action
shown thus:
Collecting Sta.
Field Hosp.
Dressing Sta.



FORCE
MARCH TO WATER

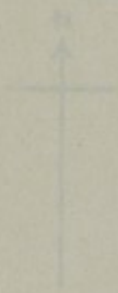


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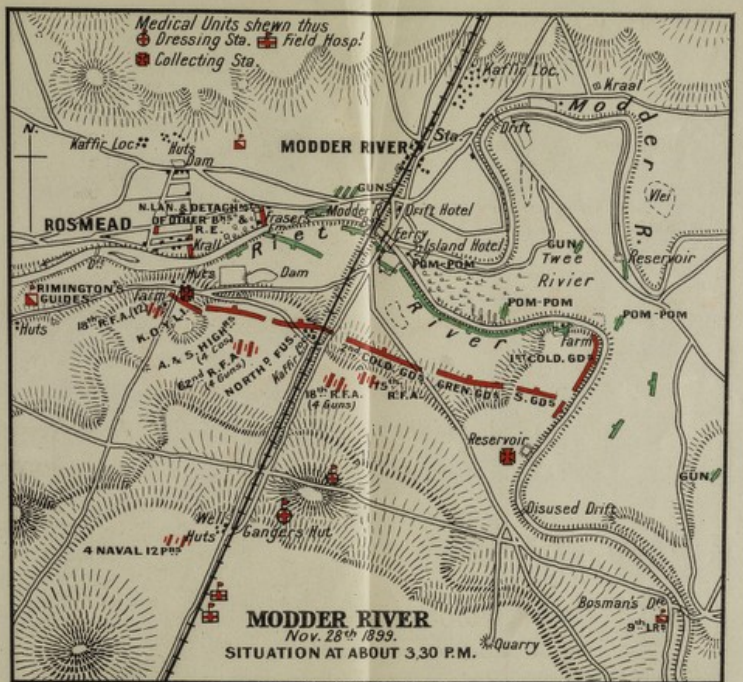


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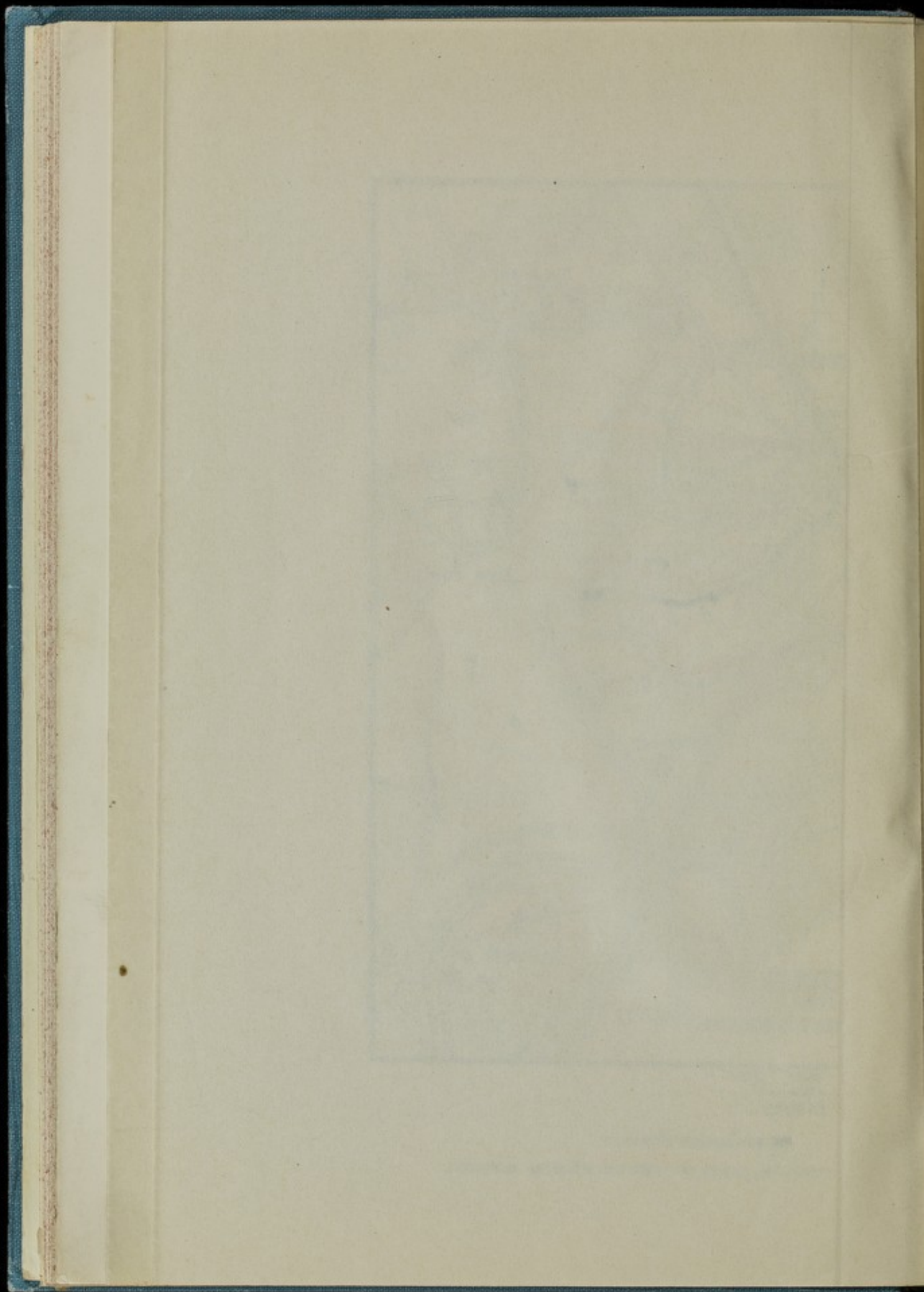


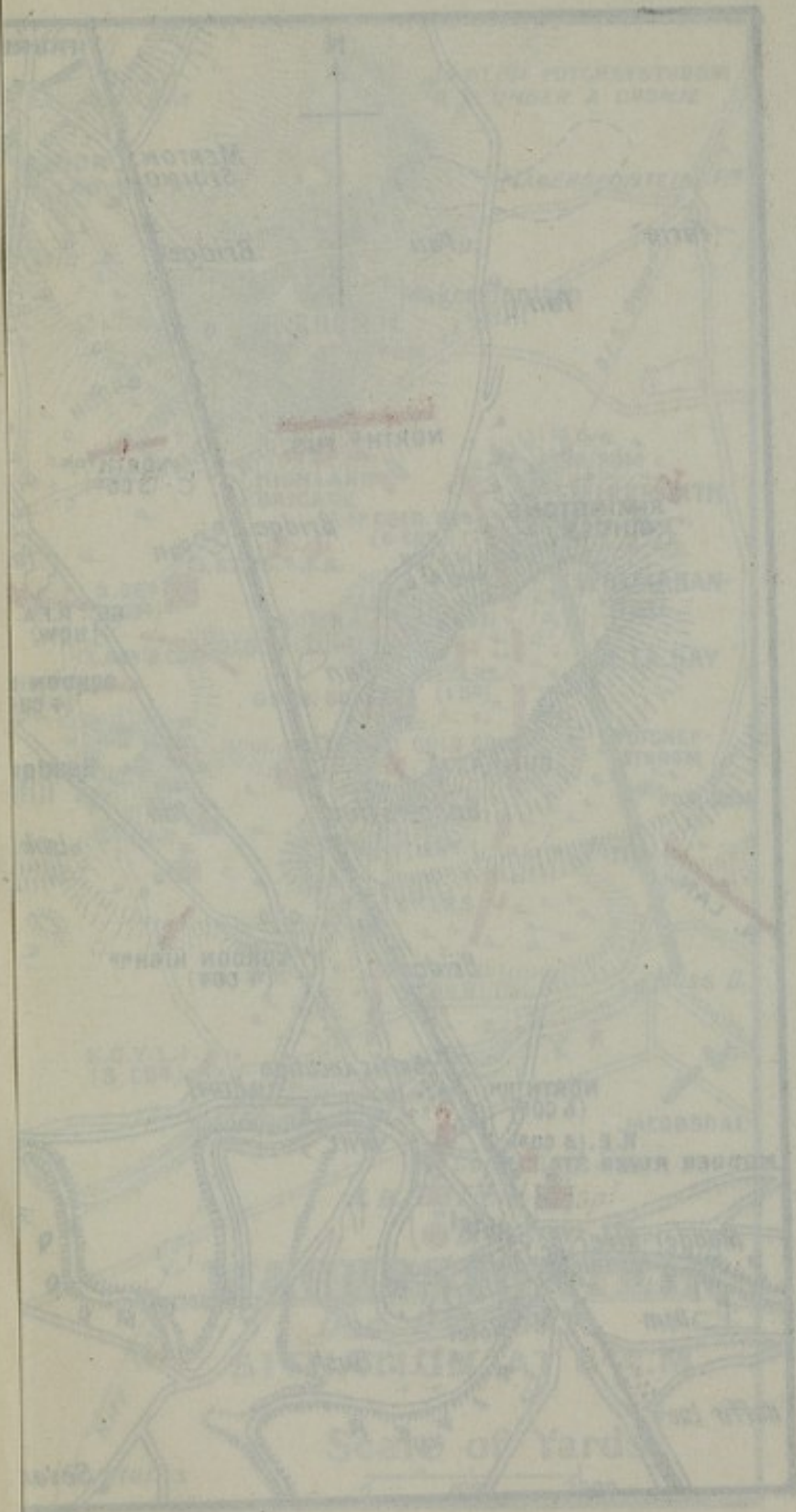


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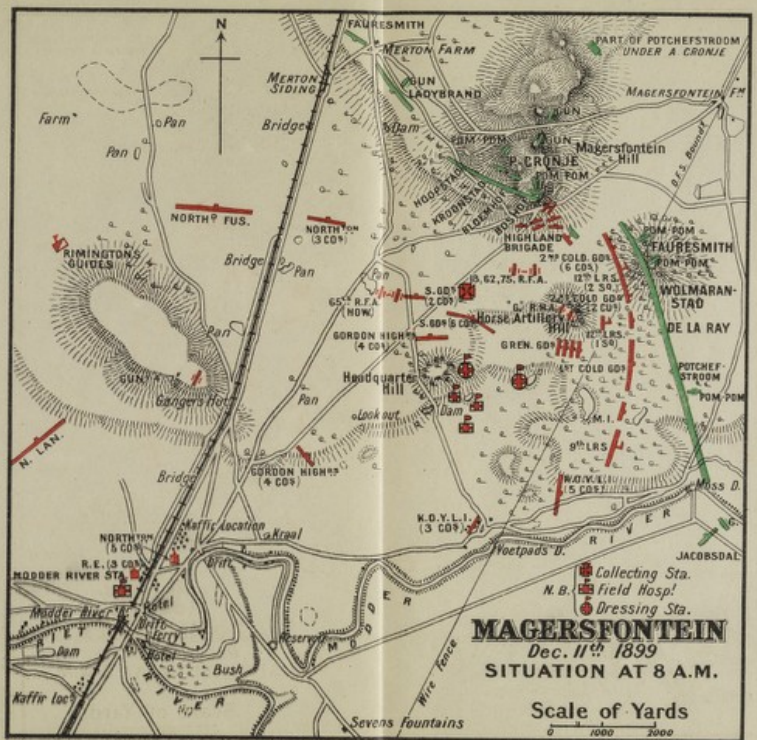


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