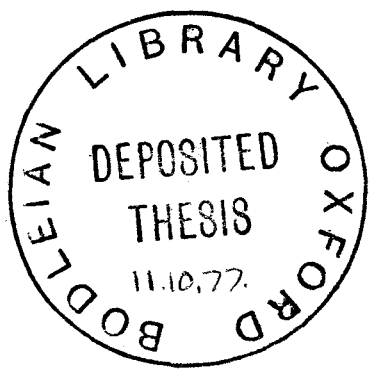
THE SUPPLY SERVICES OF THE BRITISH ARMY IN THE SOUTH AFRICAN WAR 1899-1902

Andrew Page



A thesis submitted to the Faculty of Modern History
University of Oxford
for the Degree of Doctor of Philosophy

London 1976 [D 1977]HT

Abstract

The purpose of this study is to analyse the methods and results of the supply services of the British army in the South African war. The study will consider both the preparations made for the war and the changes made after it and covers administration both in the War Office and with the army in the field. It tries to show how the complex task of moving the army and providing it with the transport, arms, stores, food and animals needed to keep it effective was performed, and to what extent the material provided met the needs of the army both in quality and in quantity.

The subject is an important one for two reasons. Firstly the supply of the army in the field is basic to any military operation. In many of the colonial campaigns of the British army in the nineteenth century the problems of logistics were the most important that commanders had to face. If they were successfully solved the strategic, and still more the tactical, problems were often relatively simple. The South African war, though it also posed new strategical and tactical problems, made extreme demands on the supply services because of the combination of unusual difficulties. The size of the force, the extent of the area of operations, the distance from the home base and the duration of the campaign were all much greater than in any conflict since the Napoleonic wars. It is thus particularly suitable for this type of study. Secondly the South African was was the first major conflict for the British army for half a century, and the last before the First World War. It was, therefore, largely the experience of South Africa that determined the organisation and equipment of the British army in 1914.

Despite this the supply services of the army, either in South Africa or in other colonial campaigns, have not been much studied in modern works. They are frequently ignored altogether or briefly noticed when something went seriously wrong. The last works to consider the questions at any length were the Times History of the war and the Official History of the war, both published before 1910. Neither sought to consider the supply services in the political and commercial context which seriously affected their administration. Numerous collections of private and official papers have since become available making a fresh look at the question both possible and desirable.

This study begins by considering the state of the War Office and the supply departments before the war and their attempts to prepare for a war in South Africa. It seeks to show how personal, political and organisational difficulties combined to prevent the War Office from making adequate preparations for the conflict despite the frequent warnings that such a conflict was coming.

The efforts of the various departments of the army during the war itself are then discussed. Separate sections deal with shipping, railways, road transport, ordnance stores, food supplies and remounts. They show how each department tried to deal with the problems it faced and the impact made by individual officers connected with the administration. The degree of success each department had in meeting the needs of the army is assessed and the study illustrates the method of working of the army and the War Office during war.

No attempt has been made to give an account of the course of the war, which is sufficiently well known. The specialist

corps, the engineers, signallers, and the medical and veterinary departments are also outside the scope of this work because the problems they present are largely self contained and separate from the questions considered here. However, where the role of these corps impinges significantly on the administration of the departments under consideration, as, for example, the close connection between the veterinary and remount departments, the relationship has been fully discussed.

Finally the administration of the supply services as a whole is reviewed. An account is given of the reform of the War Office in the aftermath of the war and the lessons taught by the war on both organisation and material are considered.

The main sources for this study are the voluminous War Office records at the Public Record Office and the private papers of the leading soldiers and politicians, including all three Commanders in Chief in South Africa among the soldiers, and Arthur Balfour, St.John Brodrick (Secretary of State for War 1900-1903) and Sir Michael Hicks Beach (Chancellor of the Exchequer 1895-1902) among the politicians. There were a number of Royal Commissions, Committees and Courts of Inquiry into various aspects of the war and the evidence presented to them is also a valuable source. Colonial Office records have been consulted and a number of South African archives shed useful light on the question. The only serious gap in sources is the continuing unavailability of the papers of Lord Lansdowne, Secretary of State for War from 1895-1900, until a biography for which they are being used is completed. However, the gap is partly covered by the appearance of many of his papers in the collection of Cabinet Memoranda at the

Public Record Office and by his testimony before the Royal Commission on the war in South Africa. He was questioned for two days by the Commission and his evidence covers 78 closely printed columns. His letters also appear in the other political collections mentioned. It is not thought likely that material in the Lansdowne papers would significantly alter the conclusions of this study.

Acknowledgements

I wish to thank the librarians and archivists at the following institutions for their help and co-operation: the British Museum, London; the County Record Office, Gloucester; Hove Central Library; the Ogilby Trust, London; the Public Record Office, London; the Cape Province Archives, Cape Town; the Natal Archives, Pietermaritzburg; the Orange Free State Archives, Bloemfontein; South Africa National War Museum; Transvaal Archives, Pretoria; and the University of the Witwatersrand, Johannesburg.

I am most grateful to the Trustees of the Sir Henry Strakosch Memorial Trust for the generous Fellowship which enabled me to travel to South Africa in 1972. I should also like to thank Mr G.H.Le May of Worcester College, Oxford who first drew my attention to the Trust. My time in South Africa was made both more pleasant and more profitable by the unstinting help I was offered by Professor Carson of the University of the Witwatersrand and by Dr Burridge Spies and Professor C.J.Barnard of the University of South Africa. Their advice on the documents available in South Africa was extremely valuable.

I am also most grateful to Professor M.H.Gibbs of All Souls College, Oxford who has supervised my work. His advice on sources, encouragement and comments and suggestions on my work have been invaluable. I am also extremely grateful for his remarkable patience in the face of my continuing inability to complete work in the time I had forecast.

Finally I should like to thank Miss Nancy Auckland for all her work in typing the thesis and Miss Caroline Robinson for her help in preparing the maps.

Abbreviations

AAG	Assistant Adjutant General
ADR	Assistant Director of Railways
AIR	Assistant Inspector of Remounts
AQMG	Assistant Quartermaster General
ASC	Army Service Corps
C.in C.	Commander in Chief
CGR	Cape Government Railway
CCO	Chief Ordnance Officer
CRE	Commander, Royal Engineers
CSCF	Chief Superintendent Ordnance Factories
DAAG	Deputy Assistant Adjutant General
DAC	Director of Army Contracts
DADR	Deputy Assistant Director of Railways
DAG	Deputy Adjutant General
DAQMG	Deputy Assistant Quartermaster General
DGO	Director General of Ordnance
DGOF	Director General of Ordnance Factories
DMI	Director of Military Intelligence
GOC	General Officer Commanding
GS	General Service
ID	Intelligence Department
IGF	Inspector General of Fortifications
IGR	Inspector General of Remounts
IMR	Imperial Military Railways
IY	Imperial Yeomanry
MI	Mounted Infantry
NGR	Natal Government Railway
OFS	Orange Free State
POO	Principal Ordnance Officer
PUS	Permanent Under Secretary
QF	Quick Firing
QMG	Quartermaster General
RD	Remount Department
RSO	Railway Staff Officer
SAA	Small Arms Ammunition
SAR	South African Republic

Note on terminology

On 28 May 1900 the Orange Free State was formally annexed and renamed the Orange River Colony. Similarly on 1 September 1900 the annexation of the South African Republic was proclaimed and it was renamed the Transvaal Colony. When referring to these areas I have called them the Orange Free State and the Transvaal respectively because these names are the ones by which they are best known. These names are used regardless of whether the discussion concerns a time before or after annexation. However, where I have referred to the action of the governors of the Dutch states I have used the title of the country at the time of the incident referred to.

The senior General Officer in Cape Colony was at various times before and during the war known as the GOC Cape Colony, the GOC South Africa and the GOC Line of Communications depending on what other forces and officers were in the country at the time. I have referred to the man holding this position as GOC Cape throughout unless it has been necessary to give his exact position at a particular time to avoid ambiguity.

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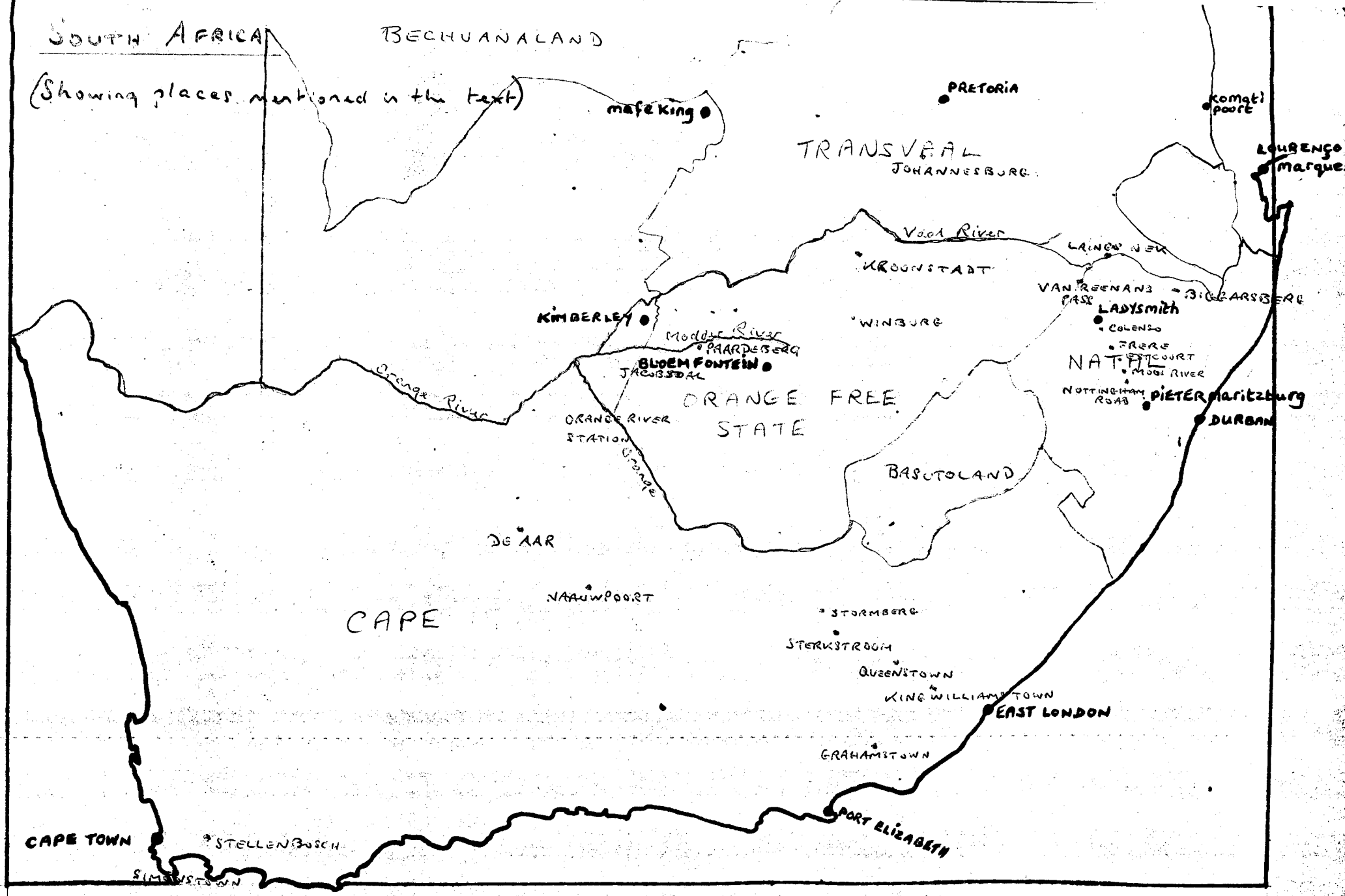
Errata.

p.142:- below bottom line read:

4. Sir Philip Magnus: Kitchener: Penguin Edition, 1968 p.450.

p.227 line 14:- between "arrangements" and "From" insert:

From the point of view of the ordnance department the last of these was the best system since their worries ended at the depot.


SOUTH AFRICA
(Showing places mentioned in the text)
BECHUANALAND
mafeking
PRETORIA
komati poort
TRANSVAAL
JOHANNESBURG
LOURENÇO marques
Vaal River
LAING'S NEK
KROONSTADT
VAN REENAN'S PASS
BIGGARSBERG
LADYSMITH
KIMBERLEY
WINBURG
Modder River
COLENSO
FRERE
PAARDEBERG
BLOEMFONTEIN
JACOBSDAL
NATAL
NEWCOURT
Modi River
NOTTINGHAM ROAD
PIETERMARITZBURG
DURBAN
Orange River
ORANGE FREE STATE
ORANGE RIVER STATION
BASUTOLAND
DE AAR
NAAUWPOORT
CAPE
STORMBERG
STERKSTROOM
QUEENSTOWN
KING WILLIAMSTOWN
EAST LONDON
GRAHAMSTOWN
PORT ELIZABETH
CAPE TOWN
STELLENBOSCH
SIMONSTOWN

Introduction:

The Organisation of the War Office

The experiences of the South African war did much to accelerate changes in the military structure of the British Empire. Such changes were impending both in organisation and in material before the war broke out. For example neither the soldiers nor the civilians were happy with the way the War Office was functioning despite the changes made after the retirement of the Duke of Cambridge as Commander in Chief. In material, new guns and ammunition were being tested in a number of experimental batteries and new rifles were coming into use.

There was also an awareness though not very developed, that new weapons and technology would require new tactical and strategical ideas. The increased range and accuracy of small arms, the rates of fire of small calibre, magazine rifles and quick firing artillery, and the use of smokeless powder enabling troops to conceal themselves much better were recognised as factors that would change the nature of warfare. Other factors such as machine guns had implications that did not appear to have been considered.

The South African war demonstrated some of these new factors very clearly and gave both an impetus to the movement for reform and an indication of the direction it should take. This was particularly true of the organisational and administrative side of the army. While tactically many of the features of the war were peculiar to it and lessons learned could not necessarily be applied indiscriminately to other

conflicts in other theatres, logistically the war was special only for the extreme demands it made. These demands were not different in kind from those likely to be encountered elsewhere, merely more difficult because of the size of force, the area of operations and the distance from the home base. Similarly lessons learned about the equipment of the army were for the most part applicable elsewhere.

Not only were the problems of supplying the army similar in kind, if not in degree, wherever it fought, but for many of the colonial campaigns of the time it was the most important problem. Provided a force reasonably clothed, fed and armed could be brought into contact with the enemy which was frequently *none* of these things, the outcome of the ensuing battle was usually assured. Early reverses in South Africa showed that this comfortable assumption did not apply to the Boers. However, huge reinforcements meant that although the British forces were not better armed than their opponents they heavily outnumbered them and could therefore rely on winning any pitched battle fought on their own terms. The Boers naturally sought to avoid such battles and the war became a lengthy struggle involving extensive movements by large bodies of troops. Once again, therefore, the main burden descended on the supply services to keep the expanded forces in the field. A study of the supply services during the war and the preparations for it will illustrate much of the working of the army and the War Office.

The Military Side of the War Office

The organisation of the War Office in the years before the war was an untried one, introduced in 1895 after the retirement of the Duke of Cambridge. For almost 40 years the Duke of Cambridge had been an autocratic Commander in Chief and although he had been brought, more or less, under the control of the Secretary of State for War there was a universal feeling that no subsequent Commander in Chief (C. in C.) should have so much power. No man, however able, could cope with all the responsibilities supposed to be discharged by the C.in C. and in 1890 a Royal Commission (the Hartington Commission) had recommended, among other things, that the post of Commander in Chief should be abolished and that a General Staff should be formed in the War Office with a Chief of Staff as a primus inter pares. It was agreed that no action should be taken until the Duke retired for, apart from other considerations, the Queen would have strongly objected.

The scheme that was adopted in 1895 by the Secretary of State for War, Lord Lansdowne, was a compromise between the old system and the recommendations of the Hartington Commission. According to the Orders in Council issued on 21 November 1895 defining the duties of the senior military heads of the War Office - the Adjutant General, the Quartermaster General (QMG), the Inspector General of Ordnance and the Inspector General of Fortifications (IGF) - these officers were directly responsible to the Secretary of State and not to the C.in C. as they had been before. However, the C.in C. in addition to his particular duties remained the 'principal adviser' to the Secretary of

State on all military questions and retained a 'general supervision' of the military departments of the War Office.

Lansdowne's reorganisation did not carry complete conviction with some other members of the government. Arthur Balfour, First Lord of the Treasury and leader of the government in the House of Commons, told Lansdowne while the new organisation was being discussed that his scheme was an 'attempt to combine fragments of both the other plans (i.e. that for a Commander in Chief with full powers and that for a General Staff answerable to the Secretary of State)[1] and as a result is neither very coherent or very logical and would be extremely difficult to defend in argument.'[2] St. John Brodrick, Under Secretary of State for War, and the War Office spokesman in the House of Commons, supported Balfour but the only concession they were able to get was the substitution of the word 'Supervision' to describe the C.in C.'s relationship to the other departments instead of 'Direction' which had appeared in Lansdowne's original draft. Balfour was not reassured and confided to Brodrick: 'I cannot help entertaining the conviction that our administrative machinery is cumbrous and costly and that in all probability it would break down under a serious strain.'[3]

Under the new arrangement as finally agreed, the C.in C. was charged with the exercise of general command over the army at home and abroad, the issue of Army Orders and

1 My parenthesis.
2 Balfour to Lansdowne 19 October 1895. Add Mss 49727.
3 Balfour to Brodrick 2 November 1895. Add Mss 49720.

periodical inspections of the troops. He was to be the principal adviser of the Secretary of State on all military questions and had a general supervision of the military departments of the War Office. He was responsible for the general distribution of troops at home and abroad, the preparation and maintenance of detailed plans for mobilisation of regular and auxiliary forces, the preparation of schemes of offensive and defensive operations, the collection and compilation of military information, the selection of fit and proper regular and auxiliary officers for promotion, staff or other military appointments and for military honours and rewards.[1]

This formidable catalogue required a man of exceptional abilities and energy, indeed to do them all properly would have required superhuman qualities. The choice fell, after a brief period of uncertainty, on the obvious man, Lord Wolseley. However, at the age of 62 Wolseley had no longer the full force of the powers that had made him the outstanding soldier of the British army. His memory was going and he was quite capable of failing to recognise someone to whom he had been introduced earlier in the day. However, his staff rallied round as one of them later recalled: 'It was not long before we realised that Wolseley was not the man he had been, notably as regards his memory, and I remember Buller talking of it with me, and saying we must do our best to see him through, and we all did. It was rather a faulty memory than

1 Order in Council 21 November 1895 and Memorandum showing the duties of the Principal Officers and Departments of the War Office. PP Eng. 1896 LI.

a mental failure and things went on pretty well in spite of it.'[1]

Wolseley's condition was worsened by a severe illness at the beginning of 1897 which was brought on by overwork. In addition to all his duties Wolseley was trying to write a biography of the Duke of Marlborough and had insisted on working on it from six to nine each morning. The added load had brought about his collapse and for many months he could do only a minimum of work and thereafter his attention to business was spasmodic.[2]

Under Wolseley's supervision were the military departments of the War Office. There were seven of these though two of them, the medical and veterinary departments, were small and staffed by appropriate professional men rather than ordinary soldiers. It was not until shortly before the war that members of the Army Medical Corps were even allowed to assume military titles. The other departments were those of the C.in C. himself, which included the military secretary whose chief responsibility was promotions and postings, the Adjutant General's department (responsible for discipline, training and enlistment), the QMG's department (food and transport), the ordnance department (warlike stores and clothing), the mobilisation and intelligence department, and the works department (headed by the IGF).

Much depended on harmonious relations between the C.in C.

1 General Sir N. Lyttleton: Eighty Years. London1927.

2 Minute by Brodrick on Lord Wolseley's memorandum. 20 November 1900. PRO Cab 37/53 no.75.

and his colleagues but although they were mostly old friends of his, the 'Wolseley ring' having made almost a clean sweep of the high staff appointments of the army, there was some friction. The Adjutant General (most senior of the departmental heads and automatically acting as C.in C. if the latter was absent) in 1895 was Sir Redvers Buller VC, one of Wolseley's oldest lieutenants and described (by an enemy) as the 'evil genius of the Wolseley ring'.[1] He had campaigned with Wolseley in China, Canada, Ashanti and Egypt and had come to prominence through Wolseley's patronage. However, Wolseley was convinced that Buller had tried to oust him in 1895 and become C.in C. himself and as a result never really trusted him again. For his part, Buller, having been the effective head of the army as Adjutant General during the declining years of the Duke of Cambridge, was resentful of Wolseley's control. Buller even told Brodrick that 'all his work was taken from him by the Commander in Chief and he had no power left except to say ditto to him on Councils and Boards. He (Sir Redvers Buller) desired to go back to the old Adjutant General's meetings in which certain officers met informally and agreed on a joint opinion - usually the Adjutant General's.'[2]

For similar reasons Wolseley was suspicious of Sir Henry Brackenbury, another longstanding member of the Wolseley ring, who took over the ordnance department at the beginning of 1899. It was an open secret that Brackenbury

1 Sir Ian Hamilton: Listening for the Drums. London 1944.

2 Minute by Brodrick on Lord Wolseley's memorandum. 20 November 1900. PRO Cab 37/53 no.75.

had drafted that section of the Hartington Commission report calling for a Chief of Staff with himself in mind and Wolseley did not forget it. The truth was that with increasing age Wolseley was becoming increasingly querulous and tiring himself by fretting about what he disliked, a category that grew steadily larger.[1]

The other heads of the military departments were also old comrades of Wolseley. In 1895 the QMG was Sir Evelyn Wood VC, one of the earliest members of the ring. He became Adjutant General in 1897 when Buller moved out to take command at Aldershot.[2] The new QMG was Sir George White VC (the number of VCs in the War Office is confirmation if any were needed that the departmental heads were not merely chairborne soldiers), previously C.in C. India. Although never one of Wolseley's protégés there does not seem to have been any difficulty between them, perhaps because White had never presented a threat to Wolseley's ambition. The remaining head of department, the IGF, was at the outbreak of war Sir Richard Harrison. A capable engineer, he had seen a good deal of war service including, once in China and twice in Egypt, with Wolseley.

As well as these heads of departments whose relationship to the Commander in Chief was not entirely clear either to him or to them, there was a Director of Military Intelligence

1 He ventilated these feelings in letters to his wife preserved in the Wolseley papers. His list of dislikes included Irishmen, Catholics, MPs, priests, Americans, Germans, doctors, Lord Roberts, Lady Roberts, Ireland, Sir William Russell (the war correspondent), Henry Labouchere, Sir William Harcourt, the Duke of Cambridge, Gladstone, peacetime, age, Lord Chelmsford, Sir Edward Hamley (author of Operations of War), and the French.

2 Wood, like Buller a VC, had a remarkable ability to catch diseases. Only Wood could have succumbed to what appeared to be chilblains during a campaign on the Gold Coast. At this time his main problem was deafness.

(DMI) directly subordinate to the C.in C. The DMI was responsible not merely for the collection of intelligence but for ensuring that defence plans were workable and up to date. In the absence of a general staff or any specific planning staff this was a vitally important function. However, since only one of the seven sections of his department was concerned with Imperial defence and since it had to cover the military geography, resources and armed forces of all British dominions, colonies, protectorates and spheres of influence, including the two Dutch republics in South Africa, to check and to criticise every defence plan for any part of the Empire (outside India) and to consider the strategic implications of new cables and the defence of naval bases and since for all these functions it had a total establishment of two officers and one clerk, there was little capacity for strategic planning.

The Director of Military Intelligence, who clearly had a crucial role to play in the preparations for the South African war, was Sir John Ardagh. Originally a Royal Engineer, Ardagh had spent most of his military career in intelligence or staff appointments and had also spent five years as private secretary to the Viceroy of India. Wood once described Ardagh as 'the Moltke of the British Army'[1] which was partly a compliment to his abilities and partly a description of his job. Although subordinate to the C.in C. Ardagh had relations independently with the Foreign, India and Colonial Offices who were interested customers for his intelligence reports.

1 Quoted in Susan, Countess of Malmesbury: Life of Major General Sir John Ardagh. London1909. p 251.

The Civil Side of the War Office

Parallel with the military side was the civil side of the War Office consisting of the Accountant General's department, the contracts branch and the central office. The Accountant General's department dealt with all financial matters within the War Office and so was in constant and frequently acrimonious contact with the military departments. The Accountant General, who was the senior civil servant in the department and responsible to the Financial Secretary to the War Office (a junior minister), had both to cost all military requirements and to ensure the departments kept to the financial limits set by the Secretary of State.

Once military requirements had been agreed and the expenditure sanctioned the purchase of items that could not be obtained from the factories run by the ordnance department was the responsibility of a civilian contracts department. This was divided into four sections dealing with different types of supplies and stores. Most of the work of the department, whether measured in volume or value, was with the ordnance department and relations between the two were to become very strained under the pressures of war.[1] In addition to its work for the army the contracts department also accepted work from the India Office, the Post Office, the police and colonial governments.

The third department of the office, which dealt with all business not covered by the other two, was the central office, headed by the Permanent Under Secretary (PUS). This

1 See below pp 186 - 190

included the registry which was charged with the receipt, custody and distribution of all letters, cables and other documents received by the War Office. It was also responsible for keeping track of all documents and for destroying those no longer wanted by departments or for the Public Record Office.[1] A second section of the central office dealt with all Parliamentary business, public statements, correspondence with Royal Commissions and one or two minor topics such as the administration of the Order of the Bath. A third section dealt with the promulgation of regulations.

There were also civilians in the military departments but the majority of staff were on the civil side. Of 56 higher division clerks in the War Office in 1900 19 only were on the military side and 7 of those should have been with the civilian departments. On the civil side more than half the clerks were in the Accountant General's department. The age of the civil staff was remarkable. On the military side apart from two confidential clerks in their twenties the average age was 55 and the average length of service 37 years. Ten of them had been there since before the Crimean War.[2]

This, briefly, was the organisation of the War Office in the years before the South African War. On the military side relations between the Commander in Chief and the other senior staff officers of the army were confused by the vague phrases of the Orders in Council and were not improved by the

1 This last responsibility at least was carried out vigorously if not with great discretion.

2 Calculated from figures given in the appendix to the Report of the Committee on War Office Establishments. WO 33 190.

ill-will felt by Wolseley towards his erstwhile friends. On the civil side the ageing group of officials was grossly overworked. The two sides were quite unintegrated and relations between them were often poor. As a whole the Office was ill adapted for the strains it had to meet.

Preparations for War

The years before the war revealed many of the weaknesses of the War Office organisation and some of the more fundamental difficulties under which those responsible for the defence of the Empire had to work.

From the time of the Jameson Raid the Intelligence Department of the War Office, if no one else, began to consider the possibility of a war in South Africa. As early as June 1896 the department pointed out the vulnerability of Natal.[1] The total British Garrison in South Africa at the time was one cavalry regiment, three and a half battalions of infantry, one mountain battery, two companies of garrison artillery and a company of Royal Engineers. Most of these, the engineers, the garrison artillery and two of the infantry battalions, defended the Simonstown naval base, half a battalion was in the Cape Peninsula and the remainder, one regiment, one battalion and one battery, was in Natal.

In October 1896 Ardagh made a detailed assessment of Boer capabilities based on the published figures of the South African Republic (SAR). They claimed to have 21,871 adults liable for military service. The only regular corps was the artillery, 357 strong. Arms spending in 1896 was £1,500,000 an extraordinary amount for a country that size. (It was to rise steeply in the three years that followed.) Ardagh commented: "As the Transvaal is almost entirely surrounded by British territory, this large expenditure can have no other

1 Memorandum by Major E.A.Altham 11 June 1896. Appendix B to the Report of the Royal Commission on the War in South Africa (hereafter Elgin Commission) PP Eng.1904 XL p 162.

explanation than an anticipation of war, or an intention of aggression against this country and its supremacy in South Africa." His conclusions were that the army must prepare for war in South Africa and he recommended that the main line of advance should be along the railways from the Cape ports, through Springfontein and Bloemfontein in the Orange Free State to Johannesburg and Pretoria.[1]

Ardagh's suggested route depended on the status of the Orange Free State and this remained in doubt until its public declaration of support for the Transvaal on 9 October 1899, the date the Boer ultimatum was despatched. However, it was always known that the Free State would never be a benevolent neutral from the British viewpoint and it was usually assumed, at least by the military, that the Free State would be actively hostile. At the time Ardagh was writing it was particularly desirable to assume that the Free State route could be used. Rinderpest, a deadly and highly contagious cattle disease, was raging throughout South Africa and horses and mules were everywhere being sought as a substitute for oxen. Local transport was thus scarce and, when available, expensive and reliance on the few railways so much the greater. The Natal railway also ran to Pretoria but had considerable disadvantages. Firstly it ran for nearly 100 miles within easy reach (under 30 miles) of the Free State border. Even had the Free State remained neutral it would have had neither the will nor the power to prevent raids on the railway taking place from its territory. Secondly there

1 Memorandum by Sir John Ardagh: The Transvaal Boers from a Military Point of View. October 1896. Ibid. pp 163 - 166

were numerous points on the railway where it would have been easy to damage and very difficult to repair. It traversed mountainous country sometimes with reverses[1] and was particularly vulnerable at Laing's Nek (a name redolent with unhappy memories from the first Boer War) where it ran through a tunnel.

In his memorandum mentioned above Ardagh also discussed the strategical considerations which would decide the type of war. He saw little difficulty in the occupation of the Transvaal, assuming of course that when the main forces met the Boers would be defeated. He argued that whereas previously every small Boer force would have had to be overcome separately the new goldfields, railway junctions and population centres were strategic centres, the occupation of which would end the war. However, this ignored the fact that all three were of far more interest to the Uitlanders than to the Boers, who were still predominantly agricultural. Of the two main centres of population Pretoria was probably more Uitlander than Boer and Johannesburg was overwhelmingly so. Certainly the Boers drew a huge income from the railways and mines, but they were not concentrated round them or dependent on them. Their capture stopped the revenue but this only meant that the Boers reverted to their previous state when, as Ardagh noted, every Boer force had to be individually overcome. But even if some of the reasoning was dubious the main part of the memorandum dealing with the threat posed by the South

1 These were the railway equivalent of hairpin bends whereby the track zigzagged up steep slopes and trains ran forward up one part and then (having no room to turn) backed up the next.

African Republic and the weakness of the colonies was sound.

These warnings were repeated in a further memorandum by Ardagh, dated 15 April 1897, in which he reiterated his views on the vulnerability of Natal and revealed a particular shortage of artillery and machine guns. He added that Mafeking and Kimberley were also likely targets for Boer forces.[1] This was not prescience but one example of the remarkably accurate information brought out of South Africa. Such examples are worthy of note because of some allegations at the time that the lack of preparedness when the war broke out was due to faulty intelligence. Among other information produced by the Intelligence Department (ID) was the correct identification and (with one exception) number of every type of gun possessed by the Boer Artillery. The one exception was an overestimate of the number of Creusot 6 inch guns. The ID gave the figure as 16 when in fact there were only four. Sixteen had been ordered but only four had been delivered by the time that war broke out, despite the existence of freight bills apparently showing the shipment of the sixteen from Bordeaux to Delagoa Bay. Other details included the number of maxim guns and the quantity of ammunition in Pretoria (23 million rounds of small arms ammunition and 41,000 rounds of all types of artillery ammunition).[2]

A half hearted attempt by the government to claim that

1 Memorandum by Sir John Ardagh 15 April 1897. Appendix B to the Report of the Elgin Commission. PP Eng.1904 XL. pp 167-

2 These figures are taken from 'Military Notes on the Dutch Republics of South Africa' issued by the ID in June 1899 Ardagh Papers PRO 30 40/16 and 'South Africa: Supplementary Reconnaissance Reports' issued by the ID in September 1899 WO 33 161. Both papers, which were classified 'secret' when issued, were shown to be accurate in the course of the war.

it had never received such information collapsed in confusion when Salisbury and Lansdowne contradicted each other in a debate in the House of Lords. Salisbury, speaking of the extent of Boer armaments, said: 'How on earth were we to know it? I believe as a matter of fact ... that the guns were generally introduced in boilers and locomotives, and the munitions of war were introduced in pianos ... we had no power of knowing what munitions of war were sent in.' Yet Lansdowne who followed him admitted '... the Intelligence branch has been able from time to time to supply us with information which I believe to be extremely correct as to the extent and nature of Boer preparations.'[1]

In the years before the war a number of compilations of information were issued by the Intelligence Department. They included 'Report on Communications in Natal North of Ladysmith' (1897-118pp),'South African Republic Road and Rail Reports' (1897-102pp), 'Reconnaissance Reports on the Lines of Advance through the Orange Free State' (1899-issued in three parts) and 'Notes on the Lines of Communication in the Cape Colony' (1899-69pp). They culminated in the 'Military Notes on the Dutch Republics of South Africa' (June 1899-119pp) and 'South Africa: Supplementary Reconnaissance Reports' (September 1899-234pp). These reports, all of which were classified 'secret', contained a wealth of accurate information of all sorts. There were details of roads and railways including their quality, gradients, bridges, stations and watering places. Towns were described in some detail, including their principal

1 Parliamentary Debates 4th Series (hereafter Hansard) LXXVIII col 27 (Salisbury) and col 40 (Lansdowne).

officers and estimates were made of the accommodation and supplies they could provide for an invading force. The population of different areas was given, together with an explanation of the military organisation of the Boers and an estimate of the likely enemy forces. Details of Boer arms and ammunition was provided and pen portraits of leading military figures.

There was much other important information that the Intelligence Department made no pretence of providing. Ammunition both artillery and small arms was held at centres outside Pretoria and quantities of small arms ammunition had been distributed to the burghers. There was no attempt to estimate the figures in these categories. Above all there was an acute shortage of maps.

These omissions were caused mainly by lack of resources and staff. The allocation for the Intelligence Department before the war was around £20,000 per year. Of this it was estimated that about £2,000 was spent on South Africa.[1] (By comparison, in the three years before the war the South African Republic spent £280,000 though it is possible that some of this was spent on guns.) In the mapping section three officers and 25 assistants were responsible for a task to which the French army allotted 144 officers with 83 assistants.[2] The lack of money and staff made all serious mapping impossible. One officer in the mapping section estimated that a proper map of Southern Africa would take

1 Evidence of Ardagh to the Elgin Commission. PP Eng.1904 XL. q 5126 – 5130

2 Evidence of Major E.H.Hills RE Commanding Officer Mapping Section of the Intelligence Division of the War Office to the Elgin Commission. PP Eng.1904. XL q 871

ten years and from £3-400,000.[1] Frequent appeals to the Colonial governments to map their own territories went unheeded. The only maps produced officially in the colonies were for land registry purposes and only attempted to show farm boundaries. Even these were frequently inaccurate.[2] Some years before the war Ardagh had asked for £18,000 a year for ten years to map South Africa. It is unlikely that the Treasury would have accepted this demand but it was never asked for a decision. The request was struck out in the Financial Department of the War Office, and Ardagh was offered £100 for the work.[3] It was impossible to do more with this than produce maps based on sketches by individual officers. It would, after 1896, have been impossible to do more in the Transvaal and the Orange Free State anyway. Feelings after the Jameson Raid precluded British intelligence officers from surveying possible invasion routes.

The sources of the information that was gathered fall into two types. Much of it came from visual reconnaissance by officers often using only a compass and notebook. They could not use other instruments for fear of drawing attention to themselves. This was important even in the British colonies as feeling throughout Southern Africa was very inflamed after 1896. There were, of course, substantial Dutch populations in the British colonies.

Intelligence about the armaments, personalities and

1 Evidence of Lt. Col. S.C.N.Grant to the Elgin Commission. PP Eng.1904. XL q 763

2 Evidence of Major Hills to the Elgin Commission. PP Eng.1904. XL q 874

3 Evidence of Ardagh to the Elgin Commission. PP Eng.1904. XL q 5005 and 5011

policies of the South African Republic were gathered initially by the British Agent in Pretoria. Although his correspondence was with the High Commissioner the latter passed information to, and accepted requirements from, the General Officer Commanding (GOC) South Africa. He, of course, was in touch with the Intelligence Department. The British Agent, Connyngham Greene, had wide contacts in the British community (there was a vice-Consul in Johannesburg), and culled newspapers and official government publications. He was also able to build up a number of well placed agents whose identity is even now not clear. His information improved rapidly in the years before the war. In April 1896 Greene annotated a request from the High Commissioner asking for information on arms: 'There is no possible means by which I could find out the quantity and description of Ordnance small arms ammunition ...'[1] Yet within a year Greene was sending details of military spending and the numbers of permanent Boer forces. Within two years he was able to send detailed information on the movements of artillery, small arms and ammunition within the Transvaal. He was also able to get details of secret sessions of the Volksraad within two or three days of their taking place.[2] Although at one time there was a fear that the information Greene was sending was leaking in Cape Town and finding its way back, thus endangering one of his informants,[3] the sources were sufficiently protected to

1 High Commissioner to British Agent 29 April 1896. Papers of the British Resident. Confidential Correspondence Vol 14. Transvaal Archives Pretoria.

2 See for example British Agent to High Commissioner February 1897 and 2 March 1897 Ibid Vol 15; 16 December 1897 Ibid Vol 17; 19 February 1898 Ibid Vol 18.

3 British Agent to S.V.Fiddes 5 January 1898 Ibid Vol 18.

enable them to continue reporting until the beginning of the war.

Thus despite the difficulties and lack of resources there was sufficient information to enable the Commander in Chief and the heads of departments to make some plans and material preparations to deal with the possibility of war. The events of the war were to show a lamentable failure to make such preparations. One of the reasons was the sheer pressure of work on the military departments which were swamped with huge amounts of trivia most of which could have been better dealt with by junior officers in their districts. In 1898 a committee was appointed to consider the possible decentralisation of the work of the War Office. It found many extraordinary examples of over-centralisation. The position was made worse by the centralisation of the specialist corps. The Royal Artillery, the Royal Engineers and the Army Service Corps all had regimental headquarters at Pall Mall and matters affecting them had to be referred there. For example the Duke of Connaught instanced a case when he had been GOC Aldershot where it had taken 12 signatures and two orders from London to move a driver from the artillery staff under his command back to his battery at Woolwich; and Lord Roberts, then C.in C. Ireland complained that he could not transfer a gunner from one battery to another, both under his command, without reference to London. Similarly almost every personnel matter other than the promotion of NCOs had to be referred to the Adjutant General.

The financial regulations were particularly stringent. All accounts within a district were examined by the district paymaster. A test audit of one eighth of all the accounts

was carried out by the War Office and a further audit was made by the Comptroller and Auditor General. Moreover many of the accounts had to be handled through the War Office in the first place. Local ordnance officers could not spend more than £25 without reference to London. General Officers Commanding districts could not authorise repairs to clothing costing more than 3/6d per garment. Further delays were caused by the rigorous pursuit of trivial sums. The commercial practice of writing off losses was never allowed to reach the War Office even during the war. Thus a demand for one penny (deduction for damage to barracks) was sent 6,500 miles to South Africa where it had to be divided among 900 men. A similar demand for one halfpenny was also sent and one bill for 2/6d had to be divided among five regiments.[1]

Such things as appointing schoolmistresses to army schools, travel allowances or felling dangerous trees on War Office property could not be dealt with without an order from London. The report of the committee on War Office decentralisation listed 206 such cases which could be better dealt with at a lower level, and the decision, where necessary, notified to the War Office. Just one of these matters involved 1500 letters a year. The report also cited 102 returns which it recommended could either be made less frequently or, with most, abolished outright.[2] The rush to give effect to these recommendations was less than frenzied. In April of the following year Parliament was told that a

1 Acland Hood 19 June 1900 Hansard LXXXIV col 493.

2 Report of the Committee appointed by the Secretary of State for War to consider the decentralisation of War Office business. PP Eng.1898 XLII.

departmental sub-committee had been set up to consider the report, but that its meetings were indefinitely suspended as its chairman was ill.[1] How much progress was subsequently made may be judged from the first recommendation of the Dawkins Committee which reported three years later: 'To abolish the present system of ruling the army by minute regulations (both military and financial) and by excessive reports, which conduce to centralisation and excessive correspondence.'[2] In fact the report of the 1898 committee would have had little effect even if carried out in full. Its suggestions affected only 300 regulations out of 11,000. Every week the War Office received about 10,000 communications quite apart from the accounts.[3]

Organisation within the War Office was not conducive to the rapid despatch of the huge quantities of paper which thus descended on it. (It had risen to 3,500 letters a day in 1901.)[4] The Office was spread over nine buildings in central London, not including the ordnance complex at Woolwich, and this separation was 'an enormous impediment to business' in the words of the Permanent Under Secretary.[5] It led to excessive minuting and increased the reliance on the registry to route incoming papers correctly in the first place and

1 Hansard LXX col 35.

2 Report of the Committee appointed to enquire into War Office organisation. PP Eng.1901 XL.

3 Memorandum by Sir Ralph Knox July 1898. WO 33 122.

4 Brodrick 8 March 1901 Hansard XC col 1086.

5 Statement of Sir Ralph Knox. Minutes of Evidence to the Committee on War Office Establishments 1900 WO 33 190.

then make sure they were not lost sight of and that they went to all those who needed to see them. This by common consent the registry was unable to do. Brackenbury complained that while he could post a letter up to six in the evening and have it delivered in Edinburgh by eight the following morning any paper sent to the registry after quarter to four would not get to another department, even in the same building, until eleven the following morning. Brackenbury characteristically found his own solution: '... the delays caused by the registration of papers are so great that ... I generally disregard the registry altogether. I never pass a paper to the Director of Naval Ordnance through the registry, nor ... to the ordnance factories at Woolwich.'[1]

The weight of paper and the slowness with which it was handled so overloaded the War Office that almost nothing was done outside the routine. Thus despite the continuing reports of the Intelligence Division virtually nothing was done until the months before the war. The garrison in South Africa was slowly increased but by August 1899 the total reinforcements were only 3 battalions of infantry, 3 field batteries and a cavalry regiment. This had brought the fighting force in South Africa to 8,500. If this garrison was meant to do anything except hold strongpoints on railway lines it needed transport of which it was lamentably short. This seems obvious enough but it was not seriously considered by the War Office until it was pointed out by the British High Commissioner in South Africa, Sir Alfred Milner. In a despatch

1 Statement of Sir Henry Brackenbury. Ibid.

to Chamberlain dated 1 February 1898 Milner reported that recent tension with Basutoland had revealed a total lack of mobility in the South African garrison.[1] The despatch was passed on to the War Office in March 1898. The DMI had, it is true, asked the GOC South Africa to submit plans for the defence of the colony, including necessary transport, in 1897. This was routine. All garrison commanders were obliged to submit defence plans based on whatever troops they had under their command. As the South African garrison was being increased new plans were needed. When they were submitted they were accompanied by proposed standing contracts which would have enabled transport to be taken up at short notice when required. These were vetoed on the grounds of expense thereby nullifying the whole plan.

The War Office did not lack reminders on the seriousness of the situation. The memoranda on South Africa produced by the Intelligence Division were read with more care in the Colonial Office (which received 37 of them in 1896 and 1897)[2] than in the War Office and from 1897 there were frequent messages from the Colonial Office asking for the garrison to be strengthened. The Milner despatch was only one of many and the pleas for action were reinforced in April 1898 with a copy of one of the War Office's own reports 'for reference'. The barrage of notes finally galvanised the War Office into replying though only with a refusal to take action. 'The establishment and upkeep of a permanent transport nucleus in the Cape Colony for military purposes would, apart from the

1 Milner to Chamberlain 1 February 1898. Appendix C to the Report of the Elgin Commission. PP Eng. 1904 XL p 191

2 Colonial Office Papers. Secret Register, 1894-1898. PRO CO 694 13.

necessarily heavy initial outlay, involve such a large annual expenditure for maintenance etc. for which the state in times of peace would not get an adequate return, that his Lordship (Lansdowne) is not at present prepared to agree to the formation of such an establishment.'[1] However, the War Office did offer to mobilise a small force of 4 companies of mounted infantry, 3 field batteries, one engineer company and 4 battalions of infantry; about 4,500 men. Even then it was hoped that the Colony would bear the cost. This letter was not well received in the Colonial Office. The Assistant Under Secretary, Frederick Graham, minuted that the War Office, despite the warnings of the Intelligence Division, grudged every penny on South Africa. The Permanent Under Secretary, Sir Edward Wingfield, said that '... if we are caught napping a vast deal of unnecessary delay, expense and humiliation will have to be faced.'[2] Finally the offer was accepted as an absolute minimum.

The QMG sent out orders in June (there seems to have been no sense of urgency) for the GOC South Africa to work out what transport was needed and arrange with local suppliers to provide as much of it as possible. He was not actually to enter into any contracts without first referring them to the War Office.[3] The GOC replied that he could complete regimental transport for troops in the Cape Colony at a cost of £16,000.

1 Fleetwood Wilson (Assistant Under Secretary of State War Office) to Under Secretary of State Colonial Office 14 April 1898. PRO CO 417 252. Also published in Appendix C to the Report of the Elgin Commission. PP Eng. 1904 XL p 194

2 Minuting on the above letter. PRO CO 417 252.

3 QMG to GOC South Africa 8 June 1898. Appendix C to the Report of the Elgin Commission. PP Eng.1904 XL. p 195

To equip the mobile force specified would require 80 vehicles and 794 mules (actually 798 on his figures; four were lost in the addition). Messrs Weil of Cape Town offered to provide all this transport, within seven days of demand for regimental transport and thirty days for the remainder. The total cost of transport for the mobile force would have been £39,504. The figure could be reduced by using ox-transport, (the cattle plague was over) for thirty ox-wagons would carry as much as fifty mule-wagons. Ox carts were, however, unsuitable for the carriage of medical equipment and ammunition.[1]

When these suggested arrangements reached London they were reviewed by the Intelligence Division, together with the plans for using the force. Major Altham pointed out the difficulties. There was a small problem over transport for the Ladysmith garrison. No provision had been made for the carriage of tents. This did not greatly matter for nine months in the year but if war had to be conducted in the rainy season, as was likely and in fact happened, tents would be needed and, if they could not be carried, dependence on the railway would remain. But the basic objection was to the idea of standing contracts which underlay the whole scheme. The troops at Pietermaritzburg for instance, were supposed, in the event of war, to seize Van Reenan's Pass and Biggarsberg. Why they were stationed 130 miles from both the points they were supposed to take, when Ladysmith was barely 20 miles from either, is inexplicable. The memorandum makes no comment on that. But as it rightly points out, if

1 GOC South Africa to Under Secretary of State for War 10 August 1898. Ibid. pp 198 - 201

the troops could not move for seven days until their transport had been produced, they would be beaten to the positions they were meant to hold. Similarly if the main force could not move for thirty days, it would be of little value in protecting the colonies for that period. And yet its only function was to hold on for the four to six weeks it would take for reinforcements to arrive. In Cape Colony the position was worse because the distances were greater. Most troops were over 500 miles from the positions around De Aar, Naauwport and the Orange River Station they were to occupy in the event of war, and they too would have to wait seven days to collect transport before starting. As for supplies there was little concerted effort at accumulation. There was 30,000 pounds of preserved meat at Pietermaritzberg. At Ladysmith a two month supply of all provisions for its garrison of one cavalry regiment, one infantry battalion, one company of mounted infantry and three field batteries had been maintained since 1897. There was no allowance for any increase in the garrison. In general the troops relied on purchasing food locally, supplementing it where necessary with supplies from England. There were rifles in plenty for the 5,000 volunteers who might be raised from the colony, but only 500 sets of mounted infantry equipment and about 3,000 sets of infantry equipment.[1]

In November 1898 Sir William Butler[2] took over as GOC South Africa. Before the end of the year he was asked to

1 Memorandum by Major E.A.Altham 18 September 1898. Appendix B to the Report of the Elgin Commission. PP Eng.1904 XL. pp 168-174

2 Sir William Francis Butler (1838-1910) was an Irish Catholic who had never forgiven the English for the Irish potato famine he had experienced as a child. He considered the British community in Johannesburg 'probably the most corrupt, immoral and untruthful assemblage of beings at present in the world'. He was anathema to Milner and Chamberlain and was recalled in August 1899.

produce a completely new set of plans. It was pointed out to him that as the Cape and Natal were likely to be cut off from each other in the event of war, the arrangements for the two forces in these colonies should be separate. Again the virtues of short term economy were stressed. 'I am to urge,' ran the War Office letter, 'the importance of limiting the already heavy expenditure which is involved.'[1]

The desire to avoid spending money remained paramount until the weeks before the war. In 1897 the Colonial Office asked for the despatch of three cavalry regiments and two field batteries to South Africa. This was refused solely on financial grounds. The cost was £500,000 and Lansdowne would only spend £200,000.[2] The reason for standing contracts for transport instead of outright purchase was simply the attempt to save money. The same consideration helped rule out a suggestion by Ardagh to send 20,000 troops to South Africa in 1897, which at that time would probably not have triggered off war and might well have made the garrison strong enough to stop it later, or at least to have avoided the initial disasters.

The pressure against increased spending seems to have come largely from within the government itself. The Chancellor of the Exchequer, Sir Michael Hicks Beach (Black Michael), was a high Tory squire in most things but a strong Gladstonian in matters of finance. He was supported by a formidable Permanent

1 Assistant Adjutant General to General Officer Commanding South Africa 21 December 1898. Appendix C to the Report of the Elgin Commission. PP Eng.1904 XL.pp.202 - 203.

2 War Office letter to the Colonial Office 29 April 1897. Ibid. pp.184-185.

Under Secretary at the Treasury, Sir Francis Mowatt, 'then the very Cerberus of civil servants'.[1] The financial department of the War Office behaved like an outpost of the Treasury and itself rejected many proposals for expenditure. This role, which was of course under the control of the Secretary of State, was much resented by the soldiers. Ardagh complained: 'The War Office is in reality but a subordinate branch of the Treasury, which holds the purse strings of the nation and inexorably refuses to open them until forced to do so by public opinion'.[2] This refusal to spend money also led to necessary demands not being made. Wolseley later wrote to the PUS at the War Office: 'I am afraid that for many years past it is not what all soldiers know to be required but what those at Army Headquarters think they may be able to get the money for, that is usually pressed upon the Secretary of State for War. Even of the services so pressed for it is understood that only a proportion will be allowed by the Treasury.'[3] Wolseley detested Beach anyway. Shortly before becoming Commander in Chief he wrote: '... my great enemy in the Cabinet is Sir M. Hicks Beach - a man whom I scarcely know, but with whom I had to keep up a correspondence in 1879-80 ... I had the most supreme contempt for his intelligence then and I have never felt otherwise for him since.'[4]

In 1898 Lansdowne was finally pressed into battle with

1 J.G.Garvin: The Life of Joseph Chamberlain Vol III p.541.

2 Ardagh writing to a friend 4 November 1900. Quoted in Susan, Countess of Malmesbury op.cit. p.332.

3 Wolseley to the Permanent Under Secretary of State for War 8 October 1900. PRO Cab 37/57 no.57.

4 Wolseley to Lady Wolseley 16 July 1895. Wolseley Papers 24/64.

the Treasury and managed to get significant increases in military strength agreed by the Cabinet (10 new battalions, 15 new batteries spread over 3 years and an increase in the establishment of infantry battalions). Lansdowne even offered his resignation over this issue but only after the Cabinet had agreed to his demands. Salisbury, who had never known a minister resign after winning a Cabinet battle simply because he had been opposed in the first place, rejected the offer with kind words but failed to conceal his bafflement that it had been made at all.[1] Despite this success or perhaps partly because of it many demands for much smaller expenditure on preparations for the despatch of a force to South Africa were rejected.

As the comment by Ardagh cited above suggests opinion outside the government tended to be in favour of greater expenditure on the armed forces. The three years before the war were years of prosperity and government revenue rose steadily. In all these years there were unlooked for budget surpluses. Within Parliament neither the Conservatives nor most of the Liberals would have opposed a demand for more funds for military purposes. Indeed in his 1898 budget speech Hicks Beach lamented the general lack of interest in economy. Moreover the government was careful to keep good relations with members in the House who were particularly interested in the army. Having used them to bring down the previous government on the cordite vote they were too obvious a force to be ignored. Brodrick as the War Office spokesman in the

1 Lord Newton: Lord Lansdowne A Biography. London 1929 pp.149-151.

Commons ensured that they at least felt they had influence - 'by arranging meetings socially between the military MPs whom we had mobilised to defeat Campbell-Bannerman with Lord Wolseley and Lord Lansdowne, we secured their advice and confidence.'[1]

Although there was no significant group in the Commons opposed to military spending as such there was a deep suspicion among the radicals in the Liberal Party of the Colonial Secretary Joseph Chamberlain. Although dismissed by Lord Rosebery as the 'pro Boer, pro Armenian, pro Macedonian and generally hysterical section of the party'[2] they were supported by the Irish and, spearheaded by Henry Labouchere,[3] formed a significant bloc in the Commons. This may have discouraged the government from asking for money specifically for troops in or ordered to South Africa. The distrust of Chamberlain was not concealed. In the debate on the army estimates for 1899 for example Labouchere said:

> I want a moderate army. I do not want such an army that it will be able at a moment's notice to annex any country upon which the Right Honourable gentleman the Colonial Secretary may have set his mind on (sic) ... We have 8,000 men at the Cape of Good Hope; what are we doing with those 8,000 men? What is it we are going to annex there?[4]

The leader of the largest Irish party in the House, John Dillon,

1 Earl of Middleton: Records and Reflections 1856-1939. London 1939 p.98.

2 Quoted in Robert Rhodes James: Rosebery: A Biography of Archibald Philip, Fifth Earl of Rosebery. Weidenfeld & Nicholson London 1964 p.447.

3 Henry Labouchere (b.1831) was a powerful figure in the House of Commons where he had had a seat for 30 years by the time Chamberlain became Colonial Secretary. He had only been kept from a seat in Gladstone's Cabinet by the hostility of the Queen.

4 Labouchere 3 March 1899. Hansard LXVII col 1238.

referred to 'dark and designing schemes against the Transvaal'.[1]

These sentiments came particularly to the fore when the government asked in April 1899 for £73,000 for barracks for the 8,000 troops in South Africa. Because of reluctance to spend in the past the demand was urgent as living conditions for the troops had led to 116 cases of typhoid at Ladysmith and outbreaks at King William's Town and Grahamstown. Labouchere launched into a diatribe against the government's motives in keeping a 'large' force there. 'Is it supposed,' he asked, 'that President Kruger is going to invade the Cape or Natal or Rhodesia or any other place under the British flag? ... nobody dreams for a moment that President Kruger is at all likely to wage an offensive war against our Colonies.'[2] Balfour clearly resented the questioning that developed in the course of the debate and refused to spell out the government's military policy in South Africa, adding: 'Nor have I ever heard of an executive and responsible government being asked to go into details on such a matter.'[3]

Balfour's reluctance to give details illustrates yet another constraint acting against adequate preparations which became stronger as war approached. This was the danger, partly political but mostly military, of giving the South African Republic an excuse for a sudden declaration of war.

1 John Dillon 3 March 1899. Ibid col 1242. John Dillon (b.1851) was one of the most violently spoken of the Irish leaders. He had served three terms of imprisonment and in 1899 he led the 70-strong anti-Parnellite party in the House.

2 Labouchere 21 April 1899. Hansard LXX col 1257. Interestingly Labouchere was speaking exactly 26 weeks before the Boers invaded all three.

3 Balfour 21 April 1899. Ibid col 270.

If this came there would inevitably be a gap of several weeks before troops from England or India could reach South Africa and the garrison there would have to fend for themselves for that time. This argument, of course, formed an unbreakable circle. While the garrison was inadequate this risk was always present but any attempt to reinforce it was likely to trigger off the disaster it was supposed to avoid. Politically the government had no wish to be seen taking military action that was bound to force a rupture before all negotiations had clearly ended, and talks continued in 1899 even after the failure of the Bloemfontein conference. The final breakdown in negotiations occurred on 5 September 1899 and shortly afterwards reinforcements of 3 cavalry regiments, 6 field batteries and 10½ infantry battalions were sent from India, Mauritius and the United Kingdom. Most though not all of these troops had arrived by the outbreak of war but the garrison still proved inadequate.

These pressures against military precaution were almost without exception operative in fields outside the competence of the military chiefs of the War Office. Equally the military dangers and military needs were often not outstandingly obvious to civilian ministers. An effective military policy depended on a high degree of cooperation and understanding between the two and particularly between the Commander in Chief as the principal military adviser and the War Office ministers. However, such cooperation was neither provided for organisationally nor easy on a personal level. Wolseley later recalled: 'I was very seldom at any Cabinet meeting during

the whole of the business.'[1] and Buller, asked by the Royal Commission into the conduct of the war whether he had never been called before the Defence Committee of the Cabinet replied: 'No I was never called before anything.'[2]

On the personal level Wolseley and Lansdowne did not find it easy to work under the new organisation. Indeed they seem to have had a totally different idea of what it was. In March 1901 in a debate in the House of Lords on the organisation of the War Office Wolseley (who had recently retired) gave a highly critical account of his official relationship with the Secretary of State stressing the anomalous position of the War Office heads of departments. Lansdowne denounced his account as 'a travesty of the actual facts'.[3] Though he did not know it Wolseley was supported by his old rival Lord Roberts. In a private letter to Brodrick, Roberts wrote: 'I feel most strongly ... the impossible position C.in C. was placed in by the Order in Council which directs that the Senior Military Staff Officers are to be on an equality with, and practically independent of, C.in C. In the eyes of the public latter is the responsible military adviser of S.of S. while in reality he is at present one of a board.'[4]

Wolseley's view of the ministers with whom he had to work was not conducive to harmonious relations either. He had a low view of politicians in general - 'Heaven knows that

1 Evidence of Lord Wolseley to the Elgin Commission PP Eng.XL 1904 q.8703.

2 Evidence of Buller to the Elgin Commission PP Eng.1904 XLI q.15020.

3 Lansdowne 4 March 1901. Hansard XC col 350.

4 Roberts to Brodrick 26 November 1900. Brodrick Papers PRO 30.67/6.

all politicians are timeservers and ready to stoop to anything that will keep them into office.'[1] - and an equally poor one of the particular ones he dealt with. 'I have a horror of having once more to work with that prig of prigs, St. John Brodrick who according to my views is a clever talking ass ... Any system of government that can give over the Army to such a prig must be rotten to the core.'[2] Although Wolseley seems to have started without any particular feelings against Lansdowne, who he thought would be dominated by Brodrick, by 1898 he was writing to his wife: 'He is a most gentlemanly prig himself of intelligence and education, but he could never be more than a highly polished gentleman with much refinement and education but still a prig all over, incapable of great thought or startling decisions or of very broad views or courageous conduct in public affairs.'[3] A year later the tone of Wolseley's letters suggests something more akin to hatred: 'I spend my day struggling with my little gentleman at the War Office. Such a small minded man it would be difficult to imagine. I am sure that some little Jew must have "overtaken" his mother before he was conceived.'[4]

The combination of lack of machinery for adequate planning and consultation in the War Office, the vast weight of routine work that came in, the desire for economy and the ill feeling both among the soldiers and between the soldiers and

1 Wolseley to Lady Wolseley 19 May 1898. Wolseley Papers 27/7.

2 Ibid 2 July 1895. Ibid 24/60

3 Ibid 14 July 1898. Ibid 27/49 and quoted in Julian Symons: Buller's Campaign. The Cresset Press 1963. p.50.

4 Wolseley to Lady Wolseley 24 June 1899. Wolseley Papers 28/30.

the civilians all contributed to the difficulties of making adequate preparations. Even a proposal to reinforce the garrison by 10,000 men ran into all sorts of difficulties, quite apart from the basic decision of whether it should be sent or not. The organisation of the army was governed by the Stanhope memorandum issued in 1891 by Edward Stanhope, then Secretary of State for War, which largely embodied the ideas of Wolseley who had been Adjutant General from 1885 to 1890. The memorandum anticipated being able to send abroad a maximum of two army corps with certain other troops. (See Appendix A.) To send abroad 10,000 men could have disrupted the whole army corps system, on which the memorandum was based, because of the number of reservists needed to bring units in England up to war strength. This could be done either by summoning the reserves by proclamation with the necessity of summoning Parliament if it was not already sitting to ratify the action, in which case there was little advantage in mobilising 10,000 men rather than a complete corps, or by cannibalising other units for the additional men which would have affronted regimental feeling and caused chaos if the rest of the army corps were subsequently needed.

The problem could, of course, have been solved by sending 10,000 men from India where the units were kept up to strength. The Indian government had agreed to make a force of this size available if it was needed. Lansdowne favoured the idea because they could get there more quickly than troops from England. Beach approved because Indian troops were cheaper than troops from England to send to South Africa. Indeed for this reason Beach wanted to use Indian troops instead of a portion of the

army corps even if the latter were wanted, regardless of any military inconvenience this might cause. He felt he was being asked to spend more money than was absolutely necessary 'to suit a War Office fad of mobilising a whole army corps.'[1] Wolseley, however, set his face against any troops from India, even denying they would be quicker. Since they were already mobilised and up to full strength, and Bombay is only about half the distance from Durban that Southampton is, this view was merely perverse. Wolseley's opposition seems to have come from his long prejudice against the Indian army. Units from the UK, he said, 'would have better health and go than those coming from India, sodden with fevers, drink and venereal. I always remember that the battalion that lost us Majuba was an old one from India.'[2] This too was not a strong argument since the battalion in question had been led into an untenable position by the foremost of Wolseley's protégés. The Indian troops were sent.

In the summer of 1899 material preparations began to be made for the equipping and transporting of an army corps as it became increasingly obvious that such a move would be required. As late as January 1899 Lansdowne had said: '... we shall have to think twice before we send so large a force out of the country. It seems to me very improbable that we shall do so at the outbreak of hostilities.'[3] Nobody seems to have paid much attention to this and the force to be sent

1 Beach to Salisbury 24 August 1899. St. Aldwyn Papers PC/PP 75.

2 Wolseley to Lansdowne 24 August 1899. PRO Cab 37/50 no.56.

3 Minute by Lansdowne 25 January 1899. Appendix D to the Report of the Elgin Commission PP Eng.1904 XL p.261.

out was set at one army corps, one cavalry division and seven battalions for the lines of communications. In February 1899 Brackenbury, who was discovering a total lack of reserves of ordnance stores and an insufficiency of clothing even for peacetime needs, requested £320,000 for a six month reserve of clothing. Eleven months later, three months after the start of the war, the request had still not emerged from the Accountant-General's department.[1]

There was considerable muddle in clothing the field force because of the need to adapt clothing to South African conditions. In April 1899 the force was clothed with khaki drill, which was light and seemed suitable for hot climates. But in August, after representations from the medical department, the Adjutant General ordered a change to khaki serge instead. This was thought to be healthier in wet weather. Similarly carts had to be adapted to South African conditions. They had to be altered to be drawn by mule and ox instead of horse. Special brakes had to be fitted and harness purchased. Many of the vehicles were found to be unfit for use at all.

On 12 August 1899 Lansdowne, who later claimed to have been unaware of the seriousness of the position until very late, informed the Cabinet that over £1,000,000 and four months would be needed between the time the word was given and the time the army corps could be assembled, fully equipped for a two month campaign, on the frontiers of the Boer Republics.[2] Chamberlain, who would listen to no one who suggested that a war with the Dutch Republics would be a

1 Evidence of Brackenbury to the Elgin Commission PP Eng.1904. XL q 1604 – 5
2 Cabinet Papers PRO Cab 37/50 no.50.

serious one ('My own opinion is, as it has always been, that both Milner and the military authorities greatly exaggerate the risks and dangers of this campaign'[1]), was furious. He told Selbourne two days after the Cabinet meeting at which Lansdowne's paper was presented: 'I understand that the W.O. which a few months ago was boasting that it could send off two army corps in less time than transports could be obtained to carry them ... has now convinced itself that it cannot place one corps in Natal in less than four months.'[2] In fact Wolseley's claim, to which Chamberlain referred, that the army could mobilise before the navy could find ships to carry them only ever referred to the time it would take to get the troops to the ports in England. The mobilisation plan was the same for any campaign to that extent and so could be well polished in advance. The remainder of the time was needed to ship the troops 7,000 miles (if going to Durban), disembark them and move them several hundred miles from port together with stores, transport, mules, remounts and supplies. It was these items that would cost the million pounds.

In fact nothing was, or could be, done until this sum was authorised and it was not until 22 September 1899 that the Cabinet finally granted £645,000 as a first instalment. The only thing in plentiful supply before that date was small arms and ammunition and even here there were difficulties. Many of the rifles were wrongly sighted and much of the ammunition was of the wrong type and could not be used.[3]

1 Chamberlain to Beach 7 October 1899. St. Aldwyn Papers PCC 86.

2 Chamberlain to Selbourne 14 August 1899. Quoted in Garvin op.cit. vol.III p.454.

3 See below pp 191-192.

Not that the ordnance department had a monopoly of problems. The QMG's department was also unable to prepare before 22 September and as Sir George White was ordered to take command in Natal just before hostilities broke out the QMG during the war, Sir Charles Mansfield Clarke, was new to the job. He spent the first three months of the war in fear of the army going without the food and forage it needed. Up until 22 September the amount of food sent to South Africa was calculated on the basis of the strength of the garrison actually there. There were reserves in England but there was a natural limit to these as many of the items were perishable. There was for a force of 40,000 men and 20,000 horses, 50 days of preserved meat, 15 days groceries, 30 days hospital comforts and 25½ days hay and compressed forage;[1] a reserve obviously far too small for the force that was actually sent out.

Of course stockpiling of supplies was best done in consultation with the commander of the force to be sent and Buller who was given the command knew more about supply and transport problems than most. However, he was not appointed until June 1899 and even then could make no specific plans because the status of the Free State, on which depended the whole plan of campaign, had not been clarified. Until it was Buller opposed taking action which might subsequently prove misguided. This particularly applied to the proposal to send out 10,000 men in advance of the main force. 'I myself deprecate sending out any portion of the actual fighting

1 Evidence of Sir Charles Mansfield Clarke to the Elgin Commission PP Eng.1904 XL q. 2472.

force until hostilities are so far decided upon that it is necessary to put your force in the field, and there are several things I should like to see done before that step is taken.

Firstly ... Cape Colony and Natal must be protected.

Secondly our relationship with the Orange Free State must be defined ...

Thirdly in South Africa the main difficulties are those of supply and transport ...

/to that I only allude/to say that supply difficulties are so great that they should be faced from the outset and that even 10,000 men for a week if they are not wanted to fight are better anywhere than on a frontier across which they are not intended to be sent.'[1] Wolseley strongly endorsed his demand for the status of the Free State to be resolved so that the route could be decided and magazines formed along it, but no decision seems to have been taken.

Buller became alarmed at the failure to get a decision and at the lack of coherent thought at the War Office, and discussed the problem with Fleetwood Wilson the AUS, on 10 July.[2] Three days later the first meeting of a new committee took place with senior representatives of the civil and military departments (often their heads) under the chairmanship of the Commander in Chief. This 'Commander in Chief's Committee to consider Questions Relating to Operations

1 Buller memorandum 6 July 1899. Cabinet Papers PRO Cab 37/50 no.43 and published in Appendix D to the Report of the Elgin Commission PP Eng.1904 XL p.263

2 Buller Papers. Buller to Tremayne 3 November 1899. WO 132 6

in South Africa' met several times a week and proved to be one of the most useful of the War Office committees and the forum for the administration of the army during the war. On 11 September 1899 it became the 'Army Board for Mobilisation Purposes' and on 11 June 1900 'the Army Board' with a brief to consider military measures quite apart from South African operations.[1]

The committee stimulated a steady stream of demands for expenditure on preparations, most of which were turned down, though Wolseley continued to press Lansdowne on their necessity, sometimes sending him daily minutes on the subject. For example on 1 September 1899: 'I think we ought to be more prepared than we are at this moment as regards stores, equipment, saddlery, harness and hospital materials for the sudden mobilisation of the force it is intended to send to South Africa in the event of war', and on the 2nd: '... I want if possible to avoid the congestion of work to be done and of stores to be purchased at the last moment ...'[2] The continued inaction alarmed Buller still further and the soldiers in the War Office could only tell him that Lansdowne would do nothing. Eventually Buller voiced his misgivings to the Prime Minister's Private Secretary and was invited by Lord Salisbury to state his views. This he did in a lengthy memorandum of 5 September 1899. In it he repeated his misgivings pointing out that at some stage military and political forces must come into line; that before political leaders sent an ultimatum the military should be in a position to enforce it. This was not the case

1 Proceedings of the Army Board 11 June 1900 para.905. WO 108 79.

2 Minutes from Wolseley to Lansdowne 1 and 2 September 1899. Cabinet Papers PRO Cab 37/50 nos.60 and 61.

in South Africa. 'So far as I am aware the War Office has no idea of how matters are proceeding, and has not been consulted. I mean that they do not know how fast diplomacy is moving.' A campaign in the Transvaal would need a large and strange transport. Until the route was known neither the type, amount or position of this transport could be settled. Buller spelt out the size of the forces needed for the advance, for defensive purposes on the frontiers of the colony and for the lines of communications. He pointed out which of these forces had to be provided with transport to enable them to give some meaning to any ultimatum that might be sent and concluded that it was time the diplomatic authorities consulted the military.[1]

The central point to be decided was still the status of the Free State and the point was pressed so forcibly on Lansdowne that on 25 September 1899 he wrote a paper for the Cabinet asking for an early decision: '... we cannot go on making our preparations in ignorance of a factor which should determine the strength of the force to be employed, the places at which land transport and supplies will have to be collected - in a word our whole plan of campaign.'[2] There is no evidence that even this produced a decision or perhaps it did and Lansdowne missed it; as he said on a later occasion when accused of flouting a 'clear' decision of the Cabinet: 'I was quite unaware of any such decision, but our decisions are very often impalpable - and perhaps I ought to have been

1 Buller to Salisbury 5 September 1899. Cabinet Papers PRO Cab 37/50 and published in Appendix D to the report of the Elgin Commission PP Eng.1904 XL.

2 Memorandum by Lansdowne 25 September 1899. Cabinet Papers PRO Cab 37/51 no.74.

able to construct one from the materials afforded by Devonshire's yawns and casual interjections round the table.'[1] In the event the decision proved to be of less importance than had appeared as by the time the troops reached South Africa units had to be diverted to points where they were most needed and the army corps never assembled as a whole.

Apart from the problem of equipping the army corps, and later many more troops, the task of transporting it, its animals and goods over some 6-7,000 miles was itself considerable and required careful preparation. The primary responsibility for this rested with the Admiralty. The organisation was potentially disruptive as there was a division between control (the Admiralty) and financial responsibility (the War Office). Some members of the War Office sought to increase their control, since they paid for the service, but the Admiralty opposed this as they did not think it safe. This could have led to friction. There was also the danger that expenditure recommended by the Admiralty would be vetoed by the Secretary of State for War who might not realise its importance.

Such a case did arise in 1899. A joint War Office-Admiralty conference on the problems of the despatch of two army corps with cavalry division and line of communication troops (which was the maximum envisaged by the Stanhope memorandum) opened on 14 May 1899. It considered such things as bedding, horse fittings and so on. The naval experts predicted that the embarkation of one corps, one cavalry division and

1 Lansdowne to Balfour 28 April 1900. Balfour Papers Add. Mss 49727.

line of communication troops, which was the force proposed for South Africa, could be completed within a month of the order, if fittings were ready in advance. Such a force contains over 15,000 horses and there were, in stock, fittings and and water tanks for only about 9,000. The committee recommended a change in the type of horse fitting to one more like that used in the cattle trade. This was simpler, quicker to fit and allowed more horses on board a ship than the old fashioned military ones. The committee also found that the existing stock of fittings was dangerously insufficient and that the stocks of the old type should be kept up to 10,000. The committee proposed the immediate purchase of 6,000 new style fittings.[1] This expenditure which was supported by the Army Board[2] was vetoed by Lansdowne. Inevitably there was some delay because of this, but it seems not to have been serious.[3]

The actual mobilisation and despatch of the army corps proceeded extremely smoothly, all necessary steps being taken within hours of the Royal Proclamation calling out the reserves being signed. There had been plenty of time to prepare for this as the steps to be taken were the same wherever the troops were to be sent. Large scale manoeuvres had been held in the autumn of 1898 which helped iron out a few practical difficulties. Reserves were called up to bring battalions to their full war time establishment. The War Office was caught

1 Evidence of Lt.Col.J.S.Cowans to the Elgin Commission PP Eng.1904. XL q.2832 and 2858

2 Proceeding of the Army Board 15 July 1899. WO 108 79 para.19.

3 Evidence of Stephen J.Graff, Assistant Director of Transports, to the Elgin Commission PP Eng.1904. XL q.9524-9525.

by surprise at the number of reservists needed to replace unfit or immature soldiers. There were however sufficient to fill the places and Wolseley felt the short service system vindicated thereby. When the troops reached their mobilisation stations such transport as they were due to take with them was usually ready for them. They were then entrained to their ports of embarkation where ships were waiting. In the first few days the only limit on numbers leaving was how fast trains could be run and emptied. On the first day 23 special trains were run to Southampton. Colonel Stopford, who had been in the War Office perfecting the mobilisation arrangements for two years before the war, was so carried away by his success that he burst into the Adjutant General's office to announce he was going to go and buy old furniture. (This was what Von Moltke had done after mobilising on the eve of the Franco-Prussian war.)[1]

The production of the large numbers of ships needed at short notice was the result of careful Admiralty planning. Registers were kept containing full particulars of every suitable ship under the British flag, the information coming either from the owner or from naval inspectors. The transport department of the Admiralty was geared to instant expansion in time of war (unlike any of the War Office departments). Such preparations as could be made without much additional expense, such as fitting out hospital ships with equipment in store, washing all the bedding and so on, were made. Officers were sent to coaling stations on the route and various manufacturers of horse stalls were contacted. Once expenditure was authorised

1 Sir Evelyn Wood: From Midshipman to Field Marshal. Methuen and Co. 1912 p.404.

on the 22 September 1899 orders were placed for additional fittings. A requisition on the following day for the transport of 7,000 mules from the Mediterranean was dealt with in three days. The whole force originally planned for South Africa (one army corps, one cavalry division and seven battalions line of communication troops), which was mobilised between 7 and 20 October, was successfully embarked by the end of November.[1]

1 Evidence of Graff to the Elgin Commission PP Eng.1904.XL q.9545

Sea Transport

Not the least remarkable feature of the South African War was the need to send and maintain by sea so large an army so far from home. Many aspects of the war presented problems unprecedented in their complexity and scale but none so clearly as this. The original force sent out, itself twice the size of the British army in the Crimea, was dwarfed by the number of troops finally needed. A total of 387,000 men were embarked for South Africa between October 1899 and June 1902, more than ten times the number of British troops in either the Peninsula or the Crimea. Practically all their food, arms, clothing and equipment had to be shipped to them. Neither mules nor horses to make the force mobile were available in South Africa in anything like sufficient numbers so shipping had also to be found for 350,000 horses and 104,000 mules.[1] By comparison the largest force that had previously sailed from England had been some 40,000 men sent to India in 1857 to help suppress the Mutiny. These did not have to take all their equipment, food and transport with them. Other Indian campaigns involved mostly the troops of the Indian Army. British troops in colonial campaigns elsewhere were almost trivial in number compared with South Africa. Three battalions were sent out to Ashanti in 1873; 10,000 men were sent to Zululand after the disaster of Isandlwhana in 1879; and the total of all troops under British command at Tel El Kebir in 1882 was only some 17,000. Kitchener's victories in the Sudan in

1 Appendix 33 to the Minutes of Evidence to the Elgin Commission PP Eng.1904 XLII p.233.

1898 required merely a brigade of troops from England.

Most of the troops for South Africa (over 300,000) went from England. From Southampton to Cape Town is just under 6,000 miles. If the ships put in for coaling or went via St. Vincent it was over 6,000 miles. Durban is another 800 miles beyond that. Many ships sailed from other British ports, most commonly Liverpool and London, thereby increasing the distance. Bombay, the nearest major British controlled port, was 3,800 miles from Durban. Over 28,000 men of the various colonial contingents also came from homes thousands of miles away. The shortest passage from Australia, Freemantle to Durban, is 4,420 miles, Melbourne to Cape Town is 5,900 miles, Wellington is 7,000miles from Cape Town.

Nor was the shipping of animals easier. Those bought in Central or Eastern Europe generally embarked at Trieste or Fiume some 5,000 miles from Durban. Those from the Americas usually sailed from New Orleans or Buenos Aires which were about 6,700 and3,965 miles from Cape Town respectively. Many came from Australasia over the distances given above.

Military and Naval Administration.

The massive quantities of shipping required for such movements came from the practically limitless resources of the British mercantile marine. The supervision of sea transport, including the selection and fitting out of ships, was the responsibility of the Admiralty Transport Department. The role of the War Office was to requisition what was wanted and organise embarkations, disembarkations and related railway and transport arrangements. The entire cost of all these services was met by the War Office. This potentially

disruptive division of control and financial responsibility on the whole worked well. The fitting out and manning of ships at sea was very much a naval role and this was recognised by the military authorities.

Inside the War Office shipping, like all things connected with the movement of the army, came under the authority of the Quartermaster General. One section of his department (QMG 2) was responsible for all questions relating to shipping and was headed by Lieutenant Colonel Cowans as DAQMG. This section was in constant touch with the Admiralty in peacetime and an officer of the section was permanently stationed there during war.[1] QMG 2 took over as soon as the Adjutant General notified the section of what troops were to move. The section then issued orders to the troops and informed the Admiralty of the number of troops and their destination. As soon as possible the Admiralty sent back the name of the ship, its accommodation and the date of departure. QMG 2 then arranged transport to the port of embarkation.[2]

Though this organisation was established and understood before the war it had never had to face an operation of such size. To some extent therefore it was experimental. Cowans later recalled: 'Measures were at first really tentative; there had never been a despatch of such a big force before ... in the course of a few weeks ... we all became more conversant with the despatch of such a force.'[3] Moreover, like most of the War Office departments, QMG 2 was dangerously

1 Evidence of S.J.Graff to the Elgin Commission PP Eng.1904. XL q 9522
2 Evidence of Cowans to the Elgin Commission PP Eng.1904. XL q 2894
3 Ibid.

understaffed. Apart from Cowans himself there were eight clerks of various grades, most of them junior, and one copyist. Nine months before the war Cowans had stated: 'If there be any like amount of work such as has been incurred in the last three years an increase of staff must be sanctioned'[1], but nothing had been done before the war started. The embarkation of troops, however, went more smoothly than might have been anticipated in such circumstances.

The Transport of Troops.

Orders for the mobilisation of an Army Corps, Cavalry Division and seven battalions for the line of communications were sent out on October 7 1899. Mobilisation began on 9 October and the entire force (less one cavalry regiment delayed by horse sickness) was embarked by 17 November.[2] Thereafter each additional unit was embarked about one month after it was ordered out. The embarkation of the original force was, as far as possible, by brigades and divisions as Buller had wanted. A few units were kept back as their equipment or transport were not ready but most sailed in order.

Wolseley's derided claim that the troops would be ready before the ships was proved true, as he was only too happy to point out. His confidence in the War Office mobilisation arrangements was of long standing. In March 1897 he had written: 'But what is the use of our being able to mobilise in a fortnight, as we shall be able to do, I hope before long, if the navy are going to take a month to find the ships to

1 Statement of Lt.Col.Cowans to the Committee on War Office Establishments WO 33 190.

2 Memorandum by Lord Wolseley 30 January 1900. Appendix D to the Report of the Elgin Commission PP Eng.1904 XL.

send the troops where they should go.'[1] In January 1900 he was not only able to say that the troops had been ready before the ships to carry them but rather patronisingly added that the Admiralty had done very well to find them all.[2] That the troops had indeed to wait for the ships was confirmed by Stopford who told the Royal Commission after the war that reservists could have been ordered to rejoin their units within three to four days (in fact they were given ten days) but that there was no point as the ships would not have been ready for them. Wolseley and Stopford were, of course, very interested parties but there is ample evidence elsewhere that these assertions were justified. In February 1900 Lansdowne apologised to the House of Lords for disappointment caused by a three week delay in sending out Yeomanry but explained it by pointing out the difficulty of fitting out horse ships.[3] Similarly George Wyndham (who had replaced Brodrick as Under Secretary of State for War) told the Commons later the same month that the Eighth Division would sail as soon as transports were ready.[4] Nor were these explanations reserved for public consumption. In November 1899 Lansdowne told the Duke of Devonshire, and later the Cabinet: 'The delay (in reinforcements) arises not so much in getting reservists as in obtaining the necessary mules and vehicles to render the force mobile, and in providing the shipping to take it to South Africa.'[5]

1 Wolseley to Maurice March 1897 quoted in Maurice and Arthur: The Life of Lord Wolseley. London1924 p.286.

2 Memorandum by Lord Wolseley 30 January 1900. Appendix D to the report of the Elgin Commission PP Eng.1904 XL.

3 Hansard LXXVIII col.689.

4 Ibid LXXIX col.1205.

5 Lansdowne to Devonshire 15 November 1899. St. Aldwyn Papers PC/PP/73. Cabinet Papers PRO Cab 37/51 no.86.

Delay there undoubtedly was. Its cause was not Admiralty incompetence but the government's failure to provide the necessary funds in time. On average an infantry ship took ten days and a cavalry ship twelve days to prepare and this average was shorter than the initial efforts. Before the war the Admiralty never claimed to be able to fit up a cavalry ship in less than seventeen days and had not attempted to fit one out since the Crimean War.[1]

The Director of Transports, Rear Admiral Sir Bouverie Clark, had made what preparation he could without incurring unauthorised expenditure. Bedding for 55,000 men was washed and prepared. The registers[2] were checked and brought up to date. On 28 September 1899 the Quartermaster General sent details of the force to be carried and the ports of embarkation. Although no such step had yet been authorised Admiralty officials tendered for two ships on their own responsibility as well as circularising 35 ship owners asking what vessels were available and on what terms.[3] Two days later there was a meeting at the War Office between the military headquarter staff and George Goschen, the First Lord of the Admiralty, Sir Bouverie Clark and S.J.Graff (the Assistant Director of Transports). That meeting settled the details of the embarkation and the same night the Admiralty engaged twenty ships, though the official requisition for 46,000 men and 8,600 horses did not come through until nine days later. The whole tonnage required was in hand by the third week in October

1 Evidence of Lt.Col.Cowans to the Elgin Commission PP Eng.1904 XL q. 2922 and 2925

2 See p. 47

3 Evidence of S.J.Graff to the Elgin Commission PP Eng.1904. XL q. 9542.

which was a creditable achievement, particularly as the Admiralty 'were only able in view of the likelihood of the short continuance of the war, to promise two or three months certain, and that is rather a short time for ship owners.'[1]

As well as making ships harder to get the assumption that vessels would only be wanted for a few months pushed up prices. Nobody would come in for under a pound (per ton/month) which was way above the normal commercial rate and prices further increased with demands for more shipping for reinforcements. But by the end of the war the price had dropped to under sixteen shillings and the average for the whole war was just over eighteen shillings.[2] At these prices the ship owners were not making patriotic sacrifices but the general opinion of the officials and officers involved was that they were not excessive. Much of the fitting out of a ship was done at the owner's expense though under the supervision of the Admiralty inspectors. This was costly and it was reckoned that an owner got nothing out of the first month's hire.[3]

The sort of work involved in fitting out a troopship was described by The Times when reinforcements were sent to South Africa shortly before the war. One of the Union Line steamers was requisitioned by the War Office on a Monday and was completed and inspected as a troopship on the following Friday.

> The troop decks were a wonder of cleanliness and order. Great transverse beams were studded with hooks to sustain the hammocks for the men. The hammocks themselves were stowed at one end of the

1 Ibid. XL q.9547

2 Ibid. XL q.9554

3 Evidence of Captain Pitt RN Naval Assistant Director of Transports to the Elgin Commission PP Eng.1904.XL q.9789.

> huge improvised cabins. Long deal tables, each numbered and showing how many men it would accommodate, were arranged athwart the ship on either side, with a broad gangway between. The floors were nicely sanded. All manner of regulations and directions for the daily routine of life on board the troopship were posted in conspicuous places.
>
> On the deck were improvised wooden structures each with its allotted use, orderly room, dispensary, dry canteen and all the offices of military life ...[1]

The final inspection of all transports was carried out by a joint team of naval and military officers including an army medical officer and (if the ship was to carry animals) a veterinary surgeon. This was only one part of the job for the naval officers who also surveyed vessels and supervised their fitting out. Naval staffs for this purpose were established at London, Liverpool and Southampton.

The embarkations were no great strain on English port facilities which had been built up to cope with the massive seaborne commerce of the Empire. London was used to handling every sort of cargo and passenger shipping. Southampton had great experience of passenger embarkations though the tides, rising and falling some twenty feet, made it less suitable for remounts. For these Liverpool, the centre of the cattle trade, had ample facilities.

Most of the troops sailed from Southampton. By March 1902 nearly 220,000 officers and men had left from there and

1 The Times 18 September 1899. The hammocks, on any troopship, were only enough for two thirds of the men carried. In the days of sail one third of the ship's company had always to be on watch and a parsimonious government had refused to pay for more hammocks than would be needed at any one time. This was, of course, completely irrelevant to steam powered troopships but, as nobody had remembered to change the regulations, one third of the men had to sleep in odd corners or the more invigorating atmosphere of the deck.

95,000 had returned to it.[1] In practice the only limit was the speed with which troops could be poured in to the port. Colonel Cowans recalled:

> ... some of the embarkations - I mean in the early ships we were sending as many as 20,000 men a week from Southampton - were governed by the train services; we could not have got off more than we did, there were about five ships a day. I think there were 23 or 25 special trains down to Southampton on the first day of the despatch of the Army Corps.[2]

Food for the passage was initially provided by the Admiralty Director of Victualling. The troops' reaction to salt beef was very unfavourable but at first Lansdowne refused to meet the extra cost of having the ships victualled by the owners. If the experience of the 1,600 men on the transport 'Nubia' was typical the troops' feelings were not unjustified. There it was found that the twelve pounds of meat, issued for each sixteen men, shrank to three pounds after cooking. The doctors and the Colonel condemned the meat, after inspection, and the whole lot was thrown overboard.[3] Finally, after many complaints and pressure from the authorities of the Naval Victualling Yards who had provided rations for 43,000 men for 35 days and did not wish to deplete their stocks further, Lansdowne gave way. From January 1900 owners assumed all responsibility for victualling ships. The cost increased by one third but even so the daily rate was only one shilling for

1 Col.Stacpole, Embarkation officer, quoted in The Times 17 March 1902.

2 Evidence of Lt. Col. Cowans to the Elgin Commission PP Eng. 1904 XL q. 2878.

3 The Times 15 November 1899.

regulars and one and sixpence for volunteers and yeomanry.[1] This was scarcely pampering the troops.

The distinction between regulars and the others seems invidious and absurd, particularly as the yeomanry, in the later stages of the war, were worse than useless, indeed they were an absolute danger[2] and were anyway paid more. Even more ludicrously the distinction was extended to the tables where regulars were allotted a width of one foot six inches against the yeoman's two feet. Yeomanry, like sergeants, also had an extra two inch width of hammock.[3] Perhaps these better conditions were carried over from the abortive attempt of the Imperial Yeomanry to organise everything for themselves. When they were formed the original idea was that the War Office was to take responsibility for them only after they had landed (fully equipped) in South Africa. However, Board of Trade regulations made under the 1894 Merchant Shipping Act were found to prohibit commercial vessels from taking horses and passengers at the same time and the Admiralty had to take over.[4]

Apart from this minor difficulty embarkation proceeded without a serious check. From the time that authorisation and funds had been given to take up ships there had been no

1 Evidence of S.J.Graff to the Elgin Commission PP Eng.1904. XL q 9603-4

2 Sir John Ardagh wrote to his wife from Pretoria in March 1902: 'The announcement that many thousands of that arm, entirely untrained and inexperienced, are coming out here positively excites dismay.' Quoted in Susan, Countess of Malmesbury: op.cit. p.389.

3 Evidence of Captain Pitt to the Elgin Commission PP Eng.1904 XL q. 9817

4 Evidence of Col.A.G.Lucas, Deputy Adjutant General Imperial Yeomanry, to the Elgin Commission PP Eng.1904. XL q. 6464.

avoidable delays and as everybody became more experienced the time required to despatch a transport lessened. Moreover transports, once fitted out, were kept on though additional ones were sometimes needed. Thus in June 1901 there were 45 transports in hand and of these five were preparing in England, nine were on passage out, eleven were travelling to England, and the remainder were hospital ships, on South African coastal voyages or awaiting contingencies at the Cape.[1]

Vessels were originally retained in South Africa at the instigation of Buller who wanted sufficient transport to be able to move a division. Eight infantry ships and twelve horse ships were sanctioned for this purpose in November 1899. In December he was asked whether any more ships should be retained because of the large increase in forces. He recommended that an additional four infantry ships should be retained becuase of the ease with which they could be converted into hospital ships.[2]

Hospital ships were a form of troop transport for the conveyance of invalids to hospitals and were not themselves primarily floating hospitals. When Roberts left South Africa there were ten in service. Of these three were used to carry invalids from other ports of South Africa to Cape Town and seven were used to provide a regular service to England. Two of them had been fitted out by the Admiralty before the war in England. It was soon clear that more would be needed and two more were fitted out in England at the expense of private

1 Brodrick 6 June 1901. Hansard XCIV col.1231.

2 Buller to Promial (telegraphic address of the War Office) 25 December 1899. Buller Papers. Code Telegrams WO 132 13.

individuals (one for a committee of American ladies and one for H.R.H. Princess of Wales). The other six were all prepared by the Admiralty Transport Department in Durban. As well as these there were a number of yachts lent by private owners for the use of sick officers.[1]

In all 116 transports were used during the war with an average capacity of 6,400 tons, giving a total of nearly three quarters of a million tons of shipping. The size of vessels ranged from 12,600 tons to 3,500 tons.[2] It could not be expected that in the many lengthy journeys of so many ships they should be exempt from the ordinary maritime hazards. But it was the proud boast that they never lost a man and apart from Major Wrottesley, the designated Director of Telegraphs, who fell overboard near Teneriffe (but not as the result of any accident to the ship), it was true. There were some trivial accidents which, though irritating and delaying, caused no danger as, for example, a ship that got a hawser wrapped round its propellor; divers took four hours to clear it and it missed the tide. Yet some accidents were potentially serious. Perhaps the narrowest escape was by a militia battalion sent to Malta to relieve a regular battalion there ordered to South Africa. The German captain of their ship was determined to wreck the vessel and only a timely intervention by the First Mate saved it from destruction.[3] As the captain shot himself before any enquiry could be made his motives remained obscure.

1 Roberts Despatch 2 April 1901. Roberts Papers WO 105 12.

2 Evidence of S.J.Graff to the Elgin Commission PP Eng.1904 XL 9552 All these figures are of gross register tonnage not displacement.

3 Hansard LXXVIII col.1231.

Other vessels ran into a variety of mishaps. For example the 'Mount Lebanon' broke her shaft and had to be towed 2,000 miles to Cape Town by a Tyne collier.[1] The 'Ismore' carrying, among other things, two hundred cavalry and a field battery ran on to the rocks in St. Helena Bay and subsequently broke up, but nobody was lost though the material of the battery and 284 horses were.[2] Similarly when the 'Tantallon Castle' went ashore in Table Bay in May 1901 no lives were lost though, again, it proved impossible to save the ship or most of the cargo.[3] Considering the number of passenger miles covered it was not a bad record.

The transport of freight.

As well as the movement of troops the Admiralty supervised the transport of some 2,000,000 tons of goods. Most of this went in freight ships. These differed from transports (which also carried goods)[4] by being chartered for delivery of a specific cargo rather than by time. Thus as soon as a freight ship had discharged its cargo it was no longer in government employ. This proved appreciably cheaper than keeping on transports which might be doing nothing for half the period of their hire; but if a freight ship was kept waiting to unload after its arrival the owners had to be compensated for demurrage.

1 The Times 14 April 1900.

2 GOC Cape to Secretary of State for War 3 and 4 December 1899 17 January 1900. WO 108 66 nos,1551, 1581 and 2506A. The subsequent Court of Inquiry found the Captain at fault for not using the lead and suspended him for 6 months.

3 The Times 8,9,10,11 and 13 May 1901.

4 Similarly 'freight ships' might take troops, as did, for example, the 'Braemar Castle' which took out the Army Service Corps.

The procedure for freight ships differed from that used to get transports. Though the War Office requisitioned through the Admiralty (except for forage ships sailing from foreign ports for which the War Office used the Director of Army Contracts to contract with owners) the actual work was done by a company of City Shipping Agents. They submitted all contracts for more than £100 to the Admiralty Director of Transports but otherwise made all the arrangements themselves. Two hundred and eight cargo ships were thus engaged, not including those procured by the War Office. It was, curiously, the first time freight ships had been used in a military expedition[1] and they proved very successful.

They did, however, present special problems. Most of these came from the combination of military and commercial stores on the same ship which could only have been avoided by delaying until a shipload of goods had been amassed. The difficulties and delays in unloading caused by the mixture of military and commercial goods were aggravated by careless packing and, in the early days of the war, by failure to notify the recipients of what could be expected in each ship. This was soon remedied as the officers responsible for unloading in the Cape Colony and Natal both vehemently protested,[2] independently but within five days of each other.

Inconvenient packing, however, continued throughout the war despite many protests. It was not always a mixture of military and civil goods that was affected. Cargoes containing

1 Evidence of S.J.Graff to the Elgin Commission PP Eng.1904. XL q 9641

2 GOC Natal to Secretary of State for War 18 October 1899. GOC Cape to Under Secretary of State for War 23 October 1899. WO 108 66.

only various military stores were sometimes carelessly and unhelpfully packed. For example the 'Johannesburg' with a hundred horses for Natal first whipped out 500 tons of naval stores at Simon's Bay (which was a slow operation), then crawled along the coast, which is famed for storms, putting in at every intervening point. By the time the horses landed they had had a voyage of five weeks. Then the ship returned to Cape Town with stores of which the Director of Supplies complained he had no details and was probably at that moment buying.[1]

Later, efforts were made to avoid this kind of unnecessary difficulty. In December 1899 the GOC Cape, Sir Frederick Forestier-Walker,[2] stressed that supplies sent out for reinforcements should not be mixed with stores or general merchandise.[3] But it was not always practicable to load ships for convenience of unloading. In January 1900 Forestier-Walker asked that 12 pounder QF ammunition should be shipped on top of everything else as it was urgently needed. This proved to be impossible for safety reasons. The QMG explained that all ammunition had to be stored in magazines built according to Admiralty regulations and that these particular shells had to

1 Sir Wodehouse Richardson: With The Army Service Corps in South Africa. London 1903 p.31.

2 Sir Frederick Forestier-Walker joined the Scots Guards in 1862. He had previously served in South Africa from 1873 to 1879 and 1884 to 1885 holding staff appointments in the Zulu War, the First Boer War and the Bechuanaland campaign commanded by Sir Charles Warren. He had become GOC Western District in 1895 and had been sent to South Africa at very short notice in August 1899 when his predecessor was recalled

3 GOC Cape to Secretary of State for War 19 December 1899. WO 108 66 no.1895.

be kept separately from others. The only assurance he could offer was that where possible magazines would be built in accessible parts of the ship.[1]

Similarly the difficulties encountered over the mixture of civil and military cargoes could not be entirely overcome. In April 1901 it was suggested that certain holds in freight ships should be completely reserved for ordnance stores, until then mixed up with other cargo and often difficult to get at. It was decided that this was impracticable.[2] A further difficulty was that where civil and military cargoes were combined in the same ship the commercial cargoes tended to be on top (and hence had to be removed first) more often than chance alone made likely. Indeed, in some shipping lines it was almost invariable. In December 1901 Major Armstrong, Kitchener's financial adviser, presented a report on this situation including a list of the worst offenders, among whom was the Union line. Kitchener sent the report to England but all that it elicited was an indignant denial. In a long letter the QMG told Kitchener that the importance of keeping government stores together and easy of access was 'thoroughly appreciated both by the Shipping Agents and the Steamship Companies'. There were, he said, no grounds for Armstrong's assertion that merchandise was shipped on top with intent to get priority of discharge. A surveyor, employed by the government Shipping Agents, visited steamers daily to advise on the most convenient means of stowage. Then there were

1 QMG to GOC Cape 22 January 1900. Ibid no.2623.

2 GOC Cape to Secretary of State for War 26 April 1901 and Secretary of State to GOC Cape 3 May 1901. WO 108 70 nos. 12004 and 12149.

practical considerations. It was necessary to reserve a thousand tons or more to ensure there was sufficient space. When, as often happened, the total fell short the owner naturally filled up with general cargo. Some military stores were so awkward in bulk or shape that they could not be packed on top. Anyway, the letter finished, there was no practicable alternative as to take full ships would cause too much delay.[1] The problem never was overcome and caused much irritation right until the end of the war.

The transport of animals.

The shipping of remounts was attended with much more serious difficulties. Horses are never good sailors and the distances involved caused great distress and some loss among animals. Those that landed safely were often in poor condition and this contributed to the very high equine casualty rate in the campaign. Moreover those animals bought in Europe or North America had to cross the equator and thus met the added hardship of arriving in summer with heavy winter coats or vice versa.

The provision, fitting and inspection of ships for animals sailing from home waters was for the most part an Admiralty responsibility though a few did come from War Office arrangements with private contractors. For animals sailing from foreign ports the Admiralty arranged the hire of ships but fitting out was left to the owners and inspection to the remount officer on the spot. Thus most animals sailed in ships that had not undergone an Admiralty inspection.[2] A comparison

1 QMG to GOC IN C23 February 1902. Chief of Staff Letters and Papers. WO 108 14 C of S 172.

2 From home waters there sailed only 83,800 horses out of a total of nearly 350,000.

of casualty rates on ships from various ports is far from showing any ill effect from this lack of inspection. Indeed the figures suggest, if the inspection is to be credited with any effect at all, that it was positively harmful. The English rate (6.68 per cent) was more than double the American rate (3.04 per cent) which was the most easily comparable one for distance and numbers involved.

There is no satisfactory explanation for this difference. It has been suggested that the British practice of sending one ship to several embarkation ports to take on horses was a factor. Horses already on board when the ship stopped would suffer from lack of ventilation.[1] It is certainly true that horses quickly lose condition in such circumstances. Making the same point Colonel Birkbeck, Assistant Inspector of Remounts in South Africa, recommended that if horses could not be disembarked immediately on arrival it might be better for the ship to put to sea again to maintain ventilation.[2] Even so this can hardly account for all the extra casualties.

The British figures apart, the casualty rates were smallest for those countries nearest South Africa and larger for those farther away. This is natural enough but the progression is sufficiently uneven to show that distance was not the only significant factor. The rate for Argentine shipments was 0.695 per cent; for Hungary 1.36 per cent; for the United States 3.04 per cent; for Canada 4.02 per cent; and for

1 Maj. Gen. F. Smith: A Veterinary History of The War in South Africa 1899-1902. London 1919.

2 Answers to Questions From Various Branches of the Quartermaster General's Department by Officers Employed in South Africa. WO 108 76.

Australia 4.14 per cent.[1] In all 13,144 horses were lost at sea.[2]

Various causes contributed to this considerable loss. Accidents to horse ships were rare but when they happened the casualties were serious. The loss of 284 horses on the 'Ismore' has been mentioned. The heaviest single loss of the war was when the 'Suffolk' sank off Cape St Francis (40 miles west of Port Elizabeth) and 930 horses were drowned.[3]

Apart from such accidents the main factors governing the health of horses at sea were their condition on boarding, the weather, the steadiness and roominess of the ship and the care they received during the voyage. The first of these, the horses' condition on boarding, was very important but was not really a question of shipping. Virtually all countries sent occasional bad shipments but English and American horses suffered most from this. In America the trouble was mostly disease, usually influenza or glanders, and there were a number

1 Calculated from the Return of Horses and Mules Purchased by the Army Remount Department for South Africa from October 1899 to June 1902. Appendix 38a to the Minutes of Evidence to the Elgin Commission PP Eng.1904 XLII p.259. The figures are of horses purchased by the Remount Department and so do not include about 40,000 animals shipped for the colonial contingents and the Imperial Yeomanry. It is possible that these figures might alter slightly the relations of the shipping figures given. More detailed extracts from the return are given in Appendix B.

2 Statement shewing the number of Horses, Mules and Donkeys procured from all sources for the South African War 1899-1902. Appendix 38 to the Minutes of Evidence to the Elgin Commission PP Eng.1904 XLII p.258. This figure includes losses of horses from colonial and I.Y. shipments.

3 GOC Cape to Secretary of State for War 26 September 1900. WO 108 69 no.8410. These horses came from Fiume and must have been an Imperial Yeomanry shipment. The Remount Department lost only about 350 Hungarian horses at sea in the entire period May 1900 to March 1901.

of complaints from the Cape about careless inspection of horses. In England part of the trouble was that horses were railed to the ports when the ships were ready and had no time to recover from the train journey before being embarked. This did not happen in many of the other countries where horses were collected in camps near the ports until ships were ready. The difference in practice may have been a factor in the heavier casualty rates from England.

Weather and the steadiness of vessels are factors that must naturally be considered together. There was nothing that could be done about the first but the more stable the ship the less the effect of severe weather was felt. In general the bigger the ship the better from this point of view though size could be inconvenient for caring for and disembarking the animals. Apart from the roughness of the sea cold had an adverse effect on horses and the combination of these two showed in the early embarkations from England. The casualty rates for shipments in December 1899 and January 1900 were noticeably higher than those for October and November 1899 and February and March 1900.[1]

The effects of very severe weather could be catastrophic. A lieutenant, on a horse transport ordered from Durban to the Cape during a gale, sent his father a graphic description of his experiences. At first, as the ship began to labour, the men held on to their horses. Then the whole stabling began to crack and the men were withdrawn for their lives. Eventually the stalls smashed and horses and mules started to slide all over the deck with, in some cases, legs broken and

1 The Times 26 April 1900.

eyes torn out. The lieutenant was thankful he had been able to shoot his own three horses.[1] A similar fate met the 'Rapidan' from Liverpool. The ship was so badly damaged by a gale in the Irish Channel that it had to put back. It lost 140 horses, over one third of those it carried.[2]

The care of animals on the voyage depended on the suitability of fittings on the ship, the availability of sufficient qualified men and the trouble they were prepared to take. There were two types of horse stall in use on the boats. The older type was a six-foot stall with breast pad and slings and did not allow the horse much movement. If the ship rolled violently the animal was hoisted off its feet by the slings. Behind the stalls was a passage which allowed for mucking out. Most cavalry officers approved of this system but a joint committee of naval, military and veterinary officers adopted a system of eight-foot stalls just before the war. These were used by Atlantic horse traders and allowed the horse to try and compensate for roll. They were also less elaborate and allowed more horses to be carried in each ship. But the extra two feet of stall meant that there was no room for the passage behind and so it was difficult to clean out the stalls. On the Atlantic crossing of about ten days this was not too serious but on the longer journey to South Africa conditions became vile. The old style were still in use because the Admiralty had not been allowed the money, before the war, to replace them and so both were in service. The casualty figures do not suggest that there is much to choose between them.

1 Lt. Lord Blackwood to Lord Dufferin quoted in The Times 8 November 1899.

2 The Times 26 April 1900 and Smith op.cit.

Even where the Admiralty had adopted the trade pattern there were differences between their fittings and those of commercial shippers, mostly in the strength of construction. In general the Admiralty provided well built stalls while the trade fitted ships varied considerably and some used very flimsy materials and construction. There were also complaints of overcrowding on trade ships. Colonel Birkbeck (Assistant Inspector of Remounts) wrote in a report of December 1900: 'I entirely agree with the remarks of various officers ... as to the rapacity of ship owners'.[1] This was clearly not true of all owners as the shipment of horses from Argentina, which had the lowest percentage loss rate of all, was entirely in the hands of a private firm. Moreover the situation improved as the war proceeded, presumably as the less reliable shippers were discovered and removed from the War Office list. Birkbeck, adding to his report after the war, said that the trade ships had become uniformly good and were not overcrowded as used to be the case.[2]

Birkbeck also criticised inadequate care on the voyage. He complained that the proportion of attendants was insufficient and that the quality of civilian attendants, whether from home or foreign ports, was too low. The provision of vets also caused some difficulty, partly in finding them at all and partly in ensuring that they knew their business. Before November 16th 1899 eleven ships sailed from England without a vet at all but the numbers of horses were not large

1 Answers to Questions from Various Branches of the Quartermaster General's Department by Officers Employed in South Africa. WO 108 76. Hereafter cited as Answers.

2 Ibid. Additions 5 September 1902.

and each ship carried a farrier. The death rate for ten of them (the other was the 'Ismore') was 4.52 per cent[1] which was certainly not excessive by English standards. The effects of an incompetent or careless vet are well illustrated by the report of the Principal Veterinary Officer for the South African Constabulary on a shipment of Australian horses he inspected in August 1901. He found that though the fittings were good the ship was overcrowded, there had been no mucking out, the watering was inadequate and the food poor. No grooming had been attempted, there were eight cases of strangles untreated, 54 horses had died on the voyage, four dropped dead after docking but before they could be landed, four were shot on board as too far gone and four were shot on the wharf as incurable. Those that landed were in very poor condition and the vet, when interviewed, did not even seem to know his way around the ship.[2] Here again the situation improved as obviously incompetent men were weeded out. For example, in August 1900 the GOC Cape, calling attention to serious overcrowding and inadequate food and attention on American shipments, recommended that one Veterinary Surgeon Bannister should not be re-employed.[3]

Even when the vet was capable his advice was not always taken. On one ship from New Orleans it was claimed that the remount officer in charge became convinced that some of his horses had glanders and, against the advice of the vet on

1 Hansard LXXX col.25.

2 Report of Maj.C.J.Sanderson PVO South African Constabulary 14 April 1902. South African Constabulary Despatches CO 526 1.

3 GOC Cape to Secretary of State for War 8 August 1900. WO 108 68 no.7514.

board, threw 270 into the sea. When bad weather stopped this operation and other afflicted animals were inspected they proved only to have colds.[1]

The practice of throwing animals overboard was evidently a common one and created at least one hazard of its own. In May 1900 the GOC Cape cabled home asking the Secretary of State to instruct all ships to weight any animals thrown overboard in Table Bay and to throw them out as far out to sea as possible, to avoid their being washed up and causing a health hazard.[2]

In general the same considerations apply to mule shipments as to horse shipments, but mules are much hardier animals and the casualties were correspondingly less. The total loss at sea was 2,816 out of a total of over 104,000. The main sources of mules, excluding South Africa itself, were Italy, Spain and the United States, the last of these providing over 80,000 mules. The overall rate of loss on American shipments was 2.34 per cent which was less than that for Spanish shipments though these provided only 15,000 mules. Mule ships were easier and quicker to fit out than horse ships as the animals could be shipped in pens and did not require individual stalls. The only real difficulty was that mules will eat anything softer than their teeth. Thus wooden fittings, ropes and canvas water and food troughs suffered heavily but this was fairly easily overcome by tarring wood, substituting chains for ropes and using galvanised iron for troughs.[3]

1 Hansard XCV col.1056.

2 GOC Cape to Secretary of State for War 14 May 1900. WO 108 67 no.5542.

3 Answers. WO 108 76.

There were fewer accidents to mule ships than to horse ships which was largely due to there being many fewer ships, firstly because the number of mules sailing was less than a third of the number of horses and secondly because each mule took up less than half as much shipping as each horse. The only serious accident was to the 'Carinthia' which went aground and was a total loss as were the 435 mules it carried. There was a potentially much more dangerous incident when an attempt to sink a ship with 1100 animals on board was made at New Orleans. A high explosive shell was detonated against the vessel but damage was slight and the vessel was merely delayed.[1] Despite considerable anti-British feeling this was the only attempt of its kind.[2]

The South African Ports.

The massive quantities of shipping with hundreds of thousands of men and animals and millions of tons of stores from major ports all over the world had all to converge on the relatively minor ports of Southern Africa which were quite unaccustomed to handling ships on such a scale. Inevitably this caused great difficulty.

The facilities of the ports varied. At Cape Town ships could come alongside the wharves and unload straight on to them, but the wharfage was not enough to meet the demand which was heavier than that at any of the other ports. Up until the time Roberts left South Africa more men disembarked at Cape Town than at all the other ports put together.[3] While these

1 Col.de Burgh to Inspector General of Remounts 12 August 1901. WO 108 71 no.13,799.

2 There were also legal attempts to stop British purchase of animals in America. See below pp 311-314

3 Roberts's Despatch 2 February 1901. Roberts Papers WO 105 12.

disembarkations proceeded without delay, there was not sufficient additional space to unload freight ships and these were accordingly delayed. Moreover, accommodation for stores was 'totally deficient',[1] so that even when wharves were available ships could sometimes not unload because there was nowhere to put the cargo. The Harbour Board, which could have been very useful in helping to organise matters, proved unsympathetic and obstructive and Sir Edward Chichester,[2] the naval Principal Transport Officer, was frequently forced to invoke the aid of the High Commissioner. Milner was most helpful but cooperation between the military and the Harbour Board was never easy and deteriorated further after Chichester and Forestier-Walker left in December 1900.

Neither the civil nor the military authorities in the port hesitated to complain about careless or selfish use of the limited facilities of the port by the other. For example in March 1900 Chichester wrote to the Port Captain: 'I must protest strongly against all your endeavours to inconvenience the Transports inthe Harbour by berthing sailing ships alongside them, and then requiring the transports to shift berth to make room for them and to cover carelessness ...'[3] The Port Captain completely rejected this charge as he had others accusing him of favouring civil traffic. Thus when the Table

1 Evidence of Colonel Cowans to the Elgin Commission. PP Eng. 1904 XI q.2887.

2 Captain Sir Edward Chichester, who was promoted Rear Admiral on his return to England, had joined the Royal Navy in 1863. He had served in Egypt in 1882 and had been Principal Transport Officer there in 1884-5. He was an expert in North Sea fisheries.

3 Principal Transport Officer to Port Captain 29 March 1900. Cape Town Archives. Cape Harbour Board Correspondence files. CHB 272.

Bay Harbour Board asked him, in January 1900, to comment on military complaints that their ships were not given adequate priority he replied that even when ships were brought in out of turn the army was unable to unload them. 'The quays and jetties have large quantities of goods on them for the Military, some portion lying there for weeks - It appears to me that they are unable to remove the goods as landed, therefore further facilities would only increase the block.'[1]

And so, on the lines thus set, the arguments went on, the military complaining of lack of priority, the port authorities protesting that the army was blocking the port with stores. In September 1901 the same arguments still raged. The Secretary of the Harbour Board protested: 'If the storage accommodation was necessary for military purposes the Board would offer no objection, but it is being used for purposes which could easily be served by stores ... elsewhere, and the work of the port is meanwhile being delayed ... There are supplies at the South Pier which have been there for months.'[2] Private shipowners also complained of delays and the War Office, receiving reports that dock sheds were being used to store forage, asked the GOC Cape whether it could not be stored outside the dock area. The GOC replied that the sheds were not so used and that the hay was stacked in the open until railway trucks were available to take it north.[3] It is typical of relations between the port and the military

1 Port Captain to Secretary Table Bay Harbour Board. 4 January 1900. Ibid.

2 Secretary Table Bay Harbour Board to Assistant Treasurer Cape Colony 23 September 1901. Ibid.

3 QMG to GOC Cape 17 January 1902. WO 108 72 no.16263. GOC Cape to QMG 22 January 1902. WO 108 72 no.16348.

authorities that at the end of the war the Harbour Board demanded over £15,000 rent for the open ground so used. The War Office refused to pay and the dispute was still being energetically pursued and showed no signs of being settled at the end of 1904 by which time both sides had engaged counsel.[1]

From about the beginning of 1901 the military authorities, including Kitchener, pressed for an extension of martial law to the Cape ports but this was opposed by the Cape Ministry which at one stage threatened to resign in a body. The matter was complicated by a feud between General Wynne,[2] the new GOC Line of Communications, and the Cape Attorney General. This grew so bitter that, not satisfied with merely not speaking to each other, they even refused to write to each other and all correspondence was conducted through the Governer.[3] It was not until September 1901 that a modified form of martial law was extended to the ports.

At the other ports such problems were not so acute and the difficulties there arose out of physical drawbacks. At Port Elizabeth there were only two jetties, one 384 yards long and the other 250 yards, both with hydraulic cranes. The anchorage was an open roadstead three quarters of a mile from the jetties and everything had to be landed in lighters.

1 Cape Harbour Board Correspondence files. CHB 273.

2 Major General A.S.Wynne had held a variety of staff appointments in England, Egypt, Malta and South Africa. He had twice served at the War Office. He was originally sent out as DAG of the Army Corps but since Buller's Chief of Staff, Sir Archibald Hunter, was trapped in Ladysmith Wynne fulfilled many of his functions. He was wounded during operations to relieve Ladysmith.

3 G.H.LeMay: British Supremacy in Southern Africa 1899-1907. Clarendon Press 1965 p.120.

The roadstead was usually safe though from October to March it was subject to gales and these were occasionally so severe that ships were driven away. Even when the weather was not bad enough for that, however, heavy seas could make unloading into and from lighters impossible. In 1898 there were 48 lighters of from 30 to 150 tons and six tugs, which gave only a very small capacity.[1] Still what there was was evidently used to the best advantage for the Assistant Inspector General Lines of Communication reported (perhaps over-enthusiastically) that it was not possible to imagine a better base than Port Elizabeth and that the Harbour Board and Boating Company were justly proud of their expertise.[2]

East London was safe in all weathers but had two special disadvantages of its own. One was a sharp bend in the River Buffalo leading to the docks which prevented the largest ships from ever coming in.[3] The other was a sand bar at the mouth of the river. Because of heavy swell the depth of water over the bar was variable and ships were often held outside. When this happened there were 17 lighters available with a combined capacity of 1445 tons but these could unload ships only slowly and in rough weather not at all. Moreover it was not unknown for the bar to silt up so much that even lighters were unable to pass.[4] In that case all ships had to be diverted to Port Elizabeth until a new passage could be dredged.

1 Maj. Altham: Notes on the Lines of Communications in Cape Colony. Intelligence Division. June 1899. WO 33 153.

2 Maj. Faiholme: Lines of Communication Cape Colony. Working of the Midland Section during the South African Campaign 1899-1900. WO 33 171.

3 Evidence of Sir Edward Chichester to the Elgin Commission PP Eng.1904 XI q.9891.

4 Altham op.cit.

Durban had none of these difficulties and was described by Chichester as a 'capital port, the best of the lot'. It had nearly a mile of wharves on which the ships could unload straight into rail trucks[1] and there were no Dutch sympathies among the officials. Relations between the civil and military authorities at Durban were relaxed and press reports to the contrary were not allowed to disturb them. Thus when a newspaper claimed that the army had shot several port signalmen for non-cooperation the Port Captain sent the cutting to Captain Scott,[2] the senior naval officer, for comment. After enquiry ('Major Barton. Have you been shooting any signalmen, if so please state number and why they were shot. (sgd) Percy Scott Captain RN' 'Captain Scott CB RN, Roll of Signalmen shot as under - Nil - (sgd) M.Barton Major Commanding Point') Scott replied: 'I regret to say that as far as my department is concerned no executions have taken place, but it is not too late ...' The Port Captain sent the whole correspondence to the Colonial Secretary of Natal noting: 'I might point out that apparently there is as much foundation for this report as for others regarding officers of this Dept. being at cross purposes with Imperial Officers.'[3]

Durban had the further advantage of dealing with smaller quantities of shipping than the other ports and serving a

1 The Times 8 November 1899.

2 Sir Percy Moreton Scott RN (1853-1924) served in Ashanti, Egypt, South Africa and China. He was an expert in gunnery and although in theory retiring in 1909 he was brought back as gunnery adviser to the fleet. In 1915 he came out of retirement for the second time to take charge of anti-aircraft guns in London.

3 Port Captain to Colonial Secretary Natal 23 March 1900. Natal Archives Pietermaritzburg. Natal Harbour Board Port Captains Letter Book December 1899 to May 1900 HD III/3/3

smaller number of troops. Even so it was called upon to handle more shipping than it had facilities for and experienced the same difficulties as the other ports in clearing the huge piles of stores that poured in. But delays there were fewer and shorter than elsewhere. It is significant that all six hospital ships to be fitted up in South Africa were fitted up in Durban. None of the other ports could have done that.

The effect of the deluge of men, animals and goods on these four ports may be imagined. After the initial lull, during which frantic telegrams from South Africa demanded vast quantities of supplies and these were procured and shipped as fast as possible, the ports were completely blocked. Reports from them were very similar, telling of sheds and warehouses taken over and filled wherever they could be found, of streets and quays piled with stocks of forage and ammunition despite frantic efforts to clear them and of queues of vessels waiting to unload. The Director of Supplies in South Africa, Colonel Richardson, noted (rather ungratefully) that the War Office should remember it was no use sending out sixty or seventy ships at a time, when each South African port could only take about five ships a week.[1] But, as the QMG pointed out, it was impossible to time exactly the arrival of ships despatched from all over the world.[2]

Since forage had the largest bulk and the lowest priority it was hay ships that suffered most delay. By March 1900 the problem had become unmanageable and on March 9th hay shipments were ordered to be halved and six days later to be stopped

1 Richardson op.cit. p.114.

2 Evidence of Sir C.M.Clarke to the Elgin Commission PP Eng. 1904 XL q.2404.

altogether.[1] When shipments were stopped the backlog of vessels waiting was slowly reduced but so, too, were the reserves of supplies. Then large shipments would be ordered to restore the reserves and the ports would, once again, be blocked. This sequence was repeated more than once while the war lasted. As forage ships were invariably freight ships and not transports this proved expensive, for delay in unloading incurred demurrage charges. The Director of Army Contracts sometimes cabled that particular ships should be unloaded as soon as possible but since everything possible was already being done this achieved nothing. Some delays were considerable. A telegram of October 29th 1901 pointed out that the 'Chatham' had been detained at Port Elizabeth since August 11th and asked that its discharge be expedited.[2] One ship, the 'Hyson', anchored off Port Elizabeth in the middle of April 1900 and was still there in the middle of August.

Though Port Elizabeth seemed to suffer the worst delays, the approaches to Cape Town could be chaotic as many ships were instructed to call there for orders. During Roberts' march to Pretoria it was often days before these orders were received. Moreover ships for other ports, even when they had specific orders, often had to put in to Cape Town for coaling. An attempt to coal ships in Table Bay failed and precious wharfage had to be used for the purpose. This inconvenience involved another, the need to find space for large coal stocks

1 GOC Cape to Secretary of State for War 9 and 15 March 1900. WO 108 66 nos.3798 and 3984.

2 Secretary of State for War to GOC Cape 29 October 1901. WO 108 72 no.15006.

and the ships that brought them. 'Colliers were sent out in a continuous stream to the Cape in accordance with the estimated demands of the transports.'[1] Matters were complicated, in the early part of 1901, by an outbreak of plague at Cape Town. For some months no ships were allowed to unload there.

Even without such additional problems delays were unavoidable. Some ships, sent to unload at Beira to escape the block at Durban and the Cape ports, were sent back to escape the block at Beira. In July 1900 there were, on a day when a report was sent, four ships waiting at Durban, one at Cape Town, twelve at Port Elizabeth and seven at East London,[2] and that was a relatively slack period. In September the War Office was again told that all four ports were congested with forage that could not be moved for lack of rolling stock. The message added that the block would increase when ships then on passage arrived.[3]

The War Office was anxious to reduce delays in unloading (and demurrage) as far as possible but officers in South Africa seemed to accept the situation. Thus when the QMG pointed out, in March 1901, that claims for demurrage already exceeded £250,000 and asked whether this had been unavoidable in the past and whether it could be reduced in the future, he was told that it had been unavoidable because of

> want of suitable storage space at ports, want of steady supplies of trucks to relieve congestion, insufficient facilities for unloading vessels

1 Evidence of S.J.Graff to the Elgin Commission PP Eng.1904 XI q.5957.

2 GOC Cape to Secretary of State for War 11 July 1900. WO 108 68 no.6783.

3 Ibid 19 September 1900. WO 108 69 no.8278.

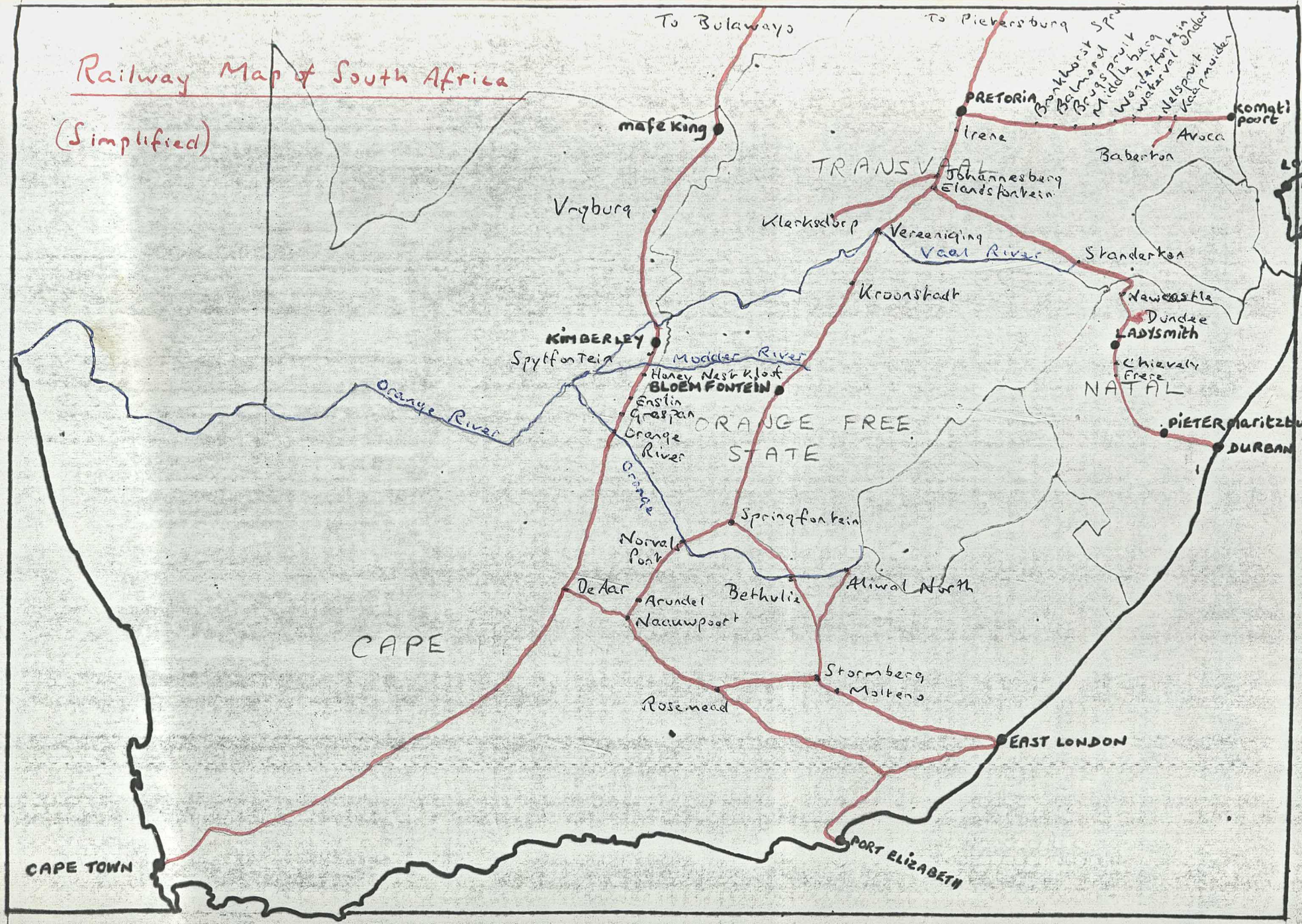
> quickly, especially at East London and recent disuse of Cape Town for unloading supply ships consequent on outbreak of plague.[1]

He was also told that delay was likely to increase in the future when reinforcements arrived. The reply added that every endeavour would be made to avoid demurrage but it seemed a rather formal assurance. In practice many of the freight ships, particularly those carrying forage, were used as temporary stores and this was recognised by including their cargoes in the fortnightly returns of supplies available. Thus what started as an unavoidable nuisance became almost a convenience.

This huge maritime operation and the difficulties that had to be overcome passed almost unnoticed by the British public, which took it all for granted. In the first two months of the war frustration at the slow build up of British forces resulted in criticism of the alleged failure to charter the best ships. This increased when two ships, the 'Zibenghla' and the 'Zayathla', carrying artillery batteries that had been urgently requested, had boiler trouble and took over four weeks to reach South Africa. These vessels became briefly notorious but they were exceptional and were soon forgotten when more serious news arrived. In fact some of the fastest liners were engaged but they made little overall difference. The infantry could not act without the other arms and the cattle boats needed for artillery and cavalry were inevitably slower. It may also not have been widely realised that while passage times for scheduled liners were given for the voyage

1 QMG to GOC Cape 21 March 1901 and GOC Cape to QMG 27 March 1901. WO 108 70 nos.11409 and 11504.

from the Needles to Table Bay, the times for transports were given from port to port and were not, therefore, directly comparable. The brief interest caused by these misunderstandings lapsed completely when offensive operations began in February 1900 and, thereafter, the whole continuing process was ignored. This is perhaps the best measure of its success.


Railway Map of South Africa
(Simplified)
To Bulawayo
To Pietersburg
PRETORIA
Bronkhorst Spruit
Balmoral
Brugspruit
Middelburg
Wonderfontein
Waterval Onder
Nelspruit
Vaalmuiden
komati poort
Irene
Avoca
Baberton
LOURENÇO marques
mafeking
TRANSVAAL
Johannesburg
Elandsfontein
Vryburg
Klerksdorp
Verceniging
Vaal River
Standerton
Kroonstadt
Newcastle
Dundee
LADYSMITH
Chievely
Frere
NATAL
KIMBERLEY
Spytfontein
Modder River
Honey Nest Kloof
BLOEMFONTEIN
Enstin
Grespan
Orange River
ORANGE FREE STATE
Orange River
Springfontein
Norvals Pont
De Aar
Arundel
Naauwpoort
Bethulie
Aliwal North
PIETERMARITZBURG
DURBAN
CAPE
Stormberg
Maitland
Rosemead
EAST LONDON
CAPE TOWN
PORT ELIZABETH

The Military Use of Railways in South Africa

The initial burden of moving the huge quantities of men and stores which flooded into the ports fell upon the railways. The South African campaign was the first in which railways played a major part in supplying a large British force. It was therefore natural that their organisation should have to be improvised Railways had played a significant role in the American Civil War and in the Franco-Prussian War of 1870-1871 but nobody in the War Office had made a systematic study of their contribution. While the American experience, at any rate in the South, might have yielded a formidable list of mistakes to be avoided, it is doubtful whether the latter conflict could have provided many useful lessons for South Africa anyway. The conditions were vastly different. In Europe parallel tracks of standard gauge had been built with strategic as well as economic considerations in mind. Rolling stock was plentiful and more could easily be manufactured by the ordinary workshops. Distances traversed were fairly short and the sources of supply of fuel, and of materials to make good damage, were near.

In South Africa none of these conditions obtained. Apart from suburban lines between Cape Town and Wynburg and 17 miles of line outside Port Elizabeth the lines were single track though they became double at all stations and at some intermediate crossing points. Throughout Southern Africa the gauge was 3'6" except in parts of Rhodesia where it was only two feet. Although the track was in good order, the great distances, steep gradients and necessarily small engines made

for slow journeys. An ordinary train from Port Elizabeth to Bethulie (392 miles) for example took just under 24 hours. Other times were in proportion and the 870 mile haul from Cape Town to Mafeking took 52¾ hours.

Rolling stock, which was not excessive for the peacetime working of the system, was totally insufficient for the loads that were required in war. In 1897 the Cape Government Railway calculated it had carriage space for about 25,000 men. The maximum number of vehicles in one train was on average 8 coaches or 20 trucks depending on the availability of water and how steep the gradients on the route were. On this basis a mounted infantry company took up two trains and an infantry battalion three or four. It was estimated that 30 trains a day was the maximum that could be got away from each of the Cape ports under the most favourable conditions including the suspension of all civil traffic.[1] Moreover the availability of rolling stock declined in the months before the war as trucks from the Cape which went into the Transvaal were not returned. The Commissioner for Public Works at the Cape, who was himself Dutch and suspected of pro-Boer sympathies, told the Cape Parliament in October 1899 that some 400 trucks had been lost in this way in the preceding three months.[2] The problem became more acute, particularly in the Cape, as the first part of the war progressed. As the Boers were pushed back they retained not only their own trucks and locomotives,

1 Major Altham: Notes on the Lines of Communication in the Cape Colony Appendix 12. Intelligence Division. June 1899. WO 33 153.

2 The Times 5 October and 11 October 1899.

but those they had captured.[1] Thus while the mileage of track under British control increased, the rolling stock stayed constant or (where subject to raids) decreased. The carrying capacity of the whole system thus declined. Fuel, too, created difficulties. In peacetime coal for the Natal railways came from the collieries of Dundee and Newcastle in the exposed Northern triangle of Natal. To the surprise of nobody these were quickly captured. Much of the coal for the Cape railways came from the Transvaal and this supply naturally stopped on the outbreak of war. Thus the bulk of the fuel for both systems had to come from England. There was a small reserve in the Cape which, it was calculated, would last until the end of 1899 but in Natal supplies were reckoned to be sufficient for only one month,[2] firstly because the collieries produced little more than sufficed for the normal running of the railway and, secondly, because Natal coal, if allowed to get wet, catches fire, making it difficult to store safely.[3] In October 1899 the GOC Cape considered that it might be necessary to buy 15,000 tons of coal. By November the Director of Railways was telegraphing for 50,000 tons saying that the matter was most urgent.[4] Large quantities of coal were quickly

1 Enemy captures of rolling stock seriously diminished the capacity of the railway. Of 621 engines 58 were lost, of 837 8-wheel coaches 119 were lost, of 73 6-wheel coaches 12 were lost, of 8,581 short trucks 1,540 were lost, of 980 8-wheel trucks 150 were lost, and of 545 6-wheel trucks 12 were lost. E.P.C.Girouard: History of the Railways During the South African War 1899-1902. HMSO 1903 p.53.

2 GOC Cape to Secretary of State 20 October 1899. WO 108 66.

3 Cox (GOC Natal) to Goodenough (GOC South Africa) 28 April 1897. Appendix C to Report of the Elgin Commission PP Eng. 1904 XL. pp.186-187.

4 Director of Railways to Inspector General of Fortifications 7 November 1899. WO 108 66 1060A.

sent in response to this plea and the problem was largely overcome when, a few months later, the advancing British armies retook the coal mines. Buller re-occupied Dundee and Newcastle in the middle of May 1900 and reported that despite some damage to machinery the collieries were basically unharmed.[1] On 26 May 1900 the vanguard of Lord Roberts' force seized the mines on both sides of the Vaal just in time to prevent their being destroyed.[2]

A problem less easily overcome was the vulnerability of the line to enemy action. The distances involved were huge, 1,000 miles from Cape Town to Pretoria, 1,400 miles to Bulawayo. A mobile and elusive enemy might, and did, strike anywhere along its length. Numerous bridges offered targets and temporary replacements were sometimes vulnerable to floods. Some of the gradients were steep. In Northern Natal reversing stations were needed for the ascents into the Orange Free State and the Transvaal. On the Pretoria - Delagoa Bay line at Waterval Onder the gradients were so steep (a total drop of 900 feet in under 4 miles) that special rack engines were needed.[3] Serious dislocation was caused for a time when these were removed by retreating Boer forces.

Despite these difficulties the railway had to be kept open. It was not a convenience, it was an irreplaceable life-line. Roberts in a telegram from Kroonstadt in June 1900 reported: 'The very existence of my force depended on the supplies coming up by train along a line of railway 900 miles

1 Buller to Secretary of State 15 May and 18 May 1900. WO 108 67 nos.5567 and 5657.

2 Roberts to Secretary of State 27 May 1900. WO 108 67 no. 5821.

3 Report of Captain Leggett RE quoted in Girouard op.cit. p.45.

long, every bridge of which, for the last 128 miles had been destroyed by the enemy.'[1] This emphasised both the difficulties and the vital need.

In the War Office the officer responsible for all railway matters was Sir Richard Harrison, Inspector General of Fortifications. Under him were two Royal Engineer railway companies. One of the railway companies was sent to South Africa in July 1899 to prepare when the likelihood of war became apparent. A provisional staff of officers was chosen headed by Major (later Colonel Sir) E.P.C.Girouard as Director of Railways. Girouard was only 32 years old but had a great deal of railway experience. In 1899 he had just completed a year as President of the Egyptian Railway Board. For three years before that he had been Director of Sudan Railways, and for five years before that railway traffic manager, Royal Woolwich Arsenal. Before joining the army he had spent two years as an engineer with the Canadian Pacific Railway. Some other officers of his staff were also experienced in the workings of railways. One had been Traffic Manager of Burma Railways, another Directing Manager North West Railways of India and a third the chief consulting engineer of the Indian State Railways.[2]

Although officially appointed Director of Railways only on 7 October, the day he sailed for South Africa, Girouard had managed in the weeks before he left to gather a considerable amount of information from the Agents General of the Cape and Natal railways and from representatives of the Orange Free State railways. He also, before he left England, ordered

1 Quoted by A.J.Balfour in the House of Commons 26 June 1900. Hansard LXXXIV col.1316.

2 The Times 26 February 1900.

sufficient materials to repair every rail bridge in the Free State and a considerable quantity of rolling stock, to be sent out as soon as possible, an act of foresight which greatly increased the speed with which the railway was later reopened. Every bridge was found destroyed but materials were by that time in the hands of the engineers in South Africa. Girouard took the precaution of leaving one of his small staff of officers to supervise the despatch of the stores, a move which may suggest a lack of confidence in Harrison's department. Girouard and his officers reached South Africa in the middle of October. By the end of November the second of the two railway companies had arrived together with two fortress companies detached for railway duty. The despatch of the second railway company threatened to cause complete chaos in the Woolwich Arsenal where it had been responsible for the internal railway. Since there were no other troops capable of running the railway civilians had to be specially employed to take over.[1]

Many of the problems affecting the Cape Government Railways (CGR) did not affect Natal where the distance from the port to the railhead for the first few months was only 170 miles. Later the front moved so slowly that it was easy for railway repairs to keep pace. Much rolling stock was sent South before the Boers seized it, and what was captured was largely compensated for by the decrease in mileage. There were only 40,000 troops involved as opposed to 200,000 on the Cape Government Railways and Imperial Military Railways (IMR).[2]

1 Proceedings of the Army Board 25 September 1899. WO 108 79 para.271.

2 The railways of the Orange Free State and the South African Republic were renamed Imperial Military Railways after their capture.

Moreover, most movemnets were simply of troops and stores from the port to the railhead, instead of forces being moved up and down the line to counter threats. There was also less interruption from enemy action. Up to May 1901 the line was broken 7 times. In the same period the CGR and IMR were broken 296 times.[1] Even so there were difficulties. Because of the gradients only five or six trucks could be taken in one train,[2] and the single line made for slow services. Members of the Naval Brigade in a special train for Chieveley from Durban took nearly 17 hours for the 120 mile journey.[3]

Control of the railways in Natal, together with responsibility for traffic management and repairs, was left with the civil authorities of the Natal Government Railway. An officer was sent to Durban with the title of Assistant Director of Railways (ADR) to act as the sole channel of communication between the army and the civilian Chief Traffic Manager. He was to inform the railway authorities of military needs and issue orders to troops on their conduct in trains. Otherwise the running of the railway was left to the normal civilian employees.

The Cape Government Railways were divided into four systems. The eastern, the line from East London through Stormberg to Bethulie and Aliwal North; the midland, Port Elizabeth through Rosemead then splitting, one line going east to Stormberg and the other going through Naauwpoort to De Aar and Norvals Pont; the western, from Cape Town to De Aar; and the northern from De Aar to Vryburg. North of Vryburg

1 Girouard op.cit. p.16.

2 Historical Section German General Staff: The War In South Africa Vol.I trans. Col. W.H.H.Waters 1907 p.131.

3 Anonymous MS 'Rough Account of my Month Ashore with Ladysmith Relief Force Feb 11th to March 11th 1900'. Private ownership.

the railways were Rhodesian. The military organisation followed the ordinary civil hierarchy. As in Natal an Assistant Director of Railways was appointed to work with the Chief Traffic Manager, with the same duties as the officer in Natal. Four Deputy Assistant Directors of Railways (DADR) were also appointed (one for each system) and attached to the staffs of the General Officers Commanding their part of the line. They had to work with the civilian traffic managers in control of each system. They were to be the sole military link with the traffic managers and their duties were to keep the Assistant Director of Railways informed of the possibilities of and demands on their section of the line, to superintend all large troop movements and to enforce the ADR's regulations. Their main duty, however, was to keep the army command away from the railway staff.

This was important because commanding officers of units usually knew nothing of railways. Being used to horse, ox or mule drawn carts and wagons, officers were sometimes so impressed with the vast quantities of baggage trains could move that they failed to realise there was a limit. One fashionable cavalry regiment even tried to have its mahogany mess table railed to the front.[1] Officers unused to the working of railways also tended to assume that their portion of the line could be worked without reference to the rest of the system, but with long single tracks and a shortage of rolling stock the whole network was closely interdependent. Thus officers casually made abrupt changes of plan, or left wagons standing fully loaded for days on end. This last was

1 The Times 26 February 1900.

a particular bane.[1] Both DADRs and Railway Staff Officers (who performed the same duties at station master level, and controlled the mechanics of getting troops and stores on and off trains as quickly as possible) were specially instructed to see this did not happen. In the early days it did. In March 1900, when Bloemfontein was taken, 1100 trucks were loaded at De Aar, Naauwpoort and Norvals Pont. A block occurred at the critical moment. It took a long time for some officers to grasp this point. One general, accused by Roberts of causing delay in August 1900, denied that any fault lay in his command and added: 'For more than a fortnight I have always kept a train of 23 trucks loaded and coupled up ready to start at a moment's notice. Latterly I have kept two trains so ready.',[2] quite failing to realise that this was largely the cause of the trouble.

Girouard also strongly condemned attempts to use the railways to move troops short distances, '... large bodies of mounted troops will march 80 miles, and infantry 40 miles, more quickly than they can be trained, unless unusual facilities for railway transport happen to exist at that particular moment and at that particular spot.'[3] These figures show the limitations of the system. They suggest that at least two days were required to produce enough trucks for a train and clear the line for it. Non-specialist officers knew none of these things and so needed to have intermediaries between them and

1 cf. the American Confederate railways: 'quartermasters and subsistence officers acquired the habit of using loaded freight cars as storehouses, a basic sin that doubtless will plague military logistics as long as the locomotive remains an engine of war.' Robert C. Black III: The Railroads of the Confederacy 1952 p.67.

2 Barton to Roberts 12 August 1900 Roberts Papers WO 105 22.

3 Girouard op.cit. p.11.

the civilian staffs who feared their interference. 'Civil railway officials ... say that attacks by the enemy on the line are not nearly so disturbing to traffic as the arrival of a friendly general with his force.'[1]

In addition to the staff structure on the railways Girouard organised Field Railway Sections for repairs and administration of newly acquired line in Cape Colony. Two such sections were formed, one for the western and northern systems to repair line recaptured by Lord Methuen, and one for the midland to repair the line to Norvals Pont. These Sections consisted of Royal Engineer Companies, Orange Free State railway employees (about 400 of whom had fled south at the start of the war) and men of the newly formed Railway Pioneer Regiment.[2] Each section had also about 300 native labourers. Each was commanded by an Assistant Director whose duties were to inform the relevant general what the railway could and could not do, learn his needs, make temporary repairs as fast as possible, put traffic staff in all captured stations and control all traffic between the railhead and the 'Junction Station'.

The last provision did not work well at all. Under this organisation the Junction Station which was up to 50 miles behind the railhead marked the change in control between the Assistant Director of Railways and the Assistant Director Field Section. As the latter completed the repairs on each 50 miles of line it was handed over to the ADR and the Junction

1 Ibid p.11. cf. the Confederate railways: 'Even worse was the disposition of many well-meaning military officers to interfere with the operation of trains.' Black op.cit. p.58.

2 Formed out of miner and artisan refugees from the Transvaal.

Station moved up. Thus there would be a complete change of control as a train moved up the line, and a periodic moving of station staffs and traffic controllers just as they were becoming accustomed to their positions. The whole system was later abolished, the Field Sections becoming mere construction companies, with a construction train that moved up with the army.

Girouard attached great importance to keeping all temporary repairs in military hands. Under his system the usual civilian workers had charge of permanent repairs but only did such temporary repairs as they were specially asked to. He considered that military personnel could be driven harder than civilians, could if necessary work all night and were more prepared to work under fire. However, in Natal all repairs were left to the civilian workers of the Natal Government Railway. This did lead to friction. Buller and the General Manager of the Natal Government Railway, Mr Hunter, got on well but relations between Hunter and the Assistant Director of Railways in Natal, Major Elliot,[1] were strained. Elliot complained that he was being systematically ignored notably over a new bridge over the Tugela, the first major railway repairing job in Natal, and he was supported by Girouard who protested to Buller. Girouard complained that although it was agreed that Elliot's opinion should be sought and acted upon as far as practicable 'this has not been the case in any single instance & I am fully of opinion that considerable delay was caused to the army owing to the nature of the temporary bridge erected over the Tugela.'[2] Buller did not

1 Elliot should not be confused with C. Bletterman Elliot who was General Manager of the Cape Government Railways.

2 Girouard to Buller 18 April 1900. Buller Papers WO 132 20.

deny there was friction between Hunter and Elliot but blamed it on the latter who, he said, was difficult to work with and did not have his heart in his railway work. However, Buller was quite unconvinced by the suggestion that Elliot should be allowed to organise his own repair gangs, or that the civilian organisation had delayed the army. He also rejected the complaints over the type of bridge used to cross the Tugela. 'I have every reason to be satisfied,' he went on, 'with the way the railway is now working. The line is in good order; the trains are punctual and we can get as many as we want.'[1] Further experience did not change Buller's view that the repairs in Natal were done very well and very quickly[2] and Girouard himself later praised the courage of civilians working under the most difficult and dangerous of conditions.

The Working of the Railway.

Once the organisation was established there was a short time for everybody to get used to it before really heavy loads were put on the railway system. The troops of the army corps arrived in small units which were entrained for whichever front they were ordered. The huge amount of stores and supplies ordered had not yet arrived. The enemy held the lines from Mafeking to the Orange River and north of Molteno and Arundel to the vital bridges of Bethulie and Norvals Pont. While this reduced the mileage of track that had initially to be covered none of the stations captured paralysed the system as, for instance, the capture of Naauwpoort might have done. The inaction after Black Week also assisted the sending up of

1 Buller to Girouard 30 April 1900. Ibid.

2 Evidence of Buller to the Elgin Commission PP Eng. 1904 XLI q.15173.

troops and stores and the settling down of the organisation.

The first big test of the whole system came in January 1900 when Roberts arrived. The original plan of campaign had been to advance on Bloemfontein along the line of railway from Springfontein where reinforcements and stores could be sent in along both eastern and midland systems. That remained Buller's intention even after he had split up the army corps to deal with the immediate problems he faced. Accordingly as the huge numbers of troops and stores arrived in January they were concentrated around the midland junctions. Roberts' change of front when he decided to march on Bloemfontein from the west required the largest troop movements of the war.[1] The midland area was denuded of troops which were trained round through De Aar to their new stations between the Orange River and the Modder River, while reinforcements poured along the lines from Port Elizabeth and Cape Town. Buller had proposed extending the railway from a point north of the Orange River east to Jacobsdal to assist the advance but Roberts questioned the idea because he feared that an unacceptable disruption of traffic would result.[2] The extension was never built but Girouard, who had collected 11 miles of line, later considered that it would have eased the whole transport problem considerably.[3] Both western and midland Field Railway Sections were, however, employed in laying sidings at Orange River, Graspan, Enslin, Honey Nest Kloof and the Modder River. This was not the last time that such additions were to be made. The

1 Girouard op.cit. p.25.

2 Buller to GOC Cape 22, 25 and 28 December 1899 and Roberts to Buller 26 December 1899. Roberts Papers WO 105 13.

3 Girouard to Buller 18 April 1900. Buller Papers WO 134 20.

existing sidings were placed to deal with the ordinary commercial traffic. Under military use obscure wayside stations became centres of importance and facilities had to be built up. The whole movement was carried out smoothly with a lot of help from civilians, particularly the General Traffic Manager at Cape Town, who was called in to advise. In 17 days 30,000 troops with oxen, horses, mules, guns and transport were detrained between the Orange and Modder Rivers. Massive quantities of stores were also poured in.

This success showed that the traffic control part of the organisation functioned well. The repairing part was soon to get an equally thorough test. Materials for the job were plentiful. Girouard's foresight was now paying off in the shape of goods from England arriving before they were needed. There was an abundance of small tools and stores in Cape Colony which were purchased through the Cape Government Railway from the normal suppliers. Timber was plentiful at the ports. Sheer good fortune helped. Three hundred miles of permanent way material for Rhodesian Railways had been ordered and landed at Cape Town just before the outbreak of war. The investment of Kimberley had prevented their being despatched. From these various sources a Railway Store Depot was organised at Cape Town shortly after Girouard landed. An advance depot had been established at the Orange River in November to support Methuen and another was established at Naauwpoort in January.

Roberts' advance freed the Kimberley line first as the Boers were forced to abandon it. Repairs started on 16 February with the western Field Section working by day and the midland by night. On 19 February at Spytfontein they met a construction

company working south from Kimberley and the line was open. The midland Field Section then immediately trained round to Naauwpoort to prepare for the advance into the Orange Free State. Girouard had intended to take the Railway Pioneer Regiment on the march to Bloemfontein and work south along the railway from there. Kitchener refused to allow this and the Regiment had to be re-routed. Kitchener's attitude is easily understandable. However desirable it might have been to have large parties working on the line from both ends, the additional burden on the transport of over 1,000 non-essential men on the march was quite unacceptable.

In the south as Roberts' advance eased Boer pressure Clement's brigade moved north from Arundel. He reached Norvals Pont on March 16 three days after Roberts had reached Bloemfontein. The bridges at Norvals Pont and Bethulie (to which Gatacre's division had advanced at about the same time) were destroyed. Roberts' need for supplies after his arrival at Bloemfontein was little short of desperate and to speed repair work the Field Sections were concentrated at Norvals Pont leaving civilian engineers to work on the line between Molteno and Bethulie. A temporary bridge was erected at Norvals Pont in 11 days and the first train ran through to Bloemfontein on March 27. As soon as this was accomplished the Railway Pioneer Regiment was split, half left at Norvals Pont to do permanent repairs to the old bridge, and half sent to help at Bethulie. There it was found that although the rail bridge was destroyed the road bridge was not, and a deviation was laid across it. It was too fragile to take engines but loaded trucks were hand shunted across and then taken on by engines the other side.

Nearly 3,000 trucks were thus sent over at Bethulie in one month.[1]

There was now a new organisational problem to be faced. Previously it had been a question of adapting the civil organisation of the colonies to Imperial military needs, and the knowledge and experience of civilians was fully utilised. The civilian managers had not been replaced or put into direct subservience to military discipline. The employees of the captured railways, however, were generally hostile and the line, running as it did through enemy country, was more liable to attack. Accordingly the captured lines were put under the full and direct control of the Director of Railways. An Assistant Director of Railways was placed at Bloemfontein and Kroonstadt. Instead of forming a channel between the army and the civilian controllers, as in Natal and Cape Colony, they were directly responsible but had technical help from civilians who were also subordinate to the Director of Railways. All were completely removed from the control of other officers, general or otherwise. The civilians were mostly loaned by the Cape Government Railways or reappointed from among English railwaymen from the Orange Free State many of whom had fled south at the start of the war. Some captured railway personnel were also found to be sympathetic and a Deputy Assistant Director of Railways was attached to Army Headquarters to send back any useful railway information and to interrogate all such captures and reappoint those that he though trustworthy.

Roberts' enforced halt at Bloemfontein gave time to establish the organisation. There was also more building

1 Girouard op.cit. p.35.

to be done. The extensive sidings at Bloemfontein were not conveniently placed for military purposes and new ones were put in. For the supply depot sidings capable of dealing with 200 trucks at a time were built while the ordnance depot got sidings of its own enough for 80 trucks. The army for the advance was spread out along the 20 miles from Bloemfontein to Karee. Between the two the line passed over the Modder where the bridge had been blown on 18 March a few hours before cavalry patrols reached it. This entailed more work as a long and difficult deviation bridge was needed. The work was completed by 7 April. Traffic was further inconvenienced by the enemy's capture of Sannah's Post water works on 1 April. Water trains had to be run daily north to the Modder and south to the Kaffir until its recapture on 27 April. Obviously on a single track line this was a hideous inconvenience. Traffic was helped slightly by the capture of 28 engines and 325 trucks at Bloemfontein[1] though it was subsequently found that only 13 of the engines could be made to work. The Cape Government Railway lent 13 engines, all of which were double manned and worked day and night. All the trains carried a special vehicle where the off duty crew ate and slept.

Even so with all the difficulties and the need to keep troop trains running south of Bloemfontein for the protection of the line only eight trains a day could be run through to Bloemfontein.[2] The number of trains was kept down by the distances that had to be covered, over 350 miles from Bloemfontein to the nearest port (East London) which was also the

1 Ibid p.30.

2 One of these was required to carry coal for the railway.

smallest, and nearly twice that distance to Cape Town. This could have been reduced by building up an intermediate depot at Naauwpoort (as opposed to blocking the line with loaded trucks). Such intermediate depots had their own disadvantages, however. The additional loading and unloading of trucks took up valuable rolling stock time and the resulting congestion of sidings and platforms itself impeded traffic. There was also the consideration that trucks would be much better packed by experts at the ports than by fatigue parties further up the line and such parties might take troops urgently needed elsewhere (or become unavailable when urgently needed for railway duty). For these reasons no depot was formed at Naauwpoort and it is unlikely that any significant delay resulted.[1]

The eight trains that were run from the ports had to carry supplies for 65,000 men and 33,000 animals, not just to feed them daily which was difficult enough, but to build a reserve to enable the advance to continue. To supply men on campaign required roughly ten tons per thousand men per day. To build up 25 days' reserve provisions before the advance meant a total throughput of over 1,000 tons each day, not including men or remounts.[2] The importance of food supplies was such that everything else, apart from limited quantities of ambulance and ordnance stores, was off loaded at Springfontein where new sidings and platforms had been put in. Before this was done the railway authorities were inundated with demands for priority from every department of the

1 Major Fairholme RFA (late Assistant Inspector General Line of Communications): Lines of Communication Cape Colony; Working of the Midland Section During the South African Campaign 1899-1900. WO 33 171.

2 Wyndham 29 June 1900. Hansard LXXXIV col.101.

army and the GOC Cape had to ask Roberts for decisive orders: 'I urgently need instructions as to the precedence of troops and stores for Bloemfontein. I receive daily wires asking for transport, remounts, artillery and cavalry: my train accommodation is very limited.'[1] Though there were complaints in Parliament about the failure to provide adequate medical appliances and hospital equipment to deal with the typhoid epidemic at Bloemfontein the fact that the force was even fed was a considerable achievement. Such was the success of the new organisation that it was extended to the Cape, modifying the original one there. Deputy Assistant Directors of Railways and Railway Staff Officers were removed from the staffs of General Officers, who were forbidden to interfere with them, and placed directly under the Director of Railways.

The lack of rolling stock was a crucial factor. The governments of Natal and Cape Colony proved reluctant to disrupt civil traffic still further by handing over additional stock to the army. Roberts therefore cabled home, supported by Milner, the Managing Director of the Cape Government Railways and the Director of Railways, asking for 25 engines and 300 wagons.[2] After deliberation by the Army Board and checks on costs and suppliers by the Inspector General of Fortifications, Lansdowne agreed to this.[3] However, since the engines would take 10 months to be delivered and the war was expected to end before then, the proposal was shuffled back and forth between the War Office and the Treasury as it could not be

1 GOC Cape to Roberts 23 March 1900. Roberts Papers WO 105 14.

2 Roberts to Secretary of State 20 March 1900. WO 108 67 no. 4135.

3 Secretary of State to Roberts 29 March 1900. Ibid no.4368.

decided whether the cost should be a war charge or aid to the colonial railway.[1] Thus although the request had been agreed to nothing was done for months. The Director of Military Intelligence had, in fact, pointed out to the Army Board in October 1899 that more rolling stock would be needed but no action appears to have been taken beyond discovering that it was difficult to obtain.[2]

When the advance restarted on 3 May 1900 the railways were quickly stretched even more. The mileage increased rapidly but no further rolling stock was captured before Elandsfontein and Roberts appealed to the High Commissioner to put pressure on the Cape Government Railways to make more stock, particularly engines, available.[3] There was a great deal of work to be done following up the army. A systematic destruction of the railway and its vital water tanks and pumps had to be made good. There was an acute shortage of staff when the Transvaal lines were taken over. As they were captured they were added piecemeal to the Imperial Military Railways but almost none of the civil staff were reappointable. During the halt at Bloemfontein a list had been compiled of all regular and irregular soldiers with any railway experience. As staff were needed these men were taken from their regiments and appointed. Inevitably there were difficulties in making large numbers of appointments without knowing the qualifications of any of the applicants but the trains were kept running.

1 Wyndham to Balfour 19 August 1900. Balfour Papers Add.Mss. 49803.

2 Proceedings of the Army Board 25 and 27 October 1899. WO 108 79 paras.418 and 425.

3 Roberts to Milner 19 May 1900. Roberts Papers WO 105 34.

As the length of track and the time taken for trains to go to the railhead from port increased the number of trucks available at the ports diminished. This led to huge complications. The difficulty of pushing medical supplies up has been mentioned. It took two months to move a base hospital from Cape Town to Pretoria.[1] The accumulation of stores at the base ports was not confined to medical stores. In the early weeks of the war there was barely two months' food and forage for troops already in South Africa and none for the army corps. The officer in charge of supplies took immediate steps to remedy this by buying everything he could and when the War Office met Buller's demand for four months' supplies the railways just could not cope. Whole streets in Cape Town were blocked with stacks of supplies. At one time 90 ships were queueing to unload.[2] They were delayed because the docks and wharves were choked with supplies the railways were unable to move. Forage was the most obvious surplus. At Cape Town there were enormous stacks all round the docks and outside. There were also stacks of ammunition that had to be left around, though they were heavily guarded. There were similar stacks at Durban and Port Elizabeth with consequent fire risks and incitement to Boer arsonists. In the event there was only one fire, at Port Elizabeth.[3]

These problems increased as the advance lengthened the lines. There was the additional problem, for the railways,

1 Evidence of Surgeon General Wilson to the Elgin Commission. PP Eng.1904 XL q.3611.

2 Evidence of Richardson to the Elgin Commission. PP Eng. 1904 XL q.3439.

3 Evidence of Rear Admiral Chichester to the Elgin Commission. PP Eng.1904 XL q.9911-9913 and q.9922.

of trying to keep up with the advance. Roberts moved fast and the heavy destruction of the line caused the railhead to fall behind. Roberts crossed the Vaal and occupied Vereeniging on 27 May 1900. At this point the railhead was 42 miles behind the rear of the army. The rail bridge across the Vaal was destroyed and there was the danger that this distance would increase if it were not speedily repaired. On 29 May Elandsfontein Junction was captured intact. This was the most important railway junction in the Transvaal and it was disappointing to find only eight trains and 200 trucks there.[1] Still they were enough to run trains from the Vaal to the army. Two trains enabled the advance to be continued and Johannesburg was taken with seven engines and 600 trucks on 31 May. The manpower situation was now becoming serious and following the expected refusal of the Boer staff to run the railway two companies of the East Lancashire Regiment were used. Two supply trains and one train load of siege guns were required for a rapid advance on Pretoria. Girouard managed to provide them and the advance continued. Pretoria was taken on 6 June. Sixteen engines and 400 trucks were found there but it was discovered that in the previous 48 hours some 70 trains, many with two engines, had been sent over the Delagoa Bay line which the cavalry had tried and failed to cut.[2]

Even so there were over 1,000 trucks and 30 engines north of the Vaal. Using these and ox portage across the Vaal a new rail depot was formed at Irene ten miles south of Pretoria. There too the bridge had been destroyed. To meet the added staff requirements a further 800 men with some

1 Report of Capt. Leggett RE quoted in Girouard op.cit. p.40.
2 Ibid p.41.

sort of railway experience were drawn from fighting units. Some were also sent out from England in response to urgent appeals. The speed of the repair work was most creditable. A deviation bridge was completed over the Vaal by 11 June and over the Six Mile Spruit at Irene by 19 June. The first train run through from the Cape to Pretoria since the start of the war arrived on 21 June, despite a sudden appearance south of Johannesburg by De Wet earlier in the month, during which he laid waste 30 miles of temporary works. Once that line was open work started on others. The Johannesburg-Klerksdorp line was repaired without difficulty, it being little damaged. The advantages of opening the line to Natal were obvious. It would allow some of the troops there to cooperate in the drive east and would enable additional stores to be sent up from Durban. A construction train from Mafeking was ordered round to work from Johannesburg towards parties coming up from Natal. They met at Standerton on 26 July.[1] The civilian organisation in Natal seems to have worked quite adequately. The railhead advanced 52 miles from Newcastle to Standerton in less than a month despite 4 destroyed bridges and the blowing up of both entrances to the Laings Nek tunnel.[2]

Meanwhile the daily number of trains running from the advance base at Bloemfontein to the front had to be reduced from eight to six because of increasing guerrilla activity. Night running became impossible. Moreover the railway was now being required to provide for considerable troop movements[3] as well as the flow of supplies. To obtain the maximum use of

1 Girouard op.cit. p.38.

2 Buller Papers WO 132 20.

3 e.g. a Mounted Infantry concentration at Krugersdorp was effected by 31 trains run through from Kroonstadt in 5 days.

the single track, always important but particularly so when demands were thus increasing, the railway authorities dealt only with the Chief of Staff. This protected them from conflicting claims. They would merely tell the Chief of Staff how many trucks could be sent to the front. How they were filled was then a matter for him.

While the main force advanced to Pretoria a completely separate force faced unusual rail difficulties in Rhodesia. Sir Frederick Carrington, who had seen more active service in South Africa than almost any other officer in the army, commanded some 3,000 men who were supposed to act against the Northern Transvaal from Rhodesia. The force landed at Beira in March and April 1900 and was due to concentrate at Marandellas, some 45 miles south east of Salisbury. The Beira-Salisbury railway which the force used originally had a break of gauge at Umtali, west of which the line was of 3'6" gauge like the rest of South African railways, and east of which the gauge was two feet. Work to broaden the narrow section had been undertaken before the war and the broader gauge had reached Bamboo Creek, just 60 miles west of Beira. Thus narrow gauge rolling stock adequate for the 222 miles from Beira to Umtali had only to work 60 miles of track while broad gauge stock intended to cover the 170 miles from Umtali to Salisbury had to suffice for the 287 miles from Marandellas to Bamboo Creek. Inevitably men, stores and horses poured into Bamboo Creek much faster than they could be sent on. Blocks built up both at Bamboo Creek and, as a consequence, at Beira. The confusion took months to clear up and it was not until the end of July 1900 that the force was operational

in Marandellas.[1]

The main force began its advance along the eastern line towards Delagoa Bay on 23 July and followed (in terms of the railway) the now familiar pattern. A construction train followed closely behind the troops. Bronkhorstspruit was entered on 25 July and eight supply trains were ordered up to form an advance depot there. In fact the troops reached Balmoral on the same day but the railhead could not be so advanced as two large bridges were down. The troops rapidly moved on to Wonderfontein where lack of transport forced them to stop. The Boers were now retreating very quickly, a fact amply demonstrated by the discovery that the 50 miles of line west of Wonderfontein were undamaged. Some of the bridges were mined but the charges had not been blown. The Boers had not, however, forgotten everything. In the 123 miles from Pretoria to Wonderfontein there was not one truck or engine. This was serious. Heavy rain had made the 'roads' from Brugspruit (the last breach in the railway before Wonderfontein) to the front almost impassable. The line was not re-opened until 6 August, the gap only barely filled by the use of platelayers' trolleys, improvised into trucks, and two 'small and ricketty colliery shunting engines discovered on a siding.'[2] These managed to move a few tons of supplies each day from the break to a depot newly founded at Middleberg.

The advance was not restarted until mid-August as four daily trains were needed in the interval to build up depots

1 Carrington's Despatches 1,9 and 16 May 1900. Roberts Papers WO 105 7. Weekly reports of the Rhodesian Field Force. Roberts Papers WO 105 8. Carrington to Roberts 25 August 1900. Colonial Office Papers. CO 417 307.

2 Report of Capt. Leggett quoted in Girouard op.cit. p.43.

at Middleberg and Wonderfontein. In this interval the Pietersburg line was opened as far as Nylstroom. To help meet extra requirements Natal lent four engines and some trucks and the Cape 15 engines and 3,000 trucks. The continuation of the advance found new difficulties as the line dropped 900 feet in four miles to reach Waterval Onder. For this section rack engines were normally used but though the rack was intact when British troops occupied the line the engines were gone. Traffic was immediately cut to 40 trucks a day, being all ordinary engines could manage on the gradient. Two heavy duty engines from Natal managed to raise the total to 60 trucks and as all the troops were deployed they had only to carry supplies which they managed to do.

There was now little of the railway left in enemy hands. On September 13 the construction train had reached the Godwen River and begun work on the bridge there. By 18 September it was in Nelspruit. In both places railway supply depots were formed out of stocks of railway material found at Krokodilpoort. More valuable than any of this the missing rolling stock began to be recaptured, as there ceased to be any further lines along which to withdraw it. Six engines and 80 trucks were found at Nelspruit. Buller found 18 engines and 150 trucks at Standerton.[1] The branch line to Baberton was very fruitful. Eighteen engines and 80 trucks were found at Kaapmuiden, though many of the latter had been burned with the supplies they carried. At Avoca 52 engines were found, and French got another 43 when he occupied Baberton.[2] The

1 Buller to Roberts 23 June 1900. Roberts Papers RP 105 13.
2 Report of Capt Leggett quoted in Girouard op.cit. p.45.

bridges at Avoca, Kaapmuiden and Krokodilpoort were down but 11th Division engineers ran a useful service from Avoca to Baberton until they were rejoined to the general system. When the frontier was finally reached at Komatipoort Station there was 'the most extraordinary scene of confusion and wanton destruction'.[1] The buildings were a complete wreck, 1,000 tons of coal was on fire in the engine yard, hundreds of trucks were burned out, and there were railway vehicles packed into every available stretch of track. Twelve and a half miles of sidings were choked with trucks. One hundred and three engines were also found, among them the special rack engines which doubled the capacity of that section of the track. Many of the vehicles were damaged, some irreparably, but there were sufficient running to make railway life somewhat easier. Kitchener estimated that it would take 130 trains to move all the stock out.[2] 1,260 trucks were recovered from the Portuguese authorities who, according to the press, were very cooperative and allowed the British to recruit engine drivers, mechanics and telegraphists in their territory.[3] In fact the Portuguese had been rather uncooperative at first. In October 1900 Kitchener reported that although they were prepared to hand over stock of the defunct South African Republic they were not willing to surrender stock originally belonging to the Orange Free State, Cape Colony and Natal which the Boers had taken over the border. Roberts promptly asked Milner if

1 Ibid p.46.

2 Kitchener to Roberts 26 September 1900. Roberts Papers WO 105 16.

3 The Times 5 October 1900.

he could put any pressure on the Portuguese authorities.[1] Shortly afterwards they seem to have relented.

By 27 September the lines were unbroken from Durban and the Cape to the Portuguese frontier. The army started to move out the following day and by 10 October 1900 the whole force, apart from the garrison to be left there, had been sent back in 102 trains. By 18 October all rolling stock not required for the district had been sent west and south. In all 222 engines and 4,250 vehicles had been taken on the line east of Pretoria.

The joining up of all the railways presented the military authorities with an unusual difficulty as they became caught up in inter-colonial ambition and rivalry. The Natal Government Railway had secured Buller's agreement that they should continue to operate his railway even when he entered the Transvaal. Milner was alarmed at possible political complications that might ensue and in June 1900 asked Roberts to retain all Transvaal railway lines for the Imperial Military Railway and to give his reason publicly as military necessity. This Roberts did.[2] Later, in August, Milner passed on to Roberts feeling in the Cape Colony that Natal was not pulling its weight in the provision of rolling stock, and asking whether some more Natal stock could not be used and some of the Cape stock released.[3] Ill feeling between the colonies increased and in September 1900 burst into the open when The Times of Natal reprinted an article from the Bloemfontein Post

1 Kitchener to Roberts 3 October 1900. Roberts Papers WO 105 16.

2 High Commissioner to Roberts 4 June 1900. Roberts Papers WO 105 20. Roberts to Milner 10 June 1900. Roberts Papers WO 105 34.

3 Milner to Roberts 21 August 1900. Roberts Papers WO 105 20.

(which was produced under military censorship). Among other highly offensive matter the paper said: 'None but boasters, given to the self laudation which has characterised the Natalians during the war, would recognise anything but sarcasm in Lord Roberts' alleged thanks and congratulations to Natal for the services rendered by its railway department.'[1] A letter from the Assistant Director of Railways in Natal asking for the help of the Cape Government Railway with the deliberate implication that the Natal authorities were unable or unwilling to help added to the ill feeling between the colonies. However, Roberts ordered the ADR to withdraw his letter and wrote both privately and publicly to the Governor of Natal assuring him that 'the military administration entertains no unfriendly feelings towards your Government or your railway administration ... I, in common with the army in this country, have every reason to be grateful for the efforts which have been made by the Natal government to meet military requirements.'[2] This defused the situation.

The reunification of the railways also had significant repercussions on more technical problems. The recaptures of stock greatly eased the running of trains and many of the damaged vehicles were made good in the captured railway workshops of Pretoria and Johannesburg which were soon in use to capacity. There was not at once a complete sufficiency of rolling stock, however. Some had been destroyed and repairs

1 The Times of Natal. Cutting enclosed in a letter from the Governor of Natal, Sir Walter Hely Hutchinson, to Roberts 25 September 1900. Roberts Papers WO 105 25.

2 Roberts to Sir Walter Hely Hutchinson 2 October 1900. Roberts Papers WO 105 25.

of those that could be repaired took time. Eventually, however, 81 out of 102 engines, 25 out of 29 coaches and 393 out of 955 trucks were repaired. Moreover the rolling stock that had been ordered on the outbreak of war to make good probable wastage now began to arrive. By June 1901, 112 new engines, 395 bogie trucks and 1,229 short trucks had been brought into service.[1] In August 1901 60 engines and the equivalent of 3,600 short trucks were ordered against future developments. Two other factors eased the load. First was the use of an additional port in Delagoa Bay, which saved some of the traffic the journey the length of Southern Africa. In the first six months of 1901 over 35,000 tons of stores and supplies were brought in this way.[2] The second was the occupation of the coal mines in the Transvaal and northern Natal. The situation of coal supplies in the north of both systems, which had caused such difficulty at the beginning of the war, was now fortunate. It enabled coal to be brought down in trucks that would otherwise have been empty instead of, as in the earlier part of the war, itself displacing military traffic on the way up.

There were, however, two problems still to be overcome, firstly another acute shortage of men and, secondly, guerrilla raids. For the first there was yet another combing of the regiments in October 1900. Engineer, army and colonial contingents all yielded some. The Natal and Cape railways released some more experienced men for the Imperial Military Railways. Wherever possible men from the Orange Free State and the

1 Girouard op.cit. p.55.

2 This included 2,082 tons of civil stores and supplies. Girouard op.cit. p.60.

Transvaal were reinstated. There were no doubt losses of security because of this but the need was urgent, especially for the Imperial Military Railway's Locomotive Department, which was formed round the captured railway workshops.

Destruction of sections of the railway by the enemy now became a considerable nuisance. For a time night movements anywhere on the Imperial Military Railway became impossible, yet the railway was still vitally necessary for supply purposes and was becoming steadily more useful for the movement of troops. The importance attached to it may be gauged by the reaction such raids provoked. The policy of farm burning originated as reprisals for raids on the railway. It was not successful in stopping the attacks. A rather unhappy Roberts telegraphed the War Office: 'The enemy continue to fire into trains and are very persisting in their endeavours to derail trains and destroy railway lines. Scarcely a day or night passes without accidents happening. A day or two ago a stoker ... was killed by a rifle bullet and the driver seriously injured. Last night a train was derailed ... the engine being blown up by dynamite ... in every case prompt punishment follows ...'[1] Apart from raids the Boers started laying automatic mines and riding elsewhere while the next train blew itself up. It became customary for the first train from any station in the morning to have three or four trucks in front of the engine. From 1 June 1900 there were 255 interruptions to the Imperial Military Railway. These varied in seriousness from 'slight damage to the line' to 'Line blown

1 Roberts to Secretary of State 6 September 1900. WO 108 68 no.8080.

up. Train captured and destroyed.'[1] On one occasion 1,450 yards of line were destroyed. Even so it was only twice that traffic was held up for more than a few hours. Organisation for signalling and repair had reached a very high standard. Roberts did not find an adequate solution to the problem. Many people both in England and in the army in South Africa suggested using hostages in a number of different ways of varying savagery. Lord Esher, ever ready to use his influential connections to suggest how things should be run though seldom prepared to take the responsibility of doing it, thought: 'A prominent Boer on every train, passenger or luggage, who would be shot through the head at the first sign of an attack would soon protect the line.'[2] A proclamation by Roberts in June 1900 warned that hostages might be placed on trains but the clause was withdrawn soon afterwards. Although a few trains almost certainly did carry Boer civilians as hostages it was never a systematic policy and none of the hostages was ever injured.[3]

Other methods of defence included arming more trains. Armoured trucks were often attached to ordinary trains and the number of armoured trains increased, but this had very little effect. It was not possible to protect the line significantly this way without running virtually every train with an armoured train escort. This was suggested to one general

1 Girouard op.cit. Appendix D. This section contains descriptions of every interruption of the line.

2 Journals and Letters of Reginald Viscount Esher Vol I Ed M.V.Brett London 1934 pp.303-4.

3 A fuller account of the question of hostages on trains may be found in S.B.Spies: (PhD thesis) Roberts and Kitchener and Civilians in the Boer Republics January 1900-May 1902. Pretoria 1973. pp.154 to 163.

but he replied, conclusively, that it would reduce trains to about one a day and that he would prefer an occasional loss to such complete disruption.[1] It was left to Kitchener to solve the problem. His blockhouse lines beside the tracks caused a quite dramatic decrease in damage. The first lines were completed in July 1901 and most of the railway was covered by the end of the year. The importance of the railway is shown by the amount of traffic it had carried up to that date. The Imperial Military Railway alone had taken 621,673 tons of goods, 935,817 passengers and 31,579 truck loads of animals and vehicles.[2]

For the last part of the war the main job of the railway department was merely to keep the trains running, a fairly simple operation with the lines reopened, rolling stock recaptured and arriving from England, and the necessary organisations built up, tested and modified as required. There were also permanent repairs to be completed on the Imperial Military Railway where, unlike the Cape and Natal, everything was done by the military. They had already laid down 20½ miles of line in diversions and now 15 miles of permanent way were relaid as well as miles of sidings put in. Some 278 bridge spans were replaced.

Specialised Trains.

As well as ordinary traffic there were two specialised types of train created. One of them, the armoured train, was used (or misused) from the start of the war. Indeed in one of

1 Barton to Military Secretary 11 February 1902. Chief of Staff Letters and Papers WO 108 15. CoS 536.

2 Girouard op.cit. p.59.

the first actions of the war an armoured train steaming from Vryburg to Mafeking ran over a gap the Boers had torn in the line and meandered to a halt in the veldt where its occupants surrendered the following morning. A train running south from Bulawayo was more successful and fought several skirmishes. In Natal also an armoured train was lost. It was sent from Frere to Chieveley for reconnaissance, a trip it had done almost daily for a month. Despite this an officer who had never been up the line was found to command the train. To reconnoitre successfully from a train requires almost perfectly flat country, but this line undulated through a series of small valleys and gave almost no suitable views. The train was derailed at the bottom of a slope and 70 prisoners (one of whom was Winston Churchill) were taken. This sort of mishap gave armoured trains a bad name but later in the war, used more sensibly, they proved most valuable. Like Railway Staff Officers, and for similar reasons, the trains were removed from the control of general officers and placed directly under the Director of Railways. Under this system not only did they cause less disruption (previously they had steamed haphazardly about playing havoc with traffic schedules) but they were used more efficiently. There had been a natural tendency for generals to retain trains even if there was no great use for them on their section of the line. Under the Director of Railways they could be sent where they were most needed and withdrawn when circumstances changed. It was thus much easier to combine them with Kitchener's drives later in the war, in which they played a valuable role. The only change in the make up of these trains was an attempt to give them more fire

power. It was found possible to mount a six inch gun and fire it at right angles to the track without derailing the truck that carried it. Later a 9.2 inch gun weighing 30 tons was mounted and sent up the line. It gave good results in tests but never got a chance to fire at the enemy.

The other specialised variety of train was the hospital train which was developed in the course of the war. They were a railway equivalent of the hospital ship and were used to transport sick and wounded from the field to the base hospitals. Sprung passenger vehicles were used instead of the normal trucks. They were stocked with bedding, water and medical supplies, and carried one doctor and a number of orderlies. The Principal Medical Officer, Surgeon General Sir William Wilson, was enthusiastic. 'They were capital, and there never was anything like them seen in any part of the world before.'[1] Unfortunately there were very few of them. Many sick and wounded were carried (and hideously shaken) in ordinary trains. These, despatched on occasions without food, water or orderlies, were frightful. One eminent civilian doctor with the field force said that 'nearly all' fever cases that travelled by ordinary train died or developed very dangerous complications.[2] Whether the railway authorities were unable to provide any more hospital trains, or whether the medical authorities did not ask for more, is unclear.

After the war both Roberts and Kitchener paid tribute to Girouard's efficiency and he was undoubtedly one of the successes of the war. The difficulties he faced would have

1 Evidence of Wilson to the Elgin Commission PP Eng.1904 XL q.3668.

2 Evidence of Prof. Alexander Ogsten to the Elgin Commission PP Eng.1904 XL q.11083.

provided a quite respectable excuse if the railways had broken down but they did not. Despite lack of staff, rolling stock and a corporate military experience of using railways the lines maintained military forces vastly larger than would otherwise have been possible. A breakdown would have been catastrophic. Roberts' advance from the Orange River to Bloemfontein, a distance of about 170 miles, strained the road transport to the utmost, and his troops finished the march on much reduced rations and short of stores of all descriptions. Trying to operate over ten times that distance without railways would have been all but impossible. So would Roberts' march on Bloemfontein have been without the railways to bring up stores and supplies at both ends of it. The experience of Girouard and some of his officers was, of course, invaluable; but the lack of any general army experience may not have been the unmixed curse it might appear. The conditions of South African railways were peculiar and organisations based on European networks would have been of little use. As it was, improvisation to suit local conditions had no established ideas to contend with. When details were found unsatisfactory, as for example were Field Railway Sections, and the placing of Railway Staff Officers on the staffs of general officers commanding their areas, they could easily be changed. The first organisations had no time to gain a sanctity that would have made them difficult to overturn for something new. This flexibility contributed in large part to the success of the railways.

Road Transport

The provision of transport.

The complexities of campaigning over huge areas of inhospitable terrain in intemperate climates were well known in the British Army at the end of the nineteenth century. The military demands of an empire expanding into such places all over the world had given many officers a personal knowledge of the working of most forms of road transport and every type of beast of burden. Transport in South Africa was not new in type, though the scale of operations was unusual in the size of both the force involved and the theatre of war, which in area nearly equalled Western Europe. The railways available did not solve the problem. In one sense they created it, for without them such an army could not possibly have been maintained over Southern Africa. But though the lines were obviously indispensable and dominated strategy, it was equally obvious that there had to be other transport in sufficient quantity and so organised as to enable the army, or any part of it, to act away from the railway when circumstances required.

The term 'road transport' can be misleading. Although it consisted of vehicles designed to run on roads as opposed to railways the transport had also to cross open country where there were no roads. For much of South Africa, outside the towns, there was very little difference. In Cape Colony roads, where they existed at all, were little more than tracks across the veld which often became impassable after heavy

rain.[1] In Natal they were little better. A contemporary historian wrote: 'Of proper roads there were none. The country was a vast swamp after heavy rain, or, in fine weather, a mass of dry ruts and tracks, steep hills, difficult fords and irritating boulders.'[2] This was a slight exaggeration as roads on very steep inclines and for short distances on either side of drifts were often metalled.[3] Apart from these places, however, the description was accurate and applied equally to the Transvaal and the Orange Free State. Such conditions put additional demands on the transport.

The transport to meet these demands consisted mainly of ox and mule drawn vehicles. Horses were not used except to pull the guns and the horse artillery ammunition columns, though there were instances of undersized or otherwise unsuitable mounts being put into mule teams to meet emergencies. Mule and ox transport exhibited considerable differences in use. Under ordinary conditions a ten span mule wagon could be expected to carry about 3,500 pounds about twenty miles a day at an average speed of 3-4 miles per hour. A sixteen span ox wagon would carry about 6,000 pounds for sixteen miles at no more than two miles per hour. This difference in capacity added to the complication of managing the transport but more would have been lost than gained by trying to use one type only, even if sufficient of either had been available. Each type had advantages it would have been unwise to forgo.

1 Notes on the Lines of Communication in the Cape Colony. Maj. Altham Intelligence Division. June 1899. WO 33 153.

2 Louis Creswicke: South Africa and the Transvaal War. London 1901-2 (7 vols) Vol 3 pp.93-94.

3 Report on Communications in Natal North of Ladysmith. Intelligence Division. July 1897. WO 33 83.

Mounted troops would have lost much of their precious mobility had they been tied to the slow moving ox transport while reliance on mule transport alone would have reduced the range of the army as a whole. If this last objection had been just a result of the lighter load carried it could have been met, in time, by increasing the number of wagons, but there was more to it than that. While oxen could be grazed, at least in certain areas and seasons, mules had always to carry their own food. The authorised ration was based on eight pounds of grain. Two pounds of hay could be substituted for each pound of grain up to a maximum of eight pounds of hay, thus giving four pounds of grain and eight of hay.[1] In practice about ten pounds of forage was carried as a daily ration for each mule. Thus a ten span team taking a wagon five days from base (ten days there and back) would have to carry 1,000 pounds of forage or nearly one third of its capacity. A six span cart would need forty percent of its 1,500 pound capacity for forage for such a journey. As the length of the journey rose the carrying capacity available on each wagon fell. Attempts to use mule transport for very long trips were, therefore, ruled out as they would have resulted in huge transport columns able to carry little more than their own requirements.

As well as greater load and range oxen had the advantage of working well in teams. Double or treble spanning could be used by experienced drivers to overcome difficult ground and, at times, up to eighty oxen were used to pull out guns or wagons stuck in drifts. This was particularly important in Natal where the mountains in the north and west needed multiple

1 Army Standing Orders 6 November 1899. Quoted in With The Army Service Corps in South Africa: Sir Wodehouse Richardson. Richardson and Co. London 1903 p.52.

spanned wagons to negotiate the passes, even in good weather.[1]

Ox wagons were the traditional transport of the country and were available, with their teams, in more than adequate numbers. At one time it had seemed this might not be so. In 1896 a memorandum from the Intelligence Department pointed out that the spread of railways had largely replaced ox transport over the area that the lines covered.[2] Far more serious was rinderpest. This scourge had started in Matabeleland (a contributory cause of the revolt there) and, in 1896 and 1897, had spread throughout South Africa. Its effect was devastating. In the Transvaal alone, out of little over 1,500,000 oxen, 800,000 were estimated to have died and a further quarter of a million to have been shot.[3] Had war come at this time (and the prospect was never far away in these years) the army would have experienced very serious difficulty in obtaining transport. The lack of ox transport forced the people of South Africa to make a much more extensive use of horses and mules. These, too, rapidly became scarce and many such animals were imported. However, by 1899 the ravages of the disease had been largely made good. Even Sir William Butler, whose enthusiasm was limited to the enumeration of difficulties and who stressed that long trekking had been replaced by rail journeys, that rinderpest had diminished the number of oxen and that many of the country's transport resources were in the hands of the Free State and the Transvaal, was compelled to admit that

1 Report on Communications in Natal North of Ladysmith. Intelligence Division July 1897. PRO WO 33 83.

2 Memorandum No.8 The Transvaal Boers from a Military Point of View. October 1896. Ardagh Papers PRO 30 40/14.

3 Military Notes on the Dutch Republic of South Africa. Revised to June 1899. Ibid PRO 30 40/15.

given two months' notice he thought he could get about 1,000 ox wagons and teams.[1]

Mule transport was available locally to mobilise the garrison and to equip the reinforcements sent from England, but not the expeditionary force. Authority to purchase sufficient to equip the units already in South Africa was given on June 24th 1899,[2] and on August 7th Butler was ordered to obtain regimental transport for two more battalions then under orders for South Africa.[3] By the beginning of September all vehicles and mules for these purposes were in hand and it was hoped that if war came the troops would be able to seize and hold the frontiers until the Field Force arrived. Lansdowne recognised that, unless a supply park able to carry at least another three days' supplies was assembled, the troops could not do more than hold off raids. He estimated that 100 ox wagons complete with teams for this purpose could be got in three weeks from the date of the order. He also enquired about the availability of transport for a prospective force of 10,000 men, which he took to need 261 vehicles and 3,000 mules for regimental transport and a supply park of 75 wagons and 1,200 oxen, and for an Indian contingent of 5,500 men which would need 136 vehicles and 1,300 mules for its transport, and a supply park of 50 wagons with 800 oxen. He estimated this would take two months from the date of the

1 GOC South Africa to Secretary of State 6 and 22 July 1899. PRO WO 108 66.

2 Secretary of State to GOC South Africa 24 June 1899. Ibid.

3 Ibid 7 August 1899.

order and asked for the views of General Symons[1] on the accuracy of these estimates for his own personal information.[2]

Symons replied that the figures were correct as far as they went but pointed out that no provision had been made for field hospitals, bearer companies, staff or ammunition columns either for the forces in South Africa or for any that might be sent. Excluding the needs of the Indian contingent he estimated that 5,000 mules would be needed in all, that 3,000 of them could be obtained in South Africa while contractors on the spot could get the remainder, within the two months specified, from America. He also pointed out that while the supply park suggested was sufficient for a concentrated force, it was none too large for the same sized force scattered along the frontiers.[3]

On the following day (September 5th) Lansdowne telegraphed that the 'Indian contingent might be ordered to Durban at any moment and it is absolutely essential that transport should be provided for it in South Africa.'[4] As the proposal to send the 10,000 men from England was dropped for various reasons[5] there was little difficulty about this. The GOC was also able to provide regimental transport for an additional four

1 Sir William Butler left South Africa on 23 August 1899. Sir Frederick Forestier-Walker arrived on 6 September. Between those dates the then GOC Natal, Sir William Penn Symons, acted as GOC South Africa. On the arrival of Walker he reverted to the command of Natal which he held until the arrival of Sir George White on 7 October, when he was given the overall command of infantry in Natal. He was killed thirteen days later at Talana.

2 Lansdowne to GOC South Africa 'Secret and Personal' 2 September 1899. PRO WO 108 66.

3 GOC South Africa to Lansdowne 4 September 1899. Ibid.

4 Lansdowne to GOC South Africa 'Secret and Personal' 5 September 1899. Ibid.

5 See pp. 37-38.

battalions ordered to South Africa on September 8th. In the same telegram as that which notified the reinforcements Lansdowne asked for details of what numbers of ox and mule wagons, Scotch carts, mules, oxen and harness could be obtained in two months in addition to all that was already authorised.[1]

These details were sent on the following day and showed that resources of ox transport in both colonies was larger than any foreseen requirements, and that after equipping all transport authorised there would be 1,500 draught mules available for future needs. There followed a display of misplaced parsimony remarkable even by Lansdowne's standards. The figures for mules depended on Forestier-Walker being authorised to conclude three contracts for them, which he had arranged, including one for 1,000 animals from America. This arrangement was duly authorised and on 13 September Forestier-Walker was able to report that he had concluded all the contracts. He added that the American mules had been ordered for fear that South African draught mules were exhausted, but that there was a possibility of about 1,000 more locally.[2] The next day Forestier-Walker was ordered to cancel or suspend the contract for American mules as 'being in excess of your present requirements'.[3] It would be hard to find a clearer example of futility in the drive for economy. There was every reason to believe that a field force, for which these mules and many more would be needed, would have to be sent

1 Lansdowne to GOC South Africa 8 September 1899. PRO WO 108 66.

2 GOC South Africa to Secretary of State 13 September 1899. Ibid.

3 Secretary of State to GOC South Africa 14 September 1899. Ibid.

in the near future, and the speed with which they could be assembled in South Africa was of vital importance. If it should happen that they were not wanted it is most unlikely that they could not have been resold with very little loss. Anyway the loss to be risked on having to resell cheaply was probably no greater than that risked in paying compensation for cancelling the contract and then having to repurchase the mules later, which was what happened. Indeed, less than a week after the contract was cancelled in South Africa orders were sent out from London to the remount officers in America, Italy and Spain to purchase 3,000, 3,000 and 1,000 mules respectively.[1] Major Scobell, in America, was further ordered to have 1,000 of his mules ready to embark in the first ship that could be sent. Nine days later 8,000 more mules were ordered from the same sources.

Meanwhile we should not lose sight of Symons' warning that no transport had been allocated to field hospitals, bearer companies, ammunition columns or the staff, though that is what the Army Board proceeded to do. The question was not brought before the Board for a fortnight after Symons' telegram had been received, though the Board met twice in the interval. The most probable explanation for this is that Lansdowne forgot to tell the Quartermaster General and that the telegram, being personal to Lansdowne, was not sent to

1 IGR to Major Scobell, New Orleans; Colonel Waldron, Naples; Major Williams, San Sebastian. All 23 September 1899. Ibid.

the interested departments in the usual way.[1] When, on 17 September, the QMG did bring this deficiency to the attention of the Board, consideration was postponed. It was never raised again. The matters were dealt with as they arose. On the 17th Forestier-Walker reported that he was preparing transport for the staff and a bearer company.[2] On the 20th he was ordered to obtain transport for an ammunition column about 200 strong and with 53 vehicles, and two days later he was ordered to provide for the field hospital coming with the Indian contingent.[3]

At this point the situation was transformed by the grant of funds to provide for the urgent preparations for the mobilisation of an army corps, and large scale buying and hiring was authorised. One hundred mule wagons and 70 Scotch carts were ordered before the end of September, apart from everything already mentioned, and Forestier-Walker was told to discover how many more he could get within two months 'by arranging with local factories to apply all their producing power.'[4]

1 Just why Lansdowne asked for this for his private information is not clear. If he suspected his advisers were misleading him, deliberately or otherwise, he could have called for the cables sent them from South Africa. If he thought officers in South Africa were stating the position wrongly, there is no reason why a telegram addressed to him personally should be more accurate. If he wanted the most recent information to lay before the Cabinet there was no good reason for not cabling for it in the usual way. There is no sign among surviving Cabinet Papers that this subject was discussed at this time, and it is not very likely that it would have been. Perhaps Lansdowne just wanted to establish his right to consult any officer in the service, perhaps he wanted to feel he was doing something useful.

2 GOC South Africa to Secretary of State 17 September 1899. PRO WO 108 66.

3 Secretary of State to GOC South Africa 20 and 22 September 1899. Ibid.

4 Ibid. 28 September.

On October 2nd he was ordered to buy 200 more wagons and 160 carts. Ten days later he had contracted to hire 700 ox wagons to be delivered during December. These teams were hired complete with native drivers and European conductor and sub-conductor with each section of ten. Thus a detachment of five could if necessary be sent away and still remain under proper supervision. Although there was experience of the use of oxen on campaign there were few trained drivers in the army and, anyway, the Army Service Corps had more than enough work without trying to find crews in such numbers. Teams were hired rather than bought because this was thought to be cheaper, as it would have been had the campaign lasted only the few months that was anticipated. They were hired month by month until December 1900 when Kitchener took all the teams over. By that time there were over 2,500 wagons and over 30,000 oxen, and Kitchener was able to save £90,000 per month by cancelling the contracts of hire.[1]

The contractor for the first 700, Julius Weil, suggested that convenient points for mustering them would be Queenstown (400), Naauwpoort (200) and De Aar (100). He did not specify to whom it would be convenient. Forestier-Walker very properly cabled for instructions on this point. The War Office, reasonably, passed the question over to Buller who replied, with that firmness of irresolution that became so marked, that he knew nothing of local circumstances and would leave the decision to the men on the spot. Such a reply from the General appointed to command the largest army that had ever been sent from England, made two days before he sailed, can scarcely have encouraged

1 Kitchener to Brodrick 20 December 1900. Kitchener Papers PRO 30 57/22.

anybody. That Forestier-Walker had no information on the plan of campaign is not surprising. There was not one. Or if there was it was contained only in Buller's mind. Buller was himself in some difficulty because of the Cabinet's refusal or inability to decide on the status of the Orange Free State. Even so, the failure to pass information to Forestier-Walker was extreme. Not only was he given no official intimation that war was imminent, nobody bothered to tell him when it started. He assumed that it had done so when the Boers wrecked a train outside Mafeking on 13 October.[1] Moreover he had no detailed instructions on transport organisation. As ordered he had purchased 300 mule wagons and 230 Scotch carts all of which would have been delivered by the middle of November and probably some time before. The 700 ox wagons would start to come in December. On 18 October he was told that 50 General Service Mark VIII wagons would be sent from England to Cape Town and 50 more to Port Elizabeth.[2] The 15,000 or so mules required for the force were being purchased and shipped. On 25 October he was ordered to buy 100 more mule wagons locally. There was an obvious danger of complete chaos as all these were delivered, unless the GOC knew exactly where and how these masses of transport were to be concentrated. His actual knowledge may be seen from an agitated telegram he sent to the War Office.

> Wide differences exist between my estimate of requirements in animals, wagons, carts etc. and

1 Evidence to Committee of Inquiry on the Ordnance Department 1901 PRO WO 33 218.

2 Secretary of State to GOC Cape 18 October 1899. PRO WO 108 66.

> the numbers ordered by you. This is doubtless due to the absence of either written or telegraphic instructions as to general line of organisation of transport services. On what exact scale have the calculations quoted for regimental transport been based? How are companies, ASC, with Field Army composed, whether for mule or ox transport? What number of days supplies are these companies, ASC, to carry? How are the ammunition columns composed and are they mules or oxen or English horses? What vehicles are they and other special corps to be supplied with? Is there any proportion of baggage or tents to be carried with the Field Army? For what use are the 700 ox wagons and 80 ox carts? What number of horses, mules, are to be sent out to South Africa and are any stores coming out?[1]

While these questions should have been answered before, it was as much Forestier-Walker's fault as that of the War Office that they were not. He should have made it his business to find out and as some of the answers were contained in the 'War Establishment Tables' published in 1898 it might have been thought he was familiar with them. At that time he was commanding Western District in England. Kitchener said of him later 'Forestier-Walker is charming but is not an energetic officer with much initiative, his business qualities are, I think, also limited.'[2]

However, he had arranged to procure the transport competently enough. Detailed instructions had in fact been posted to him on 7 October so he must have received them within two or three days of sending his telegram. Some of his questions were also answered by various telegrams. The

1 GOC Cape to Secretary of State 20 October. Ibid.
2 Kitchener to Brodrick. Kitchener Papers PRO 30 57/22.

oxen were for the Supply Park with three days' supplies and tents for the force. It is a little hard to see what else Forestier-Walker could have thought they were for. The supply columns were to take one day's supplies and emergency rations. Here again, this was the usual arrangement and it is surprising that Forestier-Walker had to ask. But the essential orders were given. On 26 October twenty companies of the ASC, commanded by Colonel Clayton, landed at Cape Town. They provided the much needed trained manpower to deal with the transport that was beginning to flood in. To add to everything ordered locally a further 500 mule wagons were sent from England at this time. Moreover the troops were, in most cases, bringing water and small arms ammunition (SAA) carts with them. Each battalion had one water cart and four SAA carts. The few units who did not bring these vehicles lacked them only because they could not be fitted up and converted to mule draught in time. Orders were given for these to be equipped with transport improvised in South Africa. Their own vehicles would be sent after them as soon as they could be fitted up, the Army Board having decided that this was preferable to delaying units until their transport was ready, or to their taking their vehicles to be converted in South Africa. This delay had been foreseen by Brackenbury but he had been unable to get authority to start conversion before September 22nd (which was too late) despite repeated requests. It is possible to see, through the third person minutes of the Army Board, the frustration he felt when he explained the position. He 'informed the Board that (as he had repeatedly pointed out when asking for authority for the conversion of the vehicles and the provision of harness to be

sent with the Army Corps from this country) conversion and provision will take at least ten weeks.'[1] In all a total of 181 SAA carts had to be prepared for the Army Corps.

With the coming of the Colonial contingents and the mobilisation of the 5th Division the number of mule wagons needed for the whole force rose to the thousand mark. A further 300 were ordered in South Africa to be delivered in a month, which provided for all these needs and gave a reserve of about 200. At first the Colonial contingents had brought their own but after a little experience this was discouraged. Much difficulty was caused by wagons far too heavy for the country. The South African wagon weighed under seventeen hundredweight and was built to meet local needs. The Australian wagon by contrast weighed well over 2,600 pounds and was described as 'a huge cumbrous farm wagon absolutely unfitted for transport anywhere'.[2]

It was also confirmed that more ox wagons would be available if needed, which had briefly been questioned. The earlier predictions of plenty had included the resources of Bechuanaland, one of the richest areas in South Africa for oxen. When the Boers invested Mafeking and Kimberley, and cut the western railway, this source was unavailable for the time being but investigation showed that other areas, particularly the Eastern Province of Cape Colony and the south-east coast, were sufficiently prolific. Moreover these estimates did not include Natal. There had been a proposal in October to bring 200 wagons and teams from Natal to the Cape Colony, which would

1 Proceedings of the Army Board 11 October 1899 para.348. PRO WO 108 79.

2 Report of Committee on Transport Vehicles. November 1899. PRO WO 33 216.

have been tedious and expensive but perfectly possible. It had proved unnecessary but showed that transport could be obtained there. In the event it was needed for the large force sent there.

Thus the huge initial task of procuring the transport was successfully accomplished without any great difficulty although the time taken gave rise to some misguided criticism of the War Office. In fact the job was done within the time that the War Office had estimated and any fault lay with the Cabinet who delayed authority to start the work until very late. The conversion of vehicles in England for the force originally contemplated (one army corps, one cavalry division and seven battalions line of communication troops) was completed by 15 November, sixteen days inside the ten weeks Brackenbury had forecast.[1] The process did not stop there as the force continued to expand, and the view in South Africa seems to have been that there could not be too much transport. In December the 6th Division was mobilised and 200 wagons provided for it in England. Half of these were GS Mark VIII vehicles from the Royal Carriage Factory at Woolwich which, like the rest of the Arsenal, was working day and night for months together. The other half of the Divisional transport was provided commercially. Apart from its commitments to the 6th Division the Carriage Factory was able to produce 200 more GS wagons by 6 January and Forestier-Walker was asked if he wanted them. He replied that they should be sent together with any more available.[2]

1 Proceedings of the Army Board. 20 November 1899. para.348 PRO WO 108 79.

2 GOC Cape to Secretary of State 5 December 1899 PRO WO 108 66 no.1599.

Those parts of South Africa under British control were virtually denuded of good quality purchasable wagons at this stage (or so it appeared), but there were still sufficient carts locally to provide, for the 6th and, later in the month, 7th Divisions, those required for the carriage of tools and medical stores.

Organisation.

The organisation of the transport with the army was to be the subject of much acrimony and misunderstanding. This was unfortunate as the army had, for the first time in its history, an organised and militarily controlled transport and commissariat joined in a single corps. Perhaps Sir Redvers Buller's greatest achievement in his forty years of service was his work as Quartermaster General. The Army Service Corps was his creation and he designed it to fit the 'War Office system' of transport often known as regimental transport. This term is unfortunately ambiguous. It can mean either transport under immediate regimental control, which carries that regiment's stores and supplies (in which sense it has been used in the preceding section), or it can mean the whole of the War Office system of which regimental transport in the above sense forms only a part. This organisation, also known as articulated transport (which describes it rather well) was built up in four main parts. The first of these was regimental transport in the strictest sense and was itself divided into two, first and second line transport. First line transport was the fighting transport carrying ammunition, entrenching tools, first aid stores, signalling equipment and a machine gun or (very rarely) guns. The second

line was subsistence transport with one day's food for men and forage for animals together with blankets, regimental equipment and baggage and tents if carried. For an infantry battalion this required seven wagons, for a cavalry regiment, ten. Loads were so distributed that rations for a company or minor unit could be increased if tents (for instance) were left behind even though other companies carried them. This transport and its animals were managed by officers of the regiment.

Next came the supply column managed by the ASC. Each brigade would have its own column as would divisional and corps troops. The size could vary but the minimum and most usual load was one day's rations and forage for every man and animal in the force to which the column was attached, together with one emergency ration per man. The column formed a first reserve for its unit and a link with the supply park which came behind the entire force.

The supply park, the third element in the War Office system, was also in the charge of the ASC and carried at least three days' rations and forage for the army together with such baggage as was required. Buller preferred the German term 'rolling magazine' to supply park and that certainly describes it well.[1] It could, of course, be increased to the limit of the transport available without dislocating the organisation.

Fourthly came companies of Auxiliary transport. In South Africa these were ox companies of 100 wagons with a combined load of 600,000 pounds or mule companies of forty

1 Buller Papers. PRO WO 132 26.

wagons. Under ASC officers each had a military staff and the necessary artisans and was so organised that a section of ten wagons could be detached if needed. These companies were to work on the lines of communication. Garrisons could thus be kept supplied and new bases established without interfering with the arrangements of the field army. If necessary the companies could bridge any gap between the railhead and the supply park and companies or sections could be used to increase the capacity of either the supply park or the columns.

As well as these divisions for the supply of combatant units there was the so-called technical transport, such as the ammunition columns (which might be mule or ox drawn for the field and heavy guns), Royal Engineer transport for pontoons, bridging, signalling and balloons, and the ambulances and transport for field hospitals.

The principles underlying this system, as enumerated by Buller, were decentralisation, with conveniently sized transport units under the command of those directly interested in their efficiency; a clear chain of responsibility, every commanding officer of a company, battalion, brigade or division having direct charge of a portion of his unit's supplies; interdependence of supply and transport, 'Nothing is more fatal than to hold one man responsible for a wagon and another for its load'; and elasticity, an automatic expansion or contraction of transport if units were added to or subtracted from a larger force.[1]

On this basis the mass of transport was issued to troops on their arrival and they went from the fitting out stations

1 Ibid.

to their various posts fully mobilised. The oxen for the supply park were stationed on the western and eastern lines of advance, or what would have been the lines of advance had the original plan of going through Springfontein been adhered to. The main concentrations were at Queenstown, Sterkstroom, Orange River and De Aar. Queenstown and De Aar were also fitting out stations for mule transport, as was Naauwpoort.

By 15 January 1900 22 ASC transport companies were in Cape Colony and their distribution helps illustrate the workings of the system. On the western line five companies were with units (three infantry brigades, one cavalry brigade and 1st Divisional troops) on the Modder River and half a company was on the Orange River with 105 wagons for the supply park. At De Aar, the headquarters of the supply park, the other half of the above company had 123 ox wagons, one company was organising with an infantry brigade and there were two auxiliary companies with 361 mule wagons and 990 mules (which they had trained) awaiting distribution as required. Another two auxiliary companies were at Stellenbosch with 30 wagons and 3128 mules which they were forwarding as soon as trained. At Cape Town one company was told off to provide for the corps troops and was under orders for De Aar and one company formed a depot and landing establishment.

On the midland line one company was at Rensburg fully organised with a cavalry brigade, two companies were at Naauwpoort, one with an infantry brigade and one with the 6th Divisional troops, together with a detachment of an auxiliary company with 25 wagons. The remainder of that company was at Port Elizabeth with 30 wagons and over 1,500 mules which

they were training, organising into spans and sending up country. One other company was at Port Elizabeth. It formed part of the supply park and was awaiting wagons from the eastern line.

On the eastern line there were two companies at Sterkstroom, one with a brigade and various details and one with 203 wagons for the supply park. At Queenstown were two more companies, one an auxiliary with 220 ox wagons and one performing the duties of mule training for this line. On that date it had in hand 115 wagons and over 1,700 mules. Distributed with these companies were more than 7,000 native personnel.[1]

It is worth considering the distribution on this date because on 15 January the whole complex and functioning organisation was abolished, and orders were given for a completely new system of transport. The orders were given by Lord Kitchener as Chief of Staff under the authority of Lord Roberts and it is difficult to say which, if either, was the prime mover. Certainly there was no discord between them on the subject. Roberts wrote: 'Major General Lord Kitchener's experience in this important matter coincided with my own and we decided that the first thing to be done was to form a properly organised transport department.'[2] It is not immediately obvious why they thought that the transport department they found was improperly organised. Roberts reported that he found the transport 'to be permanently allotted to units of the several arms under a regimental system without any reserve to carry supplies for more than three days. The result of this

1 Ibid.

2 Despatch 26 March 1900. Roberts Papers PRO WO 105 6.

system was that a large amount of transport was unemployed whenever the troops to which it was attached were halted, while it was practically impossible to move any considerable force away from the railway line.'[1] Whether or not there was a sufficient reserve to carry any given number of days' supplies was a question of its quantity rather than its organisation. The supply park of ox wagons was not allotted on a regimental basis. Anyway with nearly 700 wagons there was a capacity of at least 650,000 soldiers' rations with a fair proportion of animal rations. Half of this would provide ten days' rations for 30,000 men.

Roberts' idea that transport attached to units could not be withdrawn when those units were halted for a long period, or on garrison duty, was a complete mistake. All transport was under the final control of the ASC and could be withdrawn for general use in such circumstances. Undoubtedly the misapprehension would lead to the view that the regimental system was wasteful, and it was a misapprehension shared by Kitchener. He thought 'it was impossible to provide for the transport of the Army on that system which locked up so much transport.'[2] An unavailing attempt to explain the true position was made by Colonel Bridge,[3] the then Director of Transport, in a memorandum protesting against the reorganisation. 'Though nominally "Regimental" transport orders exist, and experience

1 Despatch 6 February 1900. Ibid. PRO WO 105 5.

2 Evidence of Lord Kitchener to the Elgin Commission PP Eng. 1904 XL q.222.

3 Col. C.H.Bridge was an ASC officer. He had been on active service in Egypt in 1882 and South Africa in 1896 and had staff experience in the War Office (1888-1891), South Africa (1896-7), and Eastern District in England (1897-9).

has taught Commanding Officers, that regimental transport is available for general service when not actually and necessarily employed regimentally, and it is constantly so used in South Africa.'[1] This view was confirmed after the war by Colonel Clayton.[2] Roberts, like Kitchener, was unconvinced. He, too, when giving evidence to the Elgin Commission, maintained that under the War Office system much transport was wasted on stationary units.

If, however, this was the only objection the obvious solution was to order that transport with such units be withdrawn for general use. This would not have changed the actual position but would have brought Roberts' view of the situation into line with reality. This apparently was not enough. Indeed Roberts seems to have had no understanding of the organisation at all. He wrote to Buller

> what has delayed me as much as the want of troops is a difficulty, which I feel sure must have given you great anxiety, and that is the fact of there being no regularly organised system of transport, the large number of mules in the country were scattered about, and there was no arrangement by which they could be got together.[3]

But the only purpose of massing transport is to accompany a large force. What Roberts quite failed to realise was that the transport was scattered because the troops were scattered. Apart from regimental transport in the narrow sense, ten of the ASC brigade supply columns were with their respective

1 Memorandum 16 January 1900 by Colonel C.H.Bridge, Director of Transport. Buller Papers PRO WO 132 26.

2 Evidence of Colonel Clayton to the Elgin Commission PP Eng. 1904 XL 2672.

3 Roberts to Buller 26 January 1900. Letters and Telegrams of Lord Roberts Vol I PRO WO 108 74.

units. Had these forces been concentrated their transport would automatically have been concentrated with them.

Both Roberts and Kitchener were accustomed to forces far smaller than those they had to deal with in South Africa. With small forces they were used to having a centralised transport under their own hands. It is significant that Sir William Nicholson,[1] whom Roberts appointed to be Director of Transport, had 'had unusual opportunities for studying the question in Afghanistan, Egypt and the north west frontier of India.'[2] Such experience was exactly that of Roberts and Kitchener. It was, perhaps, the lack of a separate, centralised transport corps that above all condemned the organisation in their eyes. Certainly Kitchener complained that there was a lack of effective control over the transport when he arrived.[3] By that he doubtless meant that it was not under his control. A biographer has written of him

> Kitchener's thoroughness constrained him to swing his boot into any system of administration and to rend in pieces any established chain of command. His system was in reality the negation of any system; and his drive prompted him inexorably to centralise every species of authority in himself.[4]

Roberts was making the same point as Kitchener when he said

1 Nicholson, whom Lord Esher was later to describe as one of the cleverest soldiers he had met, was a Royal Engineer who became a Major General after only 22 years' service which was unusually quickly for the time. He was a product of the Indian Army and had been Military Secretary to Roberts when the latter had been C.in C. India. Before going to South Africa in 1899 to resume his role as Roberts' Military Secretary had been Adjutant General in India. His war experience included Afghanistan (1878-9), Egypt (1882), Burma (1886-7) and Tirah (1897-8).

2 Despatch 26 March 1900. Roberts Papers PRO WO 105 6.

3 Evidence of Lord Kitchener to the Elgin Commission PP Eng. 1904 XL 219.

that 'no organised transport corps existed'. This Buller agreed, and explained why this was so. 'During the last hundred years the British army has tried at least three Corps of Transport and has abandoned each of them in disgust.'[1]

This, however, was the type of organisation that was now adopted. Apart from first line and some technical transport all regimental transport was withdrawn, and companies of either 49 mule wagons (with one Scotch cart and one water cart) or 100 ox wagons were formed all under direct ASC control. Transport was to be issued to units as it was required but to remain under the control of its ASC company. The mule company was to carry baggage and two days' food and forage for an infantry brigade of four battalions or a cavalry brigade of three regiments. This last seldom applied as General (later Sir) John French managed to retain the regimental system for his cavalry division, and this proved just as well.[2] The trouble was that forces seldom needed just that number of wagons that a company or any convenient part of it could offer. The inevitable result was that companies were split up among different units and the officer nominally responsible for the transport might never see it again. Equally often a few wagons and animals were left over with nobody to look after them. The supposed

1 Buller Papers. PRO WO 132 26.

2 French, who made his reputation in the war and so laid the basis of his claim to command the BEF in 1914, disliked the change from the start. Four days after it was made he noted in his diary: '... Kitchener has made very drastic changes in Transport arrangements. Effect very bad.' Diary of General French Friday 19 January. A1081 Transvaal Archives Pretoria. It is, however, clear from the diary that he was a firm supporter of Buller and strongly resented his supersession. This may have coloured his view.

advantages were enumerated in a memorandum circulated by the Director of Transport in June 1900. Under the old system transport for the force of eight infantry divisions, four cavalry brigades, one mounted infantry division and corps troops, then in South Africa (outside Natal), would have needed 37 ASC companies with at least four more for the supply park. Only 33 such companies were available. With the new arrangement one and a half days' food and forage were carried on men and horses, and two days' with the mule companies which were replenished by the ox companies of the supply park calculated to carry seven days' food and forage. It continued

> It will thus be seen that a much larger supply of food and forage is carried under the new system than would be carried under the War Office system, and that the transport can be supervised by a much smaller Army Service Corps establishment than would have been necessary under existing regulations.[1]

This is a most misleading statement. Outside the supply park a total of three and one half days' supplies was carried. Under the old system the men, the regimental transport and the supply column each carried food for one day, giving supplies for a total of three days. The only difference in capacity was that the men had to carry an extra half ration, which they could have done under any system. Similarly, that the ox wagons of the supply park were calculated to carry seven days' food and forage was a question of numbers not of organisation. Everybody agreed that the establishment of the ASC was too low. This was true of all the departments of the army. The

1 Memorandum June 1900 by Sir William Nicholson. Roberts Papers PRO WO 105 40.

dead hand of the Stanhope memorandum lay over everything. No operations of the size involved in South Africa had been foreseen or prepared for. Indeed Nicholson himself, in a covering letter sent with a report on transport prepared in July 1900, wrote that unless the ASC was greatly augmented it could not staff the whole transport of the army.[1] What he omitted to say, not surprisingly, was that the new organisation made this shortage worse. When the regimental transport was withdrawn and formed into mule companies it instantly required ten ASC companies which had not been needed before, and lost the services of the experienced regimental officers who had been managing the transport previously. To enable the reorganisation to be made at all the transport companies had to be diluted. Each company was made into two by adding an equal number of officers and men to a company and then redividing it, sharing the experienced personnel between the two resulting companies. Later the dilution had to be repeated and some companies ended the war with very few experienced officers or men. Even by July 1900 120 new officers had been drafted to the new companies. Their quality varied. Some were good but regiments often seized the opportunity to rid themselves of incompetent officers.

Another unfortunate effect of the reorganisation was the loss of involvement in the maintenance of the transport. Before, regiments had had a direct interest in its efficiency and continuous contact between the supply columns and the units of the brigade helped. Under the new system, particularly at the start, mule companies were switched from unit

1 Covering letter with Report on Transport Services July 1900. PRO WO 108 75.

to unit, the drivers did not know the men they were to feed nor, very often, where they were likely to find them, and it might take hours for a wagon to find its unit. Also lost was the automatic flexibility of the older system. Detached forces had to have transport allotted to them instead of it concentrating with them.

While Roberts created in the field that division of responsibility, with one man responsible for a wagon and another for its load, that Buller had described as 'fatal', he centralised responsibility on the staff by creating Colonel (later Sir) Wodehouse Richardson[1] Director of Supplies and Transport. Previously he had been Director of Supplies while Bridge had been Director of Transport. This too was a mistake. It was pointed out that if the offficers commanding supplies and transport knew their jobs a coordinating officer was an unnecessary encumbrance while if they did not he was no remedy.[2] In addition experience quickly showed that the amount of work involved was quite beyond one man. Nicholson was appointed Director of Transport on 18 February 1900, after just one week of the new transport organisation. Richardson returned to supplies. This, Roberts was careful to make clear, was no reflection on Richardson's abilities, merely a recognition that no officer, however devoted and capable, could do both duties.[3] There is no need to take

1 Richardson (b.1854) was an ASC officer who had done staff duty in Egypt and England and had been on active service in Ashanti (1873-4), South Africa (1877-9), Egypt (1882) and Bechuanaland (1884-5). He was knighted for his services in the war.

2 Notes on the Working of the Line of Communications in Natal. December 1900. Colonel J.Wolfe Murray. PRO WO 108 75.

3 Roberts to Richardson 18 February 1900. Letters and Telegrams of Lord Roberts Vol I PRO WO 108 74.

this at other than its face value. It is true that Roberts, after his return, gained the reputation of a very kind hearted man by rather indiscriminate praise of his subordinates in his final despatches. But in the ten months he was in South Africa he sent home, for incompetence, five divisional generals, seven brigadiers and nine regimental and battalion commanders[1] or one senior officer every fourteen days. This does not include useless officers relegated to subordinate positions on the lines of communication or in remount depots where it was thought (often wrongly) they could do no harm. In the face of this it is clear that Roberts would not have hesitated to remove Richardson from charge of so vital a matter as supplies had he had the slightest doubt of his abilities. Later still Richardson returned to control of both supplies and transport on the lines of communication but the necessary division in the field army was maintained with a new Director of Supplies.

Despite all the objections the reorganisation went ahead and Clayton himself went to the Modder River to supervise. It was, to say the least, highly inconvenient to have to make such a change in the middle of a campaign and Bridge feared the worst.

> At this stage of the campaign, to attempt a radical and extensive reorganisation seems to be certain to be attended with a great deal of confusion, and is by no means without risk of seriously dislocating a system which up to this, from every report, has been working smoothly and well.[2]

In fact the bulk of the work was done within a week, though

1 Evidence of Lord Roberts to the Elgin Commission PP Eng.1904 XL q.10520. St Aldwyn Papers PC/PP/73.

2 Bridge op.cit.

it took the best part of a month to bring together all the transport required for the advance from the west, and this could probably have been done more quickly if there had been no reorganisation to worry about. But it was a creditable achievement and its very smoothness testifies to the high degree of organisation and coherence the ASC had attained. Of course, the form of organisation did not alter the great difficulties of distance and rough terrain and it is time to consider how these were met.

The transport on campaign.

It is difficult to compare, directly, the relative success of the two forms of organisation during the war because they were, for the most part, involved in very different circumstances. In the Cape Colony operations before the arrival of Lord Roberts were largely defensive and forces were operating near large forward bases on the railway. The one exception to this was the advance of Methuen's column to the relief of Kimberley. Even this did not exhibit the War Office system to its fullest extent. Methuen wanted to advance as fast as possible and sacrificed flexibility to that end. He took mule transport only with a supply column expanded to give him seven days' rations in all. He twice refused ox transport for a supply park lest they slowed him up.[1] Instead of a supply park he relied on the railway to replenish his columns as required. This was done but as a result he was tied to the line of railway much more than was necessary. It may be that this was one of the factors that led to the reorganisation, certainly the innovators frequently claimed that under the

1 Evidence of Colonel Clayton to the Elgin Commission PP Eng. 1904 XL q.2572.

old system forces were 'tied to the railway'.[1] If they saw the proof of this in Methuen's advance it was yet another unfortunate misapprehension. Up to 230 ox wagons ready spanned were his for the asking. Moreover, had he wished he could have made a flanking movement, with at least part of his force, with the mule transport he had with him. He did not wish. He had taken the enemy's measure and considered that the surest way was a frontal attack, besides there were other difficulties.

> So far as I can judge we are getting to the bottom of these Boers, it is a mere question of pluck. We are terribly handicapped and I quite understand this country being the grave of many soldiers' reputations ... People talk of making a detour or sending one Brigade round a flank, there is no use talking in that way with 8000 horsemen in front of you, a river, and a position not be be turned.[2]

Thus though Methuen acted as though he could not move from the railway failure of transport was not the cause, and because he had the railway at his back the job of the transport was not very difficult. It was handled successfully but it would have been scandalous had it not been.

The position in Natal where, under Buller, the War Office organisation was retained was in some ways similar. There too the advance was largely along the railway and was, anyway, so funereally slow that there was little danger of outrunning supplies. Also the distances were much shorter than those

1 e.g. Lord Roberts' Report on the Situation in South Africa 6 February 1900. Roberts Papers PRO WO 105 5; Nicholson's memorandum of June 1900. Ibid 105 40; Kitchener's evidence to the Elgin Commission PP Eng.1904 XL q.219.

2 Methuen to Buller 2 December 1899. Buller Papers PRO WO 132 15. The second sentence has now an almost painful irony.

Roberts had to deal with. Durban to Ladysmith is 190 miles and from there to the Transvaal border only another 120 miles, with a railway all the way. Cape Town, by comparison, is over 600 miles from the Modder River and over 1,000 miles from Pretoria. To add to which Roberts' route included a march of 170 miles with no railway at all.

There was an initial delay in Natal while transport was amassed. As with Roberts' decision to march from the west, the large force sent to Natal was a departure from the original plan, such as it was, and had not been prepared for. Natal was ox country and there was no difficulty in finding teams or wagons but mules were scarce and some trained spans and wagons were shipped from the Cape. Even then some of the second line regimental transport was ox and not mule drawn, which was unusual. The preparations lasted about three weeks. Buller sailed for Natal on November 22nd and cabled White on December 9th that he was only waiting for wagons and hoped to be ready by the 12th, which he was.[1] It is clear that by that time there was a fair amount of transport available at short notice. On December 7th White signalled that he needed, among other things, 130 bullock wagons with spans and 40 mule wagons as soon as communication with Ladysmith was open.[2] This was passed on to the GOC Communications at Pietermaritzburg who replied that he could supply the mule wagons at once and hoped to have the ox transport ready by the time Ladysmith

1 Buller to White 9 December 1899. Index to Cypher Telegrams Buller Papers PRO WO 132 7.

2 Captain Caiper to AAG 2nd Division 7 December 1899. Buller Papers PRO WO 132 13. Caiper was an RE officer who succeeded in establishing heliograph communication with Ladysmith.

was relieved. As this was expected, at the latest, in about ten days there was obviously little problem in procuring it. Nor initially did it have much to do. When the army finally moved up to Colenso, which was only about eight miles from the base at Frere, it was promptly obliged to move back again.

Buller's next lunge was equally ponderous. The operation that culminated in Spion Kop was less a flank march than a temporary shifting of base before another frontal attack. Virtually the entire force moved west to Springfield about fourteen miles off. The force included five infantry brigades, two mounted brigades, one cavalry regiment, six field batteries, a howitzer battery, ten naval guns, engineers, pontoon, balloon and medical men, corps and divisional troops, some 29,000 men in all. The ammunition column and batteries had to take 300 rounds for each fifteen pounder and twelve pounder naval gun and 218 rounds per howitzer. But the main problem was supplies, and since the orders for this move are extant we can see how the huge load was transported. Sixteen days' supplies for the force were to be moved into Springfield which meant 464,000 rations. To this must be added 64,000 rations for horses, 56,000 rations for mules and 55,000 pounds of hay to eke out the animal rations. The total load was over 1,600 tons. To carry them were 160 wagons of the various supply columns and 164 wagons of the supply park, which between them could carry eight days' supplies. The road, to use a grandiloquent term, had been turned into something approaching a morass in parts by heavy rains. Each wagon had to make two journeys. Presumably it was impracticable to make the move in three days with all the transport moving together, possibly because it would

just have blocked the roads. The whole column would have been considerably longer than the distance to be covered. Moreover the work of loading and offloading having to be done simultaneously in the same place for all the wagons, apart from exhausting everybody, might have taken far too long. So a farm about half way between Springfield and Frere (Pretorius Farm) was used as a staging post and four days were taken. A small force was stationed at Pretorius to guard supplies dumped there. It was rationed by regimental wagons drawing daily from Frere. On the first day the supply park moved to Pretorius, offloaded, and returned to Frere. On the second day it repeated this manoeuvre while the supply columns moved all the way to Springfield and offloaded there. The third day saw the columns return from Springfield to Pretorius, load up and go back to Springfield, while the supply park moved again from Frere, this time to remain at Pretorius fully loaded. On the final day the park moved on to Springfield, the supply columns moved back to Pretorius to pick up the remaining load and with the force there, who had once more filled up their regimental wagons from Frere, returned to Springfield.

Meanwhile the troops had been moving along roughly the same line, though a little to the north, and had seized the drifts across the Tugela. They had their regimental transport which was to carry tents, one blanket for every two men and one waterproof sheet each, fifty rounds SAA per man, three days' rations (less one day's meat), 750 pounds of wood (to last three days), three days' grain, officers' baggage and such regimental stores as might be necessary. The load was

not to exceed 3,000 pounds per wagon though that sounds more a pious hope than an order. When the troops reached their positions they were to draw on Springfield which would by then be filling up.[1]

All this was making very heavy weather of a short move but the country was difficult and there was little chance of foraging. Buller was not a man to risk his soldiers going hungry for the sake of a speedy advance, particularly when he was confident of his ability to batter a way through without taking such risks. Apart from this excursion his advance was backed by the railway and such time consuming manoeuvres were unnecessary. There were other difficulties to be met. After the relief of Ladysmith Buller was ordered to remain on the defensive. A shortage of water and grass and the incidence of lung sickness forced him to scatter his oxen. When he was ordered against the Biggarsberg it was four days before he could gather his animals and start.[2] Later, as with other columns a combination of sickness, overwork and insufficient feeding, partly due to poor grazing partly to lack of time for it, resulted in his oxen falling out in large numbers. On 7 September 1900 he cabled Roberts for 1,000 more. When Roberts replied that so large an order was difficult to meet Buller agreed that it was large but pointed out that he had marched 200 miles and captured only 40 oxen, so the demand was not excessive.[3] Similar problems were met all over South Africa at this time and applied as

1 Buller Papers PRO WO 132 9 & 18.

2 Buller to Roberts 3 May 1900. Roberts Papers PRO WO 105 13.

3 Telegrams between Buller and Roberts 7 and 8 September 1900. Ibid.

much to mules as oxen. Roberts was faced with similar demands from many commanders.

French, for instance, told Roberts on 21 September

> I must point out that our transport animals are now very weak and worn out and that whatever route we take ... there are very heavy difficulties over country to be overcome. I question indeed whether our transport animals could possibly undertake another march in any reasonable time.[1]

Similarly Methuen reported on 1 November that one of his commanders had lost 60 oxen in a day from lung sickness and that he needed many replacements. This was no sudden development, overwork and inadequate feeding had weakened most of the animals in the army (it had already killed a great many). Reports of this seriously affecting the transport began to appear about May 1900 and as the effect was cumulative on surviving animals they grew weaker and demands for replacements grew as time went on. In mid-July Methuen complained of incomplete spans of small and played out oxen.[2] At the end of July Broadwood, with a mounted brigade, reported that his transport was practically immobile. And so the reports continued, Smith Dorrien in August, Ian Hamilton and the officer commanding the Colonial Division in September.

Similar difficulties afflicted the main column under Roberts which also had special problems of its own. In the words of Sir Redvers Buller 'The debut of the new transport system was marked by the total loss of a convoy of 200 wagons, the whole of which fell into the hands of a small force of

1 French to Roberts 21 September 1900. Roberts Papers PRO WO 105 14.

2 Methuen to Roberts 12 July 1900. Ibid.

Boers at De Kiels Drift.'[1] This was true but rather unfair. Had the transport been organised under the War Office system many of the wagons, as part of the supply park, would still have been moving in the rear of the army and so have met exactly the same difficulties. However, others would have been less vulnerable as they would have formed part of supply columns of various units and would have travelled separately from the supply park. The mere concentration of wagons may have added to the problems. The ground round the drift was soft and not improved by the passage of the army. By the time the first 100 wagons had crossed the sand was axle deep.[2] There were with the force, apart from the supply park, 864 mule wagons, 350 carts and another 125 ox wagons with the artillery.[3] The oxen from the supply park were needed to help out many of the divisional wagons and when they had done so and pulled their own wagons over the same ground, by then barely passable, they were unable to go on. Accordingly they were left with a small escort and soon afterwards attacked by De Wet. The native drivers scattered and the oxen could not be inspanned. Two battalions and a battery were sent back but when still more troops were needed Roberts decided to abandon the convoy. Apart from the wagons nearly 3,000 oxen, 150,000 soldiers' rations and 30,000 forage rations were lost.

This was a shattering blow. Buller believed that orders for a withdrawal were actually written at this time but there

1 De Kiels Drift was about ten miles south and slightly east of Jacobsdal. The convoy actually consisted of 186 wagons. Buller Papers PRO WO 132 26.

2 Richardson op.cit. p.97.

3 Return of ox and mule transport on the march from the Modder River to Bloemfontein. Roberts Papers PRO WO 105 6.

is no evidence for this and nobody else mentions it. An immediate appeal went back to Methuen, who was at Kimberley, to send supplies after the army, the men were placed on half rations and the Cavalry Division, whose regimental transport was separate and intact, and who alone therefore had a supply column that could be detached and sent back to meet the on-coming wagons, briefly fed the whole army. Roberts had prepared 475 wagons to carry ten days' rations for his force and the balance of the wagons, which were to have replenished the convoy now lost, were sent after him. Methuen acted promptly. Refugees who had trekked south were turned into tents and their wagons seized and 'every available conveyance' was filled up and sent off.[1] Even ambulances were pressed into service and were less than adequately replaced by sending the wounded back in any empty wagons that were returning. Heavy rains had turned the roads into a fearful state and the journey from Kimberley to Paardeburg, which normally took about thirty hours, took four days. But these shifts sufficed, 100 wagons reached the army at Jacobsdal and 200 more at Paardeburg.

While the new organisation was not responsible for the loss, its weaknesses began to show under the stresses imposed thereby. The hundred wagon ox companies were based on the assumption that such companies could be kept more or less intact. 'A week's march was sufficient to show the weakness of that foundation.'[2] Convoys rapidly ceased to be identifiable with any particular company as the sudden demands meant that

1 Methuen to Chief of Staff 16 February 1900. Ibid 105 19.
2 Report on Transport Services July 1900. PRO WO 108 75.

groups of wagons were sent off as was most convenient. This caused great confusion in accounting as companies remained theoretically responsible for their wagons even when in practice they did not know where they were. As a result nobody was actually responsible for them. That they continued in reasonable condition was largely due to the fortuitous ability of a civilian contractor.

> The fair results obtained in maintaining the efficiency of wagons and oxen, in spite of the loss of many thousands of the latter, has been largely due to the energy and business capacity of Mr L.E.B.Homan who holds a share in Mr Weil's contract.[1]

This was fortunate but there were less happy consequences of hiring ox teams with wagon drivers and conductors. Though Weil was by far the largest contractor several were involved and the ox transport was basically a civilian one. Drivers of one contractor were not disposed to obey conductors of another and there was considerable resentment at the inevitable mixture of wagons. The only rivalry between them was over who could do the least work. So long as a minimum standard was reached there was no incentive to do particularly well and employees of one firm were visibly reluctant to help other firms in an emergency.

Though mule companies were purely military they suffered the same problems of continuous mixing. The impracticability of the new system with its rigid company organisation became apparent. It was maintained for the advance on Pretoria but there was a continuous trend back to the old system as unit

1 Ibid.

commanders virtually annexed wagons for their own use. Nicholson's June memorandum began with the sentence: 'There has been no reversion to the Regimental system of transport'[1] which may reasonably be interpreted as meaning that there had been such a reversion and that it had got to stop. In fact the force had grown to an extent that made such a centralised organisation impracticable.

Some 80,000 men moved north from Bloemfontein including seven infantry divisions. To pull the transport for the force went 25,000 mules and 38,000 oxen which even allowing for spares must have meant over 2,000 wagons of each sort. Ox casualties were heavy on the march, a combination of overwork and cold nights killed or rendered otherwise unfit 13,483 or around 33 per cent. To replace them contractors had provided 6,000 by the end of July and another 5,000 were urgently wanted as the transport was deteriorating rapidly.[2] The problem of the cold had been foreseen by Roberts. Early in March he had cabled for 12,000 ox blankets from India for use in the coming winter.[3] It is not clear wither these were sent but probably they were as Roberts did not return to the subject. Even so 12,000 of which only 8,000 went to Cape Town, the rest to Durban, were too few. These casualties naturally meant that companies had to be even further mixed together to form suitable convoys.

Nor was the company organisation for mules any more successful. Before leaving Bloemfontein Nicholson organised four

1 Memorandum by Sir William Nicholson June 1900. Roberts Papers PRO WO 105 40.

2 Memorandum by Sir William Nicholson 27 July 1900. Ibid 105 29.

3 Roberts to Secretary of State 4 March 1900 PRO WO 108 66 no.3645.

such companies to be marched to Kroonstad when ready. Two of them were instantly seized by Kitchener and distributed among various details to meet pressing needs. Of the 96 wagons Nicholson finally received eight. The two remaining companies reached Kroonstad intact but one was promptly denuded of mules to send remounts to Pretoria and the bulk of the other was diverted to a brigade at Rhenoster.

The difficulties of getting adequate replacements for casualties was as marked with mules as with oxen. Nicholson had estimated mule casualties for the march on Pretoria at ten per cent which, as he claimed, was a very moderate estimate. Thus he should have had 2,500 extra mules sent up. He had had 400 marched to Kroonstad but once more Kitchener intervened and distributed them. Only 680 mules reached Nicholson at Pretoria by the end of July and 500 of those came from one of his precious companies at Kroonstad which was thus completely immobilised. His case for more was unanswerable.

> All I ask is that reasonable facilities be granted me to bring up the remount mules which I consider to be necessary to maintain the mule transport in an efficient state. If these facilities are not granted the transport will become, as indeed it is becoming, inadequate and inefficient.[1]

The trouble was that the capacity of the railway was severely limited and every department could make as good a case. Food, ammunition and clothing was equally badly needed and making the force safe where it was obviously took precedence over preparing for a further advance. In fact it was weeks before the army was fit to resume and move eastwards.

1 Nicholson op.cit.

Nicholson's troubles also illustrate, again, Kitchener's penchant for organisation wrecking, regardless of the organisation. This had manifested itself quite early after the reorganisation and at Bloemfontein Roberts had sent him a mild reproof asking him not to alter transport arrangements except through Nicholson who would endeavour to meet his demands.[1] It seems to have had no effect. One disadvantage of the new system was its greater proneness to this sort of difficulty. The exact relations between Kitchener, Nicholson, Richardson, Clayton and Bridge were far from clear.

This may have been responsible for a confusing exchange of telegrams with the War Office. On 4 April 1900 the GOC Cape was asked whether he wanted any more mule wagons. He replied that he calculated that 455 were still due and that 230 more were needed. On 26 April he cabled London that 400 additional buck wagons should be sent out as soon as possible.[2] This was considered by the Army Board. The DAC reported that the trade was full of orders from the DGO for ambulances, ammunition carts and similar vehicles, but that if these could be suspended the wagons could be produced at about 80 to 100 a week. The DGO pointed out that the ambulances were urgently needed though the others could safely be postponed, and he, the QMG and the DAC got together to try and satisfy everybody as best they could.[3] Then on June 13th the War Office was told to ship no more wagons. Rather bewildered they cabled

1 Roberts to Kitchener 14 April 1900. Roberts Papers PRO WO 105 35.

2 Secretary of State to GOC Cape 4 April 1900, and GOC Cape to Secretary of State 10 and 26 April 1900 PRO WO 108 67 nos.4530, 4678 & 5074.

3 Proceedings of the Army Board 27 April 1900 para.880. PRO WO 108 79.

the GOC Cape to ask whether his order for 400 wagons was to be completed or not. He replied that not only were they not wanted but that none from the previous order, not actually at sea, should be shipped.[1] At that stage 488 wagons of the 630 ordered were still due from contractors or were awaiting shipment. The DAC reported that the orders could not be cancelled.[2] The cancellation of the order in South Africa evidently emanated from Nicholson (nearly all such telegrams went out under the name of the GOC Cape) but there is no evidence who is responsible for the others. It may have been Nicholson but it may very well have been Bridge or Richardson working on their own. The cancellation was not quite the end of the story, as it was suddenly discovered that the wagons were wanted after all. Whether in the hope of getting them more quickly or embarrassment at the prospect of cabling again to London, Nicholson turned to Colonel Clarke of the Ordnance Department in South Africa who had already bought and equipped large numbers of second hand vehicles. He later cited it as one of the examples to show that he was a sorely tried man. 'I think, to show the situation, 400 wagons due from England had been cancelled by ... Sir William Nicholson, and I had to replace and add to it suddenly.'[3]

Transport During the Guerrilla War.

After June 1900 the assumption that the war was almost

1 GOC Cape to Secretary of State 13 June 1900, Secretary of State to GOC Cape 18 June 1900 and GOC Cape to Secretary of State 22 June 1900 PRO WO 108 67 nos.6155, 6226 & 6355.

2 Proceedings of the Army Board 29 June 1900 para.944 PRO WO 108 79.

3 Evidence to the Committee of Inquiry on the Ordnance Department 1901 PRO WO 33 218.

over led, as in other departments, to a temporary cessation of purchase. It quickly started again when De Wet invaded Cape Colony. On 1 December 1900 the GOC Cape cabled that, if any of the wagons that had earlier been cancelled had been made, he would find 200 of them useful. Three days later he asked for 200 more.[1] There was no difficulty about sending those but two months later a further 400 were urgently demanded, some to be shipped by every vessel that sailed. Of theoriginal order only 88 were left and it was decided that those should be shipped but that the others should be the standard English GS Mark VIII wagons.[2] Fifty were sent immediately to be fitted up in South Africa and others were altered in England as quickly as possible. Like the English wagons at the start of the campaign they had of course to be converted.[3]

Presumably to guard against other such unforeseen demands Brackenbury seems to have placed orders for 400 buck wagons (i.e. based on the South African pattern) on his own initiative. Unfortunately no further demands were sent for the next six months and he found himself with 400 wagons he did not want and had nowhere to put. As a result a rather plaintive telegram was sent to Kitchener in July explaining this predicament and asking him to order from England before buying locally. Some could be sent at once, if wanted, it ended hopefully.[4]

1 GOC Cape to Secretary of State 1 and 4 December 1900 PRO WO 108 69 nos.9561 & 10098.

2 Proceedings of the Army Board 29 January 1901 para.1040 PRO WO 108 79.

3 Secretary of State to GOC Cape 27 February 1901 PRO WO 108 70 no.11062.

4 Secretary of State to Lord Kitchener 8 July 1901 PRO WO 108 71 no.13258.

Kitchener obliged as best he could, ordering 100 on July 22nd, 100 on August 23rd and the remainder seven weeks later. He did not evince any great enthusiasm. They were to be sent 'as opportunity offers' and 'when convenient'. The experience evidently led to a more cautious approach and in November Kitchener was told that no buck wagons were left and asked if he was likely to want more, as if so orders ought to be placed quickly.[1] No more were ordered.

Kitchener had no problem securing sufficient oxen and wagons. Apart from any that could be bought, his policy of clearing the country brought in huge numbers. From the time he took command (November 29th 1900) to 16th February 1901 he took, among other things, 3,530 trek oxen and over 1,000 assorted wagons and carts.[2] From then until October 1901 it was rarely that he took less than 100 wagons in a week, and there were usually many more. In one week in August he took 754.[3] Cattle were captured in tens of thousands.

Kitchener, of course, was fighting a very different kind of war from Roberts, and the transport arrangements differed accordingly. He had about 70,000 men in mobile columns of various size all over South Africa, with the rest of his huge force guarding the lines of communication. Ox transport was withdrawn from the columns and limited to communication and blockhouse work. The columns' mule transport was expanded to carry seven days' supplies.[4] Though the transport company

1 Ibid. 14 November 1901 PRO WO 108 72 no.15245.

2 Kitchener to Secretary of State 24 February 1901 PRO WO 108 70 no.11004.

3 Ibid. 12 August 1901 PRO WO 108 71 no.13803.

4 Evidence of Lord Kitchener to the Elgin Commission PP Eng. 1904 XL q.219

organisation was theoretically maintained (on 1 August 1901 50 mule and 29 ox companies were operating) the mule companies cannot have been preserved intact, and in practice mule transport approximated to the older system of regimental transport with supply columns. The need for a supply park was gone with small forces operating between British held railways, and garrisons and supply depots scattered all over the country.

To this extent the transport problem was rather easier for Kitchener and, moreover, much experience had been gained by all ranks. To judge by the lack of Army Orders on the subject, under Kitchener, some of it must have been profitable. Roberts had issued and repeated a number of orders on the handling of transport. Mules were not to be driven at more than four miles an hour (9 February), GOsC were to be held responsible for preventing the overloading of their wagons (13 February) and ox transport was not to travel between 8 a.m. and 5 p.m. without express orders from the Chief of Staff (14 February). On February 27 the order on the pace of mules was repeated with orders that Provost Marshals were to arrest offenders. On 1 March an order was issued banning the whipping and ill-usage of animals. On 5 April another order condemned overloading and demanded strict adherence to the scales of personal baggage.[1] On 20 June and 7 July small cash prizes were offered for the best care of mules. On 15 October a fulmination against reckless driving was issued which, judging by the comments of an officer who experienced it, was timely. 'It should be understood that he is not the best transport officer who by moving and elbowing and crossing

1 Army Orders. Roberts Papers PRO WO 105 40.

other columns brings his charge in first.'[1]

These orders were only partially successful. Though some of these faults disappeared overloading remained widespread, and was frequently (the very frequency suggests unavailingly) criticised. The Assistant Inspector General of the Midland Line of communication wrote: 'I would like to draw attention to the excessive amount of baggage which British troops and officers will carry about with them if permitted to do so, and much of which is quite out of place in a campaign.'[2] Much of it was so out of place as to seem ludicrous. A transport officer at Mafeking complained that transport belonging to General Carrington's force was carrying office and rocking chairs on top of everything else.[3] Rocking chairs were by no means the most bizarre items. In an Army Order of 29 July 1901 Kitchener cited furniture, cooking ranges, pianos and harmoniums as examples of unauthorised baggage.[4] As this was later ordered to be read to the troops fortnightly it too presumably failed to have much effect. Much the same demand, that the scales of authorised baggage be adhered to, was made in a circular telegram of November 1901. Reports from all commanding officers, on what measures they had taken to lighten their wagons, were ordered to be sent in by 1 December.[5]

1 Notes by Colonel Grierson on Return from South Africa PRO WO 108 29.

2 Lines of Communication Cape Colony. Working of the Midland Section during the South African War 1899-1900. Major Fairholme 16 June 1900 PRO WO 33 171.

3 Captain Carter to CSO Rhodesian Field Force 14 August 1900. Roberts Papers PRO WO 105 25.

4 Quoted in A Veterinary History of the War in South Africa 1899-1902: Major-General F.Smith: London 1919.

5 Circular Telegram. Telegrams of Lord Kitchener. PRO WO 108 7.

Overloading must have contributed considerably to the loss of transport animals which averaged 53 mules and 200 oxen for every day of the war, and overwork was a major cause. Lung sickness and redwater were present throughout the war and weakened the animals it did not kill. Other things contributed. There was a weekly loss of oxen being struck by lightning throughout the wet season. Sir Neville Lyttleton recalled 'once I saw a whole span of sixteen oxen lying dead, killed by a flash which ran along the trek chain.'[1] Much more serious was an outbreak of rinderpest in 1901. This could have been disastrous, in August 1901 95,000 oxen were in service. It rapidly spread throughout the theatre of war, though mass inoculations were started as quickly as possible. In October Kitchener told Brodrick that he was inoculating everywhere and did not expect to lose many oxen.[2] But he had already lost heavily. The serum took three months to prepare and in July, August, September and October cattle deaths from all causes were10,700, 16,200, 16,300 and 14,500 respectively. The figure for April 1901 before the epidemic had started was 1,800 out of 76,400.[3]

One minor aspect of the use of transport has not yet been mentioned, the employment of traction engines. Basically there were two views on their usefulness, one held by the enthusiastic Director of Steam Road Transport, Colonel Templar, and one by everybody else, at least in the early stages. Twenty engines

1 Gen. Sir Neville Lyttleton: Eighty Years: Hodder and Stoughton London 1927 p.233.

2 Kitchener to Brodrick 11 October 1901. Kitchener Papers PRO 30 57/22.

3 Smith op.cit.

were sent out in October 1899, each with three trucks. Twenty-two more were on board the 'Denton Grange' when, on 12 December, it ran aground in the Canary Islands, to the dismay of Colonel Templar who was also on board. It was the first of many mishaps. Fifteen of the original engines were sent round to Buller in Natal although the officer commanding there two months previously had cabled 'Have consulted with best of local authorities and they condemn traction engines quite useless both Natal and Transvaal Republic ... roads not suitable, drifts and bridges impassable, fuel and water difficulties insurmountable.'[1] Thirteen of the engines (two had been sent earlier) arrived in Durban on Boxing Day 1899 and blocked the wharves for two days before they could be sent up the line to Frere[2] where, apart from moving a naval gun stuck in a drift, they do not seem to have done anything worthy of note.

Methuen also tried them and was quickly disenchanted.

> The Steam Sappers, I had three of them, are sixteen miles from here (Boshof, about 34 miles north of Kimberley) in the veld full of forage and food but minus oil or coal; they are protected by a half company. The road is the flattest, hardest, best watered I have marched in this country, so I have given these engines a fair test and foolishly placed some faith in them.[3]

Forestier-Walker was also lukewarm. He admitted that they had done some good work, but thought them most unreliable. They

1 GOC Cape to Secretary of State 16 October 1899. PRO WO 108 66.

2 Rwys (Port officer) to Buller 26 December 1899, GOC Pietermaritzburg to Buller 27 December 1899. Index to Code Telegrams Buller Papers PRO WO 132 8.

3 Methuen's Despatch 13 March 1900. Roberts Papers PRO WO 105 6.

could not travel in wet weather and were useless with mobile troops or the supply park. Moreover they were too heavy and cumbersome and soon destroyed the best of roads.[1]

Colonel Bridge was more outspoken.

> If the total expense in connection with their sea and rail transport, their upkeep and repair, the pay of the supervising staff and employees, civil and military, the compensation paid for damages to bridges, roadways, property etc. were brought under one head, the enormous cost of this mode of transport in South Africa would be apparent.[2]

Bridge was not exaggerating the amount of damage they caused. In his diary for April 25th 1900 Richardson recorded that in that month alone, engines in Cape Town had broken down a bridge, burst the water main and cut off the supply to a township, had two collisions with trams injuring several people and had twice demolished street lamps, on the second occasion plunging most of Cape Town into darkness.[3]

With reports like these coming in Roberts lost whatever enthusiasm he had possessed for these machines and refused an offer of more made by Lansdowne. He seems to have had some hopes of them earlier for in January he had ordered six armoured traction trains. What he hoped these premature panzers would be able to do is not clear. Two only were sent out. When the next two were ready, in June, Roberts was tactfully asked if he still wanted them and he quickly replied he

1 Answers to Questions from Various Branches of the Quartermaster General's Department by Officers Employed in South Africa. 1901 PRO WO 108 76.

2 Ibid.

3 Richardson op.cit. p.109.

did not.[1]

None of this, however, disconcerted Colonel Templar. He could not have too many traction engines and, though frequently forbidden to do so, cabled London direct for another twelve, in May 1900. This was in such marked contrast to the general lack of enthusiasm that it was queried, and the GOC Cape replied that none were required and that further orders for engines from Templar were to be disregarded.[2] If not engines then more trucks for existing engines, and the unabashed Templar cabled for 54. By this time the War Office was so sceptical that this too was queried. The GOC replied that no trucks were wanted and that if anything connected with traction engines were wanted he would cable for it himself.[3] Next Templar tried a letter but after an abrupt telegram from the Inspector General of Fortifications informing him that his instructions were not to send out any engines unless specially asked for by Lord Roberts, the correspondence seems to have ceased.

With all these difficulties, however, it could not be denied that such engines had a very great power and they did perform some useful services in the ports and in standing camps near the railway. Their complete dependence on coal and water severely limited their use in South Africa where neither was plentiful, but once their limitations were fully recognised, and they were used within them, they were quite

1 Secretary of State to Roberts 23 June 1900 and Roberts to Secretary of State 24 June 1900. PRO WO 108 68 nos.7054 & 7115.

2 GOC Cape to Secretary of State 3 June 1900. PRO WO 108 67 no.5965.

3 Ibid 21 June 1900 no.6327.

valuable. Few officers had any experience with them, at first, and this doubtless contributed to their unhappy start. Initially drivers were hired locally and judging by the results must often have been totally unqualified and incompetent. Later on, qualified drivers were sent out from England and this much improved the engines' performance. By the end of the war Kitchener had 45 steam road trains operating and while realising their limitations seemed quite satisfied with them.[1]

Thus for the transport service the war was as much against natural forces as those of the enemy. Great distances, difficult terrain, unhelpful climatic conditions and disease were met and, on the whole, despite mismanagement which added greatly to animal casualites, mostly by overloading, successfully dealt with. The reorganisation added to the difficulties both because the new system was inferior to the old and because such a fundamental change was made at all. Great unnecessary strain was caused thereby. Buller was right when, after the was, he said it was vital to settle the question.

> If the Regimental transport system or War Office system be so wrong and unworkable that it has to be upset at the most critical moment of a campaign then the work of mobilisation that has been carried on in the British Army for many years, <u>and is still being carried on</u>, is obviously wrong and vicious.[2]

He did not live to see it but when the British Army went to war in 1914 the transport service and the ASC were little changed from his original creation.

1 Evidence of Lord Kitchener to the Elgin Commission PP Eng. 1904 XL q.219.

2 Buller Papers PRO WO 132 26.

The Sources of Ordnance Stores

Transport services are, of course, only half the story of maintaining an efficient force in the field. Their role, apart from the movement of troops, is to provide the means for an efficient supply and distribution of the items needed to satisfy the material needs of an army. The supplying departments themselves must now be considered. The supply of all types of stores and equipment was the responsibility of the ordnance department.

Like the War Office as a whole the ordnance department faced the war with a new organisation. In 1899 the Inspector General of Ordnance was replaced as head of department by a Director General of Ordnance (DGO) with increased responsibilities. An Order in Council of March 7th 1899 concentrated in his department responsibility for warlike stores, equipment and clothing including patterns, inventions and designs, control of ordnance factories, the duty of procuring from the trade what the factories were unable to supply, and the inspection of goods from either source before they were passed into service.

The Ordnance Factories.

The main change from previous practice in this order was the inclusion of control of the ordnance factories. Since 1888 the factories had been under the control of the Financial Secretary to the War Office, working through a civilian Director General of Ordnance Factories (DGOF). The Inspector General of Ordnance had no direct voice in the factories

despite his overall responsibility for the supply of the Army with warlike stores and his direct charge of patterns and designs. In such a situation friction between soldiers and civilians was inevitable and there had been, as Lansdowne said in the House of Lords, 'a feeling on the part of the services that their requirements were not always sufficiently understood or attended to with sufficient promptitude.'[1] The retirement of the DGOF and the transfer of the Inspector General of Ordnance in November 1898 made it a convenient moment for the change and Sir Henry Brackenbury, the incoming Inspector General, made control of the factories a condition of his acceptance of the post.

Despite this the change was not made without opposition, which had finally to be overcome in the Cabinet, an outcome which displeased Salisbury who thought ministers should be left to run their own departments. The Financial Secretary, J.Powell-Williams, wrote, for the Defence Committee of the Cabinet, a seven page memorandum against the change which did little more than set out the then organisation and add that if there was a lack of contact between the services and the factories, it was not the fault of the factories.[2] Despite Lansdowne's protestations to the contrary, Powell-Williams may have felt that the removal of the factories from his control was a criticism of his abilities. If so he was right. He was not highly thought of, Brackenbury was later to clash with him over inspection and official dealings with private firms, and Balfour passed him over for promotion in 1898 telling Lansdowne, 'he would never have got even his

1 17 February 1899. Hansard LXVI col.1254.

2 Cabinet Papers PRO Cab 37/48 no.95.

present place except as the immediate personal friend and follower of Joe.'[1] He left the War Office on Brodrick's request when the latter became Secretary of State for War in October 1900 and was not re-employed. There is no doubt that there were good administrative reasons for the change but they were augmented by this personal factor.

As the reasons for the change gained strength, so too did the difficulties of making it, for Chamberlain moved to protect his protege. He thought Lansdowne's plan 'most mischievous', or so he said, and finally gave way with an ill grace saying that though Powell-Williams acquiesced he was not convinced, and complaining that Lansdowne was 'Brackenbury-ridden'.[2]

Brodrick, too, opposed the change, and spoke with some authority since he had been Financial Secretary in 1888 when Stanhope had introduced the system it was now proposed to alter, and also Under Secretary at the War Office from 1895 to 1898. Moreover in his new position as Under Secretary of State for Foreign Affairs and thus Salisbury's deputy he was well placed to have his views heard. He submitted a strong memorandum to Salisbury which went before the Cabinet. He compared the Ordnance before and after Stanhope's reform and showed how great the improvement was. Before, each factory had been, apart from the general supervision of the Director of Artillery, independent. Its head (a soldier) was free from any external financial control and, moreover, inspected both his own products and those of his rivals in the trade.

1 i.e. Chamberlain. Balfour to Lansdowne 10 October 1898. Balfour Papers BM Add.Mss.49720.

2 Chamberlain to Balfour 2 February 1899. Ibid 49773.

There were frequent complaints from contractors that their goods were unfairly rejected, and inferior ones passed by the men who made them. Under this system, said Brodrick, the Director of Artillery 'was overworked. His estimates were always wrong: his supplies always in arrear.' Most importantly the end product was often of poor quality, scandals were frequent and personal responsibility impossible to fix. But in the ten years since the change the Government 'had been free from scandal - defective stores and Parliamentary troubles.'[1]

The case against reverting to the old system, thus cogently set out, was compelling, but Brodrick was under a misapprehension. Lansdowne had no intention of reverting to the old system. Three principles underlay the 1888 change: firstly that there should be a more intimate union between departments, secondly that there should be greater permanence in the senior staffs of factories and that more of them should be civilians, and thirdly that those responsible for inspection should be quite separate from the manufacturers of stores. These principles had been laid down by the Committee On The Organisation of Army Manufacturing Departments of1887, headed by Lord Morley. They had been accepted by Stanhope and put into effect, though that of greater union between departments could have been carried further. But Lord Morley's scheme also included military control of the manufacturing departments through the Director of Artillery and Stores and a military Superintendent of Ordnance Factories. This idea of military control, also recommended by two Royal Commissions

1 Brodrick to Salisbury 18 January 1899. Ibid 49720.

of 1887[1] and subsequently endorsed by the Hartington Commission of 1890, had not been adopted and Lansdowne was now proposing that it should be.[2]

However, Brodrick's opposition was powerful. Chamberlain was against the change for the reasons explained, and Hicks Beach, the Chancellor of the Exchequer, had been enlisted by Brodrick on the grounds that the new system would weaken financial control over the factories. George Goschen, First Lord of the Admiralty, supported the proposed change; the Navy also used the ordnance factories and had experienced much the same difficulties as the Army in dealing with their managers. Thus what might have been a straightforward change between departments within a single office had become a Cabinet matter with some of the most powerful figures completely opposed to it.

The matter was referred to a Cabinet committee, consisting of the Duke of Devonshire, Beach, Lansdowne and Goschen, which Lansdowne converted to his view. Thus fortified he returned to the Cabinet and circulated a lengthy memorandum setting out the reasons for the change, the arguments raised against it, and how he thought they could be met. The most important of these arguments were, first that the proposed reorganisation was fundamentally unsound by making the same officer responsible for both inspection and manufacture, and second that

1 Royal Commission on Warlike Stores presided over by Sir John Stephen (PP Eng.1887 XV) and Royal Commission on Civil Establishments of the Different Offices of State presided over by Sir M.White Ridley (PP Eng.1887 XIX).

2 This should not be confused with the second of Morley's recommendations. Before 1888 each factory had at its head a soldier who for five years managed (or mismanaged) their factories and were then posted elsewhere. These officials were replaced by civilians.

there would be no proper financial control over departments which annually spent millions.

To the first Lansdowne replied that the manufacturing and inspection sections would be separate, and although ultimately under the same officer, there was no reason why he should support factories against his inspectors rather than the other way round. His reputation would depend on the issue of serviceable stores to the forces. The argument would apply with equal force to the Secretary of State being responsible for both. Besides which the system did not easily lend itself to abuse. The inspectors had to report on a printed form whether the specifications had been met and if a dispute arose it was decided by the Ordnance Committee on which sat civilian as well as service members. Sir Andrew Noble of Armstrong had been consulted and said he had no fear of unfair discrimination. In the event, though there were to be many complaints of the severity of inspection none alleged a double standard.

The second of these objections Lansdowne met simply by reserving financial control to the Financial Secretary. This sufficed to overcome opposition in the Cabinet but proved to be unworkable under pressure. In ordering anything new (and it was largely to make this quicker and easier that the change in control of the factories was made), the DGO had first to cost the individual items required, literally to the last farthing, obtain the approval of the Army Board and the Permanent Under Secretary, and then submit the matter to the Financial Secretary and the Secretary of State. This was not unduly cumbersome by War Office standards. In the second half

of September 1899, however, when all thoughts of avoiding war were over, the requisitions from South Africa came at a rate that made this procedure impossible. Once the war began, of course, it was to get worse. Brackenbury protested,[1] and the Army Board agreed, that quite unnecessary delays were thus caused and the Secretary of State conceded that provided the head of a military department could convince the Army Board that a particular demand was urgent detailed calculations need not be submitted until after the orders were given. Lansdowne added, in a letter that Brackenbury read to the Army Board on 29 September 1899:

> In cases of extreme urgency it must be for the head of the department concerned to decide whether he will, on his own responsibility, give the necessary orders without waiting for a meeting of the Army Board, in such a case he must, of course, report his action to the Army Board at its next meeting.[2]

Brackenbury took the view that everything to do with South Africa was of extreme urgency and thereafter merely reported at each meeting of the Board how much he had spent the previous week. This interpretation went rather farther than Lansdowne had at first intended but after the war started he gave verbally the carte blanche that Brackenbury had already usurped.

However, the promised financial control together with Lansdowne's other guarantees and explanations, persuaded the Cabinet to accept the change. Henceforth the Inspector General

1 He instanced one day when 138 separate items had to be costed involving reference to Woolwich, Pimlico and Weedon.

2 Proceedings of the Army Board 29 September 1899. PRO WO 79 para.273.

of Ordnance became the Director General of Ordnance, and the /General Director/of Ordnance Factories was renamed, to avoid confusion, the Chief Superintendent of Ordnance Factories (CSOF). Brackenbury later told the Royal Commission on the War in South Africa (the Elgin Commission) that without this control the supply of ordnance would have been impossible. His daily contact with, and authority over, the factory superintendents enabled him to ensure that the factories dealt with the needs of the moment. The Royal Army Clothing Department was similarly brought under his direct control for the first time. Until 1898 it had been a completely separate department headed by a civilian Director of Clothing, a civil servant answerable to the Financial Secretary. Towards the end of 1898 it was brought into line with the other ordnance factories and put under the DGOF, the post of Director of Clothing being abolished. Inspection of clothing was entrusted to the Inspector General of Ordnance. Now the whole department came directly under the control of the DGO.

Thus the Ordnance Department faced the unprecedented demands of the war with a new and untried organisation. It was natural that this should be a cause of concern but it does not really explain the Cabinet battles. The government was far from convinced of the inevitability of war at the end of 1898, and anyway nobody dreamed of the scale of the conflict that was to develop. The whole episode demonstrated rather the difficulties besetting the War Office than an encouraging interest in it. It had been so often assumed that the War

Office was unable to manage its own affairs that there was a tendency not even to let it try. There was a presumption against anything emanating from the War Office, particularly if it came from the military advisers. It is hard to imagine any other department wishing to make an internal change not contested by any other department involved,[1] and not requiring any increase in expenditure or any legislation, having to fight it out in the Cabinet, or even having to raise the matter there. It cannot have helped either Lansdowne or the military advisers to be so blatantly distrusted. It also helps to explain the difficulties encountered in other matters which did involve expenditure. Wolseley had written the year before:

> The truth is that a certain class of civilians cannot rid themselves of the suspicion that soldiers are consumed by a bloodthirsty and inordinate ambition ... Nor will they admit that he (a soldier) can possess a due sense of economy, although none knows better than an educated soldier the part played in war by sound and thrifty administration.[2]

At the start of his tenure of office, Brackenbury thus had a graphic illustration of this attitude, which he was to continue to meet even at the height of the war.

The factories that all this labour finally put under Brackenbury's control were six in number, and employed between

1 In this case the Admiralty supported the change and no one else was affected.

2 Introduction to Stonewall Jackson by G.F.R.Henderson. Longmans 1961 p.xv.

them some 20,000 men.[1] Of these, three factories and 14,000 men were at Woolwich where the Royal Laboratory (for making explosives, shells and so on), the Royal Gun Factory and the Royal Carriage Factory existed side by side but with each being virtually self contained. A proposal to amalgamate them was put forward by Powell-Williams in 1899 but was opposed by Brackenbury and Colonel Bainbridge, the new military Chief Superintendent of Ordnance Factories. Lansdowne having fought to give the soldiers the control they wanted now backed his judgement by backing theirs and, in March 1899, decided in their favour. There had already been some amalgamation from ten years before, when the factories were first put under one head. For instance the internal railway, some 43 miles of track with forty locomotives had been placed under one man, with a detachment of Royal Engineers for traffic control. A dramatic increase in efficiency and saving of money had resulted. Before the amalgamation six departments had had their own engines and rolling stock, of various patterns, and run them quite independently. Special trains were laid on to take officers round the Arsenal, with little or no notice, and the unsurprising result was chaos.[2] This had been replaced by a regular half hour service round the Arsenal and special trains slotted in when needed to take large numbers of workmen. This was a great improvement but there were few such matters that the factories, despite their proximity, had in common.

1 One of the arguments employed against the change had been that soldiers were unable to handle civilian workmen, and that there might be mass sackings with political repercussions. To deal with this spectre Lansdowne ordered that no large scale dismissals should take place without his authority. In fact the fears proved groundless.

2 Memorandum (undated) by Sir William Anderson, retiring DGOF. PRO WO 33 203.

Fuel (84,000 tons of coal a year in peacetime) was one, and some of the workmen were interchangeable, though many were not; but most of the raw materials and components used were different for the different factories. Even so all their materials were ordered through, and held by, a central store depot so that possible duplication and waste were largely avoided.

So much could not be said of the system of correspondence and record, and the decision not to centralise the administrative offices of the factories led to vast and unnecessary clerical labour. This was increased by the War Office practice of requiring answers to be written on the same paper as the question and the whole returned. Since the paper could not be retained for reference, and the War Office registry was not sufficiently accessible or fast working, the Chief Superintendent's office had to copy the whole thing out by hand. Similarly the central office at Woolwich was not thought sufficiently accessible by the factory superintendents and they too had to make a copy. Thus if a query on some item of manufacture came from the War Office it would be registered in the central office and forwarded to the relevant factory superintendent with a question paper on which the reply would be entered for the information of the Chief Superintendent. These would be registered in the superintendent's office and forwarded to one of the managers with a blue paper on which the manager was to answer for the information of the superintendent. Nor did the paper gathering propensities of the original question necessarily end there. Often the War Office paper was forwarded to a principal foreman with a yellow paper

on which to answer for the information of the manager. Usually the principal foreman could answer or get the information verbally from a foreman, but sometimes distance forced him to write. There was no official form for this purpose.

Once an answer was obtained the process was reversed, and the question (with answer) reascended the hierarchy shedding its multi-coloured load on the way. The principal foreman copied anything he thought he might want for reference, wrote his answer on the yellow paper and sent it to the manager, who kept it as a record. He embodied the answer on the blue paper which was kept by the superintendent as a record. The superintendent then wrote on the Question Paper, copied it and the War Office paper in full and then sent them into the central office. There the answer was written on the War Office paper and the whole copied before being despatched.

After the war what would now be called a management consultant was asked to report on this process. After reviewing the whole sequence he wrote

> Whatever advantages this system may have from the point of view of completeness of record, it is clear that it possesses defects incidental to official systems of correspondence in an unusually marked degree, and that it cannot be conducive to the rapid transaction of business.[1]

From this conlusion it would be hard to dissent.

Outside the Arsenal were the three remaining factories, a gunpowder factory at Waltham Abbey and two small-arms factories, one at Enfield and one at Sparkbrook, in Birmingham. None of the six factories was less than ten years old at the

1 Report of the Committee on the Organisation and Accounts of the Ordnance Factories. 1902. PRO WO 33 240.

outbreak of war. Almost all the plant was obsolete and much of it already well used. There was no spare capacity to meet the sudden expansion of demand that might be expected in war, except the working of overtime. Even this was made more difficult by the shortage of buildings. The existing ones just sufficed for the factories' customary output, but any significant increase quickly produced a lack of storage both for products and for materials.

Commercial Sources of Ordnance Stores.

Thus organised for peace the factories were totally inadequate to meet demands for war. This was not oversight but policy, for even in peacetime the ordnance factories were only half the story.[1] Their function was seen as providing a model for the trade to work from, to check on how much items cost to manufacture, to make those items that the trade were unable or unwilling to produce, and to give a certain flexibility in providing for the needs of the moment. Unused industrial capacity in peacetime, to provide for wartime expansion, would have incurred a charge the Treasury would not contemplate. Such elasticity as was needed was to be provided by the trade to which was confidently entrusted the day to day upkeep of any field force that was despatched. This trust was based on a general assumption that British industry could produce anything at any notice, rather than on calculation or enquiry. It was a belief that died hard. Even in March 1900 when trade and ordnance factories combined were quite unable to keep pace with demand a prominent industrialist still approved of the policy. Given notice, he said,

1 In the five years before the war the ordnance factories' share of land service orders varied from 47 per cent to 56 per cent in money terms. The rest went to the trade.

the trade could supply the War Office with anything. As it stood that was true but it ignored that there was no hope of giving adequate notice in the circumstances.

All contracts with the trade were made through the Director of Army Contracts (DAC), a civilian official responsible to the Financial Secretary. Since 1895 this had been one Alfred Major. He was honest and hardworking and over the years had built up a considerable knowledge of the capabilities of the various firms he dealt with. He was, before the war, confined to English firms. He claimed to be the largest purchaser of general stores in the world, and may well have been right. In the financial year 1897-8 he dealt with contracts to the value of £8,000,000[1] of which £2,500,000 was for land service stores. Not all of this was War Office expenditure as he also acted for other departments. The Admiralty, India Office, Colonial Office, Metropolitan Police and Post Office were all fairly regular customers. Like almost every department in the War Office the contracts branch was overworked and understaffed. It had 27 permanent clerks increased in December 1899 to 34. Until that month the number had been the same as in 1895 despite a forty per cent increase in work over the same period. Not only did the volume of the work rise sharply but as the variety of articles increased so too did the intricacy of the work. The Treasury, ever ready, as Balfour put it, to sprinkle sand in the machinery, had made matters worse by insisting on the abolition of brokers, who had been used for the bulk purchase of commodities like metals.

1 This involved dealing with 46.050 papers and writing 10,171 letters. 37,307 tenders were issued and 18,393 received. The low proportion of returns of tenders showed the need for a thorough revision of the War Office lists, but there was insufficient staff to do this.

This greatly increased the work of the contracts branch for a saving of between seven and eight thousand pounds a year in commission.[1] In November 1898 Major reported

> Many of my clerks stay night after night beyond hours, and some of them get few or no Saturday afternoons. This goes on all through the year and besides being ... intrinsically wrong, is not a satisfactory method of working, during peacetime, a branch which is one of the first to feel the effect of any preparations for war, and which in any emergency, would be called upon perhaps more than any other branch in the office.[2]

Apart from the paltry increase mentioned no action was taken on this sensible document.

The contracts branch was subdivided into four sections dealing with various categories of goods. Three of these dealt with various stores in the province of the Director General of Ordnance and the other with those under the control of the Quartermaster General and the Inspector General of Fortifications.[3] The division was a sensible one and though firms often made more than one of the types of goods in each section few were employed by more than one section. Two of these sections dealt in a fairly straightforward fashion, buying from the manufacturers items available on the open market. The third, dealing with warlike stores, particularly explosives, was in a different position. Inevitably the main, almost the sole, users of cordite were the armed forces.

1 The last of the brokers was done away with in 1897. Appendix to Evidence heard by the Departmental Committee on War Office Establishments 1900. PRO WO 33 190.

2 Ibid.

3 For a full list of goods dealt with by the various sections of the contracts branch see Appendix C.

Moreover, for obvious reasons, all governments preferred to develop their own armaments and explosives rather than rely on foreign imports. Thus the domestic government was virtually a monopoly buyer. Partly as a response to this, partly because it was anyway a natural development and partly because it was encouraged by the government, the supply soon began to be dominated by a few huge firms. Thus only the Birmingham Small Arms (BSA) Company and the London Small Arms Compny made service rifles. Webley had a monopoly of service revolvers.[1] Cordite manufacture was dominated by three huge firms, Kynochs, National Explosives and Nobel Explosives Ltd. There were four other smaller cordite firms but no tenders were invited outside this group of seven. This made little sense as there were about 20 firms in 1900 that could manufacture cordite and demand was desperately heavy.[2]

The process of placing contracts with commercial firms began with the Director of Army Contracts receiving a requisition from the department concerned. He would then invite tenders from all the firms on the War Office list that dealt with the item, perhaps 500 for an ordinary commercial product, or as few as three for a highly specialised one. The placing of the order was then at the, more or less, unfettered discretion of the Director of Army Contracts. Other things being equal he would follow normal commercial practice and accept the lowest tender. But, with so many considerations to take into account, this hypothetical equality rarely occurred.

1 There was, however, nothing to stop officers buying other revolvers and pistols privately. Many did.

2 R.C.Trebilcock: A 'Special Relationship': Government, Rearmament and the Cordite Firms. Economic History Review Vol XIX no.2 1966.

Where an appreciably lower tender was passed over in favour of a higher one the case was supposed to be referred to the Financial Secretary, and some were, but the Director also had discretion over which cases he referred. He also consulted the Director General of Ordnance but there was much friction between them. The Director General of Ordnance frequently complained that he was not consulted often enough and that when he was his views carried little weight. This the Director of Army Contracts denied.

These two officials frequently clashed over the measures to be taken (or not taken) to ensure punctual delivery of orders. Once the war had started this was often the most important consideration and orders were consequently spread over a number of contractors, even when several had tendered at different prices for the whole order. Even with the demands on each contractor thus reduced it was often difficult to keep the firms to the agreed dates. Contracts had penalty clauses but they were seldom invoked. For example, Kynochs[1] contracted to supply 10 million rounds of small arms ammunition over the year 1898-9 and only produced 6 million. The Financial Secretary before whom such questions were laid refused to fine the firm despite strong representations from Brackenbury. Brackenbury thereupon appealed to Lansdowne who finally agreed to reduce their order for the following year from 10 million to 6 million rounds. So with that 6 million added to the 4 million arrears from the previous year they were still left

1 Kynochs often appear in this sort of context. Their prices were high, their quality poor (they were finally struck off the War Office list in 1907 for adulterating cordite), their delivery slow and erratic. It is not without interest that their Chairman, Arthur Chamberlain, was Joe Chamberlain's brother.

with orders for 10 million rounds,[1] a quantity they had already shown they were unable to produce. Any effect this small gesture might have had was lost because Major did not tell the firm what had happened. They were completely unaware that their new order had been reduced, let alone of the reason for it.

In the years before the war the then Inspector General of Ordnance, Sir Edward Markham, was so lax that the delivery dates on the contracts were scarcely looked on even as a guide, far less a binding condition. Indeed when Brackenbury began to insist on the dates being kept there was some resentment. When he protested vigorously because Kynochs had taken on a profitable contract for the United States and further delayed already late deliveries to the War Office to complete it, the Chairman of Kynochs, Arthur Chamberlain, felt he was being completely unreasonable. Chamberlain was both patronising and smug and quite unable to appreciate that there was any just ground for complaint. It was all, he thought, because Brackenbury was new to the job and did not know the facts of life. 'The Director General of Ordnance probably did not know that everybody is more or less behindhand; it is a common practice and there has never been any attempt at the War Office to cut out contractors for being in arrear.' Under Markham, he added, nobody cared whether deliveries were punctual or not.[2] It was clearly a regime he preferred. Kynochs was not the only firm to feel the abrupt change of atmosphere when Brackenbury took over. Chamberlain was very wrong when he thought that the

1 Evidence to the Mowatt Committee 1900 PRO WO 33 163.
2 Ibid.

new Director General was unaware that everybody 'was more or less behindhand' and wrong when he thought that once this was known, he would rest content. The responsibility for ensuring that the contracts were fulfilled rested with the Director of Army Contracts but he got frequent and unsolicited advice from the ordnance department. Outside the special field of guns and ammunition firms were sometimes fined, though Brackenbury thought not nearly often enough, and he complained that Major was more concerned for the contractors than for the army. As an alternative to fining, the Director of Contracts could buy in the firm's default if the goods in question were in general manufacture, and charge any difference to the contractor who failed. This was a fairly common occurrence.

If no dispute arose over the fulfilment of a contract the responsibility of the Contracts branch ended with the placing of the order. The inspection of goods from whatever source rested on the Director General of Ordnance. There was a Chief Inspector of General Stores at Woolwich, with a large staff. Inspectors of small arms worked at Enfield and Birmingham as well as the small arms depot at Weedon and there was an Inspector of Clothing at Pimlico. Inspections were very rigorous and a cause of further friction between the ordnance and finance departments. The latter felt that rejections were made for wholly insufficient reasons. Sometimes there were grounds for this belief. One batch of clothing was rejected for colour variation. The makers appealed to the Director of Contracts who looked at the sample complained of and was quite unable to see any variation. The viewer (subordinate members of the inspectors' staffs who viewed goods in the first instance

were known as viewers) was duly summoned to explain the complaint and being unable to find what was wrong himself, asked them to examine the cloth outside. There, in the dazzling sunlight, he triumphantly indicated a slight change of shade. Despite the protests of the Director of Contracts the consignment was rejected.[1]

This sort of incident, though long remembered and often quoted, was rare. More often a manufacturer who complained of rejection would be quite satisfied after watching further tests of his products. In one case where a batch of cold chisels had been rejected as too weak, the maker protested and (as was the invariable practice) he was invited to watch further tests. These were simply to fix a chisel in a vice and drop a weight on it. Twenty chisels were selected at random and fixed up. The first held, the second, third and fourth all snapped cleanly in two. At that point the disconsolate manufacturer called off the remaining tests and left. Sometimes it worked the other way. If at additional tests it appeared that the previous sample only was at fault, the consignment was accepted. Precisely the same procedure was adopted with the products of the Ordnance Factories. None of the fears expressed earlier was realised.

The Provision of Warlike Stores.

Such, at the outbreak of war, were the normal sources of ordnance supplies. The factories now under the control of the army (as in every other European country) had obsolete plant and no spare capacity. Their administration might have been designed to cause the maximum delay and inconvenience.

1 Ibid.

The trade was careless of delivery dates and not always willing to take sufficient trouble to meet exacting military requirements, knowing that penal clauses in contracts were rarely enforced. Orders were formulated by one department and contracts drawn up by another and the two were often at odds. These sources were scarcely likely to prove adequate for war-time demands and there were other factors which made matters worse. Firstly there was a catastrophic lack of reserves revealed by Sir Henry Brackenbury in a minute of 15 December 1899.[1] The reserves which should have provided for demand in the opening months of the war, so giving time for orders to be placed and goods to be received, and, where necessary, extra plant to be laid down, just did not exist. Secondly the unprecedented expansion of forces in South Africa, and the unusual degree of wear and tear on goods imposed by campaigning conditions, combined to lead to a demand many times greater than anyone had foreseen. The supply of two vital commodities, small-arms ammunition and clothing, was further affected, adversely, by special factors.

Small-arms ammunition, ironically as it proved, was one of the few commodities with its full authorised reserve, some 130,000,000 rounds. Of this about half was of the older Mark II variety and 66,000,000 rounds were Mark IV,[2] an expanding bullet similar to the Dum Dum, which had been adopted after the Chitral compaign had led to demands for a bullet with greater stopping power than the Mark II. In May it was

1 See below pp. 213-215

2 Of the reserve then in South Africa 4 million rounds were Mark IV and 2 million Mark II. GOC South Africa to Secretary of State 25 July 1899, PRO WO 108 66.

discovered (by some luckless Volunteers at Bisley) that this bullet tended to strip[1] in the barrel. Tests at Woolwich confirmed that this was likely to happen with a hot and dirty rifle, conditions almost inevitable in war. Accordingly the Mark V bullet was introduced. This was also an expanding bullet, but the lead had been hardened and given a higher melting point by an admixture of antimony which prevented it from squirting through the envelope. In July 1899, despite the representations of the British delegate, the International Peace Conference at the Hague outlawed expanding bullets. By this time the manufacturers had received large orders for Mark V ammunition and had set up plant for its production. The government, mindful of the special needs of tribal warfare, had not ratified that section of the convention dealing with expanding bullets, but after Parliamentary pressure gave an undertaking, in October, that none would be used in South Africa. This left the unhappy ordnance department with the worst of all possible worlds. Half the reserve was useless. The ammunition actually with the troops in South Africa and England had to be recalled and replaced, and the trade were fully engaged in the manufacture of Mark V ammunition, use of which was prohibited.

Clothing was afflicted by a similar problem. At the beginning of 1899 there were in store at Pimlico 25,000 suits of khaki drill as a reserve. There were also about 15,000 additional suits prepared during the tension over Fashoda.

1 The bullet was a lead core in a nickel envelope. In the Mark II the bullet was completely covered, in the Mark IV there was a hole in the top of the envelope to allow the lead to mushroom on impact. If it stripped the lead, almost melted by the heat of the cordite explosion in the cartridge, squirted through the hole and the envelope was left jammed in the barrel. The next shot fired blew the rifle up.

On 1 April 1899 money was given for the purchase of another 40,000 suits, thereby providing two suits for men of an army corps with line of communication troops. As usual the troops' entire peacetime dress had to be replaced when they proceeded on active service. Although this was normal it was highly inconvenient (and expensive). Blue helmets had to be replaced by white ones and various scarlet, blue, green and tweed garments by khaki drill. In August the Director General of Army Medical Services recommended on medical grounds that serge only be used in South Africa. This request was put forward by the Commander in Chief on 18 August and suffered the usual fate at Lansdowne's hands of being vetoed on grounds of cost. When authority was given on 22 September it was far too late. The first four divisions went out in drill, to be replaced later. When the orders for serge went out the manufacturers had naturally stocked up with drill. 'All my difficulties,' said Brackenbury, 'have arisen from the fact that the troops sent to South Africa had to be entirely reclothed from head to foot before being sent out ... After embarkation had commenced the khaki drill frock was discarded for khaki serge.'[1]

The inadequacy of the arrangements and the need for additional sources of supply was quickly demonstrated. Consideration of a few stores will illustrate the problem that arose and the efforts made to increase supplies. Small arms ammunition with the special problems mentioned was in short supply from the start. As soon as Lansdowne decided that Mark II ammunition only was to be used the ordnance factories

1 Minute from Sir Henry Brackenbury to the Adjutant General 11 January 1900. Appendix to Report of the Committee on Soldiers' Clothing 1900-1901. PRO WO 33 210.

concentrated all their resources on it. The trade was fully engaged on Mark V to which they had only recently changed. Three million rounds a week were needed for South Africa but even by December the combined efforts of the trade and ordnance factories amounted only to 2,500,000 rounds each week of both types of ammunition together, and at that time none of the trade firms had started to produce Mark II. There were constant delays on the production lines. Many things can go wrong in the production of ammunition, and the sudden hurried expansion inevitably encouraged mistakes. Not all of these were spotted at the factory and rejections by the ordnance department inspectors were also heavy. As usual Kynoch's was the worst offender. In the week ending 20 January 1900 Kynoch's had more rejected (1,749,000 rounds) than the whole production of the trade for that week, including their own (1,675,400 rounds).[1] The most frequent flaws were either misfires due to a faulty detonator or incorrect filling, or a weak cartridge case. This last did not matter (unless extreme) with rifles but the powerful extractor mechanisms of the Maxim gun could tear a defective cartridge case in half. This was one of the more usual causes of the jamming of the guns in South Africa. Many such cartridges got through despite the checks.

At the start of the war it was not realised how high the expenditure of ammunition was going to be. On 23 October 1899 Sir George White, who had taken command in Natal, cabled for 4 million rounds and was asked on the following day if he was sure he wanted them.[2] By the middle of November 1899, 18

1 Brackenbury to Balfour 23 January 1900. Balfour Papers BM Add.Mss.49853.

2 GOC Natal to Secretary of State 23 October 1899 and reply 24 October 1899. PRO WO 108 66.

million additional rounds had been sent, apart from what the troops carried when they embarked, and the War Office proposed a regular weekly supply of 1,100,000 thereafter. On 17 November Buller asked for the weekly supply to be raised to 3,700,000 rounds.[1] There was no possibility of meeting this out of production and the only alternative source of supply was the rapidly diminishing reserve. At that rate there was only eight weeks' supply in the country. Buller agreed, after urgent representations, to halve his demand from 50 rounds per rifle to 25. With the despatch of the Fifth Division this brought the weekly supply to 2,375,000 rounds (including 1,000 for each of 125 machine guns). Each man embarking had also to be provided with 300 rounds, after November raised to 400. By mid-December about 30,000,000 rounds had been carried by troops apart from other shipments.

The position was now desperate. The ordnance factories were working day and night and Sundays. Since, despite the Hague conference, the standard bullet for the British army was the Mark V the trade had not been asked to change to Mark II. The Director General of Ordnance briefed the Commander in Chief on the situation and it was brought before the Army Board on 14 December. Once the Seventh Division had been equipped there would be just 13,000,000 rounds left, or less than five weeks' supply. The Ordnance Factories made about 1,500,000 rounds a week and were working flat out. If the trade were turned to Mark II there would be a three week suspension in the manufacture of any ammunition before they could start. Either this had to be accepted or the ban on the use of Mark V in South

1 GOC in C to Secretary of State 17 November 1899. PRO WO 108 66 no.1285.

Africa had to be lifted. Since this last was not acceptable to Lansdowne the Board decided to turn the trade to Mark II.[1]

This move had no immediate impact, except to make the position of British forces outside South Africa slightly weaker. The decline in the Mark II reserve was no longer compensated for by the increase in Mark V. Now a new difficulty arose. Months of high-pressure working was beginning to tell on both men and machines in the Ordnance factories. The CSOF, the Principal Ordnance Officer and the Chief Inspector at Woolwich all approached Brackenbury, on behalf of their various departments, to ask for a break. On 18 December Brackenbury got the grudging approval of the Army Board to close down all departments over Christmas.[2] Christmas Day that year was a Monday and everything closed from noon on the preceding Saturday until the following Wednesday morning. It was little enough but it helped to avoid a complete breakdown. By that time some 50,000,000 rounds had been sent.

There was little more that could be done. Shipments to all other commands were stopped and their reserves were now broached. On 22 December Gibraltar was ordered to send 1,000,000 rounds to South Africa and Malta had already had to find 2,000,000.[3] On 27 January 1900 Malta was asked for a further 4,000,000 'urgently required' in addition to which its commander was ordered to find ammunition for the Royal Sussex Regiment, then at Malta under orders for South Africa.

1 Proceedings of the Army Board 14 December 1899. PRO WO 108 79 para.530.

2 Ibid 18 December 1899 para.552.

3 QMG to GOC in C Gibraltar 22 December 1899. PRO WO 108 66 no.1994.

It is a measure of how desperate things had become that the GOC was ordered to exhaust his reserve for this, and if he still had not enough to disarm his garrison.[1]

It is clear that matters could not have continued thus for very long, but the crucial decision to turn over the entire trade to the production of Mark II ammunition had been taken just in time. By the end of January most manufacturers were in full production and huge orders had encouraged tham to lay down extra plant. As capacity expanded so demand on the now almost vanished reserve dwindled. No shipments were missed but it was so very close. The reserve finally disappeared towards the end of March. One Saturday there were just three boxes of ammunition (3,300 rounds) in the entire country.[2] But by that time the combined current production of the Ordnance factories and the trade were just equal to demand. Moreover the production was increasing and by April 27th Roberts felt able (after a request from the War Office) to reduce his demands to one million rounds a week. From then on the task was relatively easy and the rebuilding of a reserve in England could begin. On 8 June in response to a further War Office request Roberts agreed that further supplies could be suspended.[3] At that time some 170,000,000 rounds had been sent out. In October 1900 with a reserve of 66,000,000 rounds under his hand (and under the impression the war was all but over), Roberts was able to send 20,000,000 rounds back, and such further supplies as were

1 Secretary of State to GOC in C Malta 27 January 1900. PRO WO 108 66 no.2779.

2 Brackenbury to Balfour 16 May 1901. Balfour Papers BM Add. Mss.49854.

3 Lord Roberts to Secretary of State 9 June 1900. PRO WO 108 67 no.6072A.

needed in South Africa were provided without difficulty. By 12 May 1901 the Mark II reserve in England had risen to 135,000,000 rounds.[1]

The supply of guns and their ammunition for the field force was subject to much the same limitations. There was not the additional complication of a change in pattern, but apart from the Ordnance factories and the trade, who again were working to the limits of their capacity, there were only reserves and other stations and garrisons. There was no general commercial trade and foreign purchase was largely impossible because of differences in pattern. As might be expected the sources of supply again proved inadequate. Large demands came in quickly. The reserve of fifteen pounder shells in Natal at the start of the war was only 5,000 and in an early engagement two batteries fired 1,000 in a single day. Needs were again underestimated. On 7 November the War Office proposed weekly consignments of 1,200 twelve pounder, 7,200 fifteen pounder and 900 five inch howitzer shells. (There were others but these were the most important guns at the start.) Ten days later Buller asked for double these quantities for the fifteen pounders and howitzers.[2] This would have absorbed the reserves of the country in less than eight weeks. The enlarged demands were sent for two weeks only and then by agreement cut. In the middle of November a siege train was sent out with eight 6 inch howitzers and four 4.7 inch QF guns, with 500 rounds each. As both these calibres were used by the

1 Brackenbury memorandum 21 May 1901. Balfour Papers BM Add. Mss.49854.

2 GOC in C to Secretary of State 17 November 1899. PRO WO 108 66 no.1285.

navy, their stocks were raided for further ammunition for them, and also for the 4.7 inch and twelve pounder guns landed from warships in South African ports. All naval orders for ammunition had been held in abeyance since the end of October. It would have been quite impossible to have supplied both army and navy with ammunition. One fortuitous circumstance was the ability of the navy to supply shells and guns without at first making any serious inroads on its authorised reserves. Naval ordnance was planned to come forward in step with the shipbuilding programme. A delay in shipbuilding due to strikes had halted the production of ships while ordnance continued to flow in. Thus a surplus had been built up and most of the loans to the army were taken out of it.[1]

The stocks of ammunition for horse and field artillery before the war had been 300 rounds per gun distributed among the batteries and ammunition columns and parks, and a further 200 rounds per gun held as a general reserve. By mid-December Brackenbury noted that 'the whole of this reserve has long since been absorbed by the demands for South Africa'.[2] Once this had happened the stocks of batteries left in England were used to supplement the output of the Ordnance factories and the trade. By February these stocks too were finished. The only field gun ammunition in the country was then the few rounds actually in the limbers of the remaining batteries.[3]

Moreover by this time the trade was running out of

1 Evidence to the Mowatt Committee 1900 PRO WO 33 163.

2 Brackenbury minute 15 December 1899 to Commander in Chief. Published in Appendix E to Report of the Elgin Commission PP Eng.1904 XL pp.278-80.

3 Brackenbury to Balfour 16 May 1901. Balfour Papers BM Add. Mss.49854.

materials, which were not being made as fast as the shells. Shrapnel cases were procured from Germany, which helped, but explosives too were in short supply. On 6 January 1900 a request was received for 2,000 lyddite shells for six inch guns. The DGO cabled back that it was 'impossible'.[1] Instead he sent shells filled with gunpowder with a promise to replace them by high explosives as soon as he could. Powder shells were also sent for five inch guns, eight of which had been sent out. A request for additional field gun ammunition made on 2 February also met with a 'non-possumus'. Roberts asked for 100 rounds weekly for 208 fifteen pounders in or on the way to South Africa, and 5,000 rounds of twelve pounder ammunition. Brackenbury was forced to reply

> Will endeavour to comply with your demand, but present output of whole trade and Arsenal is not equal to it. I hope this output will soon increase.[2]

This unsatisfactory position continued through March. Brackenbury told the Mowatt Committee, established to investigate the lack of reserves, that he had sent to South Africa 850 rounds per gun and that this had been done 'by denuding the third Army Corps, and absolutely emptying our home stores and by fully employing the trade and the Ordnance Factories, and I cannot, with every effort, keep pace with the demands from the army in the field.'[3]

1 DGO to GOC Cape 9 January 1900. PRO WO 108 66 no.2326.

2 DGO to FM Lord Roberts 3 February 1900. WO 108 66 no.2958.

3 Evidence to the Mowatt Committee PRO WO 33 163. These efforts included the erection of ten new buildings for the shell and cartridge filling division of the Arsenal on his own authority. Proceedings of the Army Board 27 November 1899 PRO WO 108 79 para.495.

As with small-arms ammunition, however, this was the lowest point reached. The productive power of the trade was increasing as new plant was laid, and the reserves in South Africa were reaching more comfortable levels. Twelve pounder and five inch howitzer ammunition consignments were suspended (with Roberts' agreement) in the middle of April and enough fifteen pounder shells had been shipped by the first week in May. By the middle of that month the powder shells for the heavy guns were being replaced by high explosive ones. The long range twelve pounder guns and six inch howitzers had already been made up to 1,000 rounds a gun. Even so there was still nothing in reserve. When it became necessary to send guns to China in June 1900, Roberts had to be asked to release some, with their ammunition. In such a situation it might be thought that no effort would be spared to increase production. Yet Brackenbury's pleas to be allowed to expand the Arsenal were refused. The trade opposed it, fearing increased competition after the war, and the Mowatt Committee recommended only that storage space be increased and more modern machinery installed at Woolwich.[1] These recommendations were accepted.

Among the guns that Roberts sent to China were two 9.45 inch (24cm.) howitzers. There were four of these, and they were the one exception to the decision not to buy foreign guns. The objection that they did not take English ammunition, and that it was unwise to rely on foreign powers for supplies in wartime, was overcome by purchasing sufficient ammunition for the life of the gun at the same time as the gun itself was

1 Report of the Mowatt Committee PRO WO 33 163. See pp 349-351

purchased. This was not as difficult as it might sound. Guns of this size would wear out after about 250 rounds had been fired. Accordingly four of these howitzers were purchased from Skoda, together with 1,000 rounds and sent out. A proposal was made to purchase any guns that continental firms had immediately available, less for their use to the British army than to prevent the Boers getting them. Ardagh, the Director of Military Intelligence, and Lansdowne favoured this idea, but it came to nothing. An extraordinary arrangement was come to instead, with five French and Belgian firms,[1] whereby in return for a payment of £16,000 they undertook to supply no warlike stores to the Boer Republics for the duration of the war.[2]

The Provision of General Stores.

The sources of general, as opposed to warlike, stores lay solely in the ordinary commercial market. Once again reserves were quite inadequate. The authorised reserves of horseshoes, for example, was 52,000 sets and there were no mule shoes at all. In each of the first three months of the war 35,000 sets of horseshoes and 40,000 sets of mule shoes had to be sent. In many cases there were no reserves left after the army corps had been equipped. As a result the trade was quite unable to keep pace with demands. Particularly short were tents, picketing gear, entrenching tools, horse and mule shoes and saddlery.

There was a reserve of 5,000 circular tents and 100 hospital marquees, but in the first two months of the war alone 17,000 circular and 900 hospital tents had to be sent. Commercial stocks in England were all taken up, as well as

1 Societe Francaise des Munitions; Cartoucherie de Guerre de Sevres; Cartoucherie Belge, Bruxelles; Cropall & Cie, Wettern Belgique; Poudrerie Belge de Wettern.

2 Proposed Purchases of Munitions in Foreign Countries. Secret Paper WO 108 81

everything that could be produced. India provided as many as she could but there had to be heavy buying in the United States and Germany. The supply of mule shoes in England proved inadequate before the month was out. On 31 October 1899 the Remount Officer at New Orleans was asked to supply the addresses of any firms near him able to offer large quantities of mule shoes. He found one and the following day was ordered simply to buy as many shoes as possible.[1] Large purchases were also made in Germany and Sweden and it was not until August 1900 that the situation was brought under control, and the much neglected home service once more considered. Even to do this much the usual inspection was modified, and this was true of almost all goods. Here again the Ordnance Department clashed with the Finance Department and the DAC. The latter claimed that much more could be got from the trade if the inspections were less rigorous. Powell-Williams instanced the insistence on perfectly straight grained wood for wheel spokes. Brackenbury replied that as these were for the artillery he dared not accept anything that might weaken them. In his turn he complained that the contractors and the DAC wanted to give him whatever was most easily and cheaply made. 'I cannot give the army material which will break down, to please the trade,' he said, to which Major retorted that his main fear was lest the army should get no material at all, good, bad or indifferent.[2]

1 Secretary of State to Major Scobell, New Orleans 1 November 1899. PRO WO 108 66 no. 161. Scobell was evidently an energetic officer for the following day he was able to report the purchase of 200,000 shoes (with nails) and the name of the ship they would sail in.

2 Evidence to the Mowatt Committee PRO WO 33 163.

This constant bickering cannot have helped the smooth transaction of business between two departments in almost constant communication and under great stress. Neither side was being fair to the other. The contract branch, whose work had trebled since the war began, was not indifferent to the needs of the army, and was doing a difficult job with a fair degree of success. Major's plea for an increase in permanent staff had gone largely unheeded, and additional temporary staff needed time to become accustomed to their work. It was not their fault that English manufacturers were unable immediately to provide the vast quantities of goods demanded, nor that in their attempts to do so some sub-standard goods should be offered. For their part they were too ready to accuse the Ordnance Department of insisting on unreasonable conditions. In fact the attempt to confine stores to service patterns was quickly abandoned. Anything serviceable was taken and some things that, it transpired later, were not. Some of these were accepted only with misgivings. Picks, hammers and entrenching tools were named as examples of artificial shortages caused by too rigorous inspection. It was said that when commercial patterns were accepted it was easy to get large numbers good enough for service. When this was put to the Chief Inspector of General Stores at Woolwich he replied: 'I do not think, speaking generally, that they are sufficiently good for the service.'[1] He was later vindicated by the reports from Commanding Officers and Roberts cabled acidly that the spades issued 'might be useful in soft meadows or ploughland'.[2]

1 Ibid.

2 Roberts to Secretary of State 26 October 1900. PRO WO 108 66 no.8995.

There was near unanimity on their uselessness in South Africa.

This was a rare failure. Poor consignments of all sorts of things were sent, but it was unusual for these to be more than a small proportion of any commodity. The incident did, however, illustrate the dangers of relaxing inspection too much, and the contracts branch seemd not to appreciate the quite unusual strains of active campaigning. Goods rejected as unserviceable might well be perfectly good for ordinary commercial or domestic use. The useless spades were not defectively made but, as an officer in South Africa said, they were little more than gardening tools. What was wanted were navvy's tools. Similarly with picketing pegs. Large numbers of wooden ones were rejected, though perfectly well made, and this the Finance Department thought unreasonable. Again this showed a failure to understand the conditions. The pegs might have to be hammered into any sort of ground, and used repeatedly. If they were to break up, a unit might lose all its horses. The same sort of misunderstanding arose over horse shoes. In fact Brackenbury had agreed to take any shoe that would not lame an animal, but there were still large rejections of shoes that any civil smith would have accepted without demur. The point was that most shoeing in the field was done cold. Shoes had to be a perfect fit to start with and small faults, which would normally be corrected without difficulty, could not be dealt with under active service conditions.

With the misunderstanding and friction that developed between the civil and military sides of the War Office went a great readiness to take offence and, perhaps, a carelessness about giving it. On 3 November 1899 Brackenbury proposed to the Army Board that 'the system of depending on obtaining our

requirements through the Director of Contracts in England alone is unsuitable to the present emergency.'[1] All he said he meant by this most ambiguous statement was that there ought to be a systematic use of foreign manufacturers. Purchase abroad had in fact already started with the enquiry about mule shoes mentioned above. The Director of Contracts understood it to mean that his department should be by-passed, and was naturally upset about it. It was satisfactorily explained but, presumably at Major's request, Brackenbury later made a statement to the Army Board to assure everybody that he was not suggesting that contracts should be made other then through the contracts department. As three weeks elapsed between the statement and its clarification it seems likely that the interval was taken up with recrimination and demands for explanation. Major would almost certainly have drawn Powell-Williams' attention to it if the latter had not already had a report from the Accountant General, who was a member of the Army Board. The three weeks is suggestive. There were six meetings of the Board in the interval and had it been a straightforward misunderstanding to be cleared up by a few words there was plenty of opportunity to do so.

All buying remained with the contract branch and foreign markets were extensively used as demands grew and the pre-war sources of supply proved inadequate. Purchases were made either through British Consuls abroad or domestic firms with foreign connections and, in the case of goods to do with horses, by the various remount officers stationed abroad. Enquiries were initiated by the Director of Contracts and, depending on the urgency, he might either order specific purchases to be made

1 Proceedings of the Army Board 3 November 1899. PRO WO 108 79 para.440.

or give a free hand to the officer on the spot, as with the remount officer in New Orleans in the case cited. Other large purchases of animal shoes were made in Germany and Sweden. Saddlery too was needed in huge quantities as the number of mounted men, particularly mounted infantry, increased beyond all foreseen limits. Saddles of any and every pattern were taken but English makers could not provide nearly enough. The first foreign purchase of these was made through the British Consul General in New York. He was asked on 8 November 1899 how much it would cost and how long it would take to ship 1,000 US army saddles. He replied $18,000 and six weeks. At that time the offer was declined but four weeks later he was told to take them and buy an additional 500 if he could get them in the same time. Thereafter not only American but Canadian, French, German, Austian and Belgian saddles were bought in large quantities.

The purchase of stores in South Africa.

There remains one major source of ordnance stores not yet considered, South Africa itself. Local purchase was resorted to to the extent of over £1,000,000[1] in the first ten months of the war.[2] There were also ordnance department workshops at the ports, and later at other large depots, which, as well as performing their main function of repair work, manufactured goods such as clothing, picketing gear, harness, bandoliers and so on for which materials were fairly easily obtainable (or were sent from England) and no very complicated machinery

1 A considerable proportion of this was spent on transport vehicles.

2 Reports from Ordnance Officers in South Africa on the Working of the Army Ordnance Department. PRO WO 108 75.

was needed. These were highly thought of. In general local purchase was not a success. It was used to bridge delays in sending goods out. Naturally this meant that it was almost always a matter of urgency. Little attempt had been made before the war by the then Chief Ordnance Officer in South Africa, Colonel Hobbs, to compile lists of local manufacturers and stores. Partly this was due to the extreme discouragement he received from the GOC, Sir William Butler, whose strong political views may have coloured his military judgement. Some information was contained in the detailed and careful intelligence reports compiled before the war, but as local purchase on a large scale had been contemplated only for transport and provisions there was much information on these commodities and comparatively little on ordnance stores.

Starting from ignorance and acutely understaffed the Ordnance Department was unable to do much more than buy anything they were offered. The degree of staffing shortage and the amount of work demanded by the chaotic accounting system led to a number of nervous breakdowns from overwork. A sixteen hour day was commonplace, and eighteen hours not too rare.[1] Under these circumstances it is scarcely surprising that buying was somewhat slapdash. The wartime ordnance establishment of Cape Town was twelve officers and 137 other ranks which may be compared to thirteen officers and 200 men for peacetime Aldershot. No real inspection of goods was undertaken, there was neither time nor staff to do it. As a result much of the locally purchased stores, notably saddlery and harness, was of very poor quality. Even when the buying officer did manage to make a quick inspection it did not necessarily do any good.

1 Committee of Inquiry on the Ordnance Department 1901. Evidence of Col. Clarke PRO WO 33 218.

One consignment of German saddles rejected at Cape Town was accepted by an officer at Delagoa Bay.[1]

To assist Colonel Clarke, the Principal Ordnance Officer (POO), with purchase there was one Warrant Officer and one corporal, at first. There was no time to ask for tenders and a broker was employed, and given open orders. This led to much criticism. The broker was a Mr Jansen, the President of the Cape Town Stock Exchange and Cecil Rhodes' broker. This was thought to be a recommendation. No enquiries were made as to what commission he was taking and he was allowed to charge what he liked. Prices in Cape Town were high anyway, it was predominantly an importing and retailing town, rather than a manufacturing one, but even so they bore little relation to the prices Jansen charged the ordnance department. When he was sacked in January 1901, after Clarke had broken down under the strain, he had made a fortune. So too had some of his subordinates. A Mr Henry who started the war worth £100 retired with £17,000. There had been attempts to remove Jansen earlier. In March 1900 when Clarke was away (his duties as POO took him to various parts of the country) Colonel Law took over as Chief Ordnance Officer, Cape Town. He introduced a tendering system of a sort, sacked Jansen, and reduced prices by between 30 and 40 per cent.[2] Unfortunately he collapsed under the strain of the additional work this involved within six weeks of taking over, and when Clarke came back Jansen was reinstated.

Other attempts to remove Jansen were also blocked by Clarke, who trusted him. He suspected that much of the feeling against

1 Ibid.

2 Ibid. Evidence of Col. Law.

Jansen was stirred up by the President of the Cape Town Chamber of Commerce, a Mr Jagger, who owned the largest clothing firm in Cape Town and was dissatisfied with his share of the orders. This may have been true but it is likely that Jagger had grounds for complaint, and he was not alone in protesting against the distribution of orders. Brokerage was much better organised at Port Elizabeth. There the brokers collected quotations and Ordnance Officers placed orders on that basis. There were no complaints there of unfair distribution of orders.

Despite the complaints and the 'large and avoidable waste of public money', however, the ordnance department in South Arfica did perform its main function which was to obtain the goods for issue to the troops, or at least it obtained what was available. The times of maximum pressure were the start of the war and the beginning of 1901. The second arose because of the prevailing view towards the end of 1900 that the war was over. Shipments from England were reduced or suspended, and stocks were run down particularly at East London and Port Elizabeth which were not ordnance depots in peacetime. Then with De Wet's invasion of Cape Colony and Kitchener's demand for 30,000 mounted men from home and new levies in the colonies, demand abruptly rose. At these times local resources were used to exhaustion. In December 1899 there was no khaki clothing left in the country;[1] in February 1901 all local saddlery had been taken up.[2] At any time there was likely to be a sudden demand for particular stores which would make tendering or

1 GOC Cape to Secretary of State 11 December 1899. PRO WO 108 66 no.1727.

2 GOC Cape to Secretary of State 3 February 1901. PRO WO 108 70 no.10631.

inspection impossible. Colonel Hobbs recalled one such occasion.

> I remember seeing one day a telegram from Lord Kitchener for a large order for hospital equipment. The telegram arrived in the morning, and asked that the equipment might be sent up at once, the consequence was we had to get it away by the evening train. There could have been no possible time to get tenders in that case, and if the stores had not gone I should not have like to have been the man whose only explanation to Lord Kitchener for any delay, was that he was trying to get the things as cheap as possible.[1]

At least one attempt was made by the ordnance department in South Africa to buy outside the country when local supply failed. In May 1900 25,000 pairs of ankle boots were ordered from the Western India Army Boot and Equipment Factory of Bombay. They actually accepted over 30,000 pairs[2] of good quality, but the practice was discouraged for fear of two government buyers unknowingly competing against one another. There were some cases of this inside South Africa.

That there was no general breakdown in the supply of ordnance stores to South Africa was in spite of the War Office system rather than because of it. The authorised reserves of stores were shown to be completely inadequate, and because of the failure of Brackenbury's predecessor, Sir Edward Markham, even these were often not maintained. The value of the change

1 Committee of Inquiry on the Ordnance Department 1901. Evidence of Col. Hobbs. PRO WO 33 218.

2 GOC Cape to Secretary of State 26 May 1901. PRO WO 108 71 no.12602.

in control of the ordnance factories was amply demonstrated. The relations between the Ordnance and Financial Departments of the War Office have been shown to be poor, and had the latter retained control of the factories, apart from imposing an unnecessary intermediary, friction might well have had a serious effect on their use. The confident expectation that the trade could provide for the army, on which the whole pre-war organisation had been based, was shown to be without foundation and markets all over the world had to be entered without any preliminary study. Much was owed to the resource, energy and calm acceptance of responsibility of Sir Henry Brackenbury. He insisted on the change in control of the factories, did his best to ensure that contracts were adhered to, first recommended a general policy of buying abroad, expanded the ordnance factories as far as he was allowed and overrode the paralysing delays of War Office accounting. Neither he nor anyone could create in a moment productive capacity to meet any demand, and this was really what the pre-war system, with inadequate reserves, required. Brackenbury summed up the main lesson in a letter to Colonel Clarke in South Africa

> We have done all that is humanly possible to meet your demands, and in any case in which they have not been complied with it is because it has been impossible to get the stores. The idea entertained by many, who do not know better, that you can get any amount of stores at any time from the trade, is a bubble which this war has effectively burst.[1]

1 Brackenbury to Clarke 23 February 1900. Quoted in evidence to the Committee of Inquiry on the Ordnance Department 1901. PRO WO 33 218.

The Supply of Ordnance Stores to the Army

The duty of the ordnance department to supply the army with warlike stores, equipment and clothing was much wider in scope than might at first appear. 'Ordnance' covers every type of article needed by an army to keep it functioning, not just arms, ammunition and uniforms but packs, saddlery, harness, tents, cooking equipment, tools, blankets and so on. Some of the difficulties encountered in procuring an adequate supply of some of these articles have been discussed. However, even the despatch of stores in quantities to meet the demands from South Africa did not in itself guarantee the supply of the army. That depended both on the organisation within South Africa being able to distribute the stores when and where they were needed, and the suitability of the articles themselves for the largely unprecedented conditions of South African warfare.

Mobilisation of the Field Force.

The initial mobilisation of the field force was, of course, provided for by the mobilisation stores held in the United Kingdom. These were supposed to provide both for the equipment of two army corps and for their maintenance in the field for six months. A reserve of all stores sufficient for this purpose should have been held by the ordnance department. Senior officials in the War Office had been uneasily aware for some time that something was wrong in the ordnance department and one of Brackenbury's first tasks was to find out exactly the state of the reserves. His report was delayed by the pressing needs of the mobilisation of the army, which itself revealed many deficiencies, but was finally presented on 15 December 1899.

The position it revealed was far worse than anyone had imagined. The war, Brackenbury reported, 'has now disclosed a situation as regards armaments and reserves of guns, ammunition, stores and clothing, and as regards the power of output of material of war in emergency which is, in my opinion, full of peril to the Empire.'[1]

The deficiencies covered every type of armament and store. For example to back ten batteries of Horse Artillery in service there was the material of one battery in reserve and even that had been converted to an experimental quick firing (QF) system. There were 50 batteries of Field Artillery (15 pounders) in service but only 11 batteries in reserve. Of these two had been converted to an experimental QF system, five had been sent to South Africa and three were already allotted to new batteries being raised. That left just one in reserve for the entire army. To support three batteries of 5 inch howitzers in service there was one gun, one carriage and two ammunition wagons. The entire reserve of artillery ammunition (200 rounds per gun and howitzer) had been sent to South Africa some time before Brackenbury presented his report, and the entire production of the trade and the ordnance factories was insufficient to meet current demands still less to rebuild the reserve. There had been 500 sets of harness in reserve while 800 had to be sent to South Africa in the first two months of the war to replace casualties. The reserve of machine guns was 326 short of establishment and the movable armaments of fortresses had to be raided to meet the initial demands from South Africa. Five hundred sets of cavalry

1 Minute by General Sir Henry Brackenbury DGO 15 December 1899 to the Commander in Chief printed as Appendix E to the Report of the Elgin Commission PP Eng.1904 XL pp.278-280.

saddlery were in reserve to meet the wear and tear of 16,000 sets in service. Six hundred were needed in the first two months of the war. Similarly there were 10,000 sets of infantry accoutrements in reserve to meet the wear and tear of 364,000 sets in service. None were left by December 1899. Five hundred sets of mounted infantry saddlery had been in reserve. 11,500 sets had to be ordered in the opening months of the war. Many of the vehicles were obsolete and 'only fit for use on good roads in peace.'[1] Nearly 25,000 sets of mule harness were needed in the first two months of the war. There had been only 1,700 in reserve. In the place of the authorised reserve of 6,000 cavalry swords there had been just 80, largely due to protracted delays in deciding on a change of pattern. A similar story was told of tents, camp equipment ('not sufficient to supply one fiftieth of the demands from South Africa'), hospital equipment, general stores and clothing. Only in rifles, carbines, pistols and lances were reserves anything like adequate. 'We are,' concluded Brackenbury, 'attempting to maintain the largest Empire the world has ever seen with armaments and reserves that would be insufficient for a third class military power.'[2]

In default of the proper reserves there was only the mobilisation equipment maintained for two army corps. This sufficed to send out to South Africa the force of one army corps, one cavalry division and 10,000 troops for the lines of communication which was initially mobilised. Thereafter stores and arms demanded by the commanders in South Africa

1 Ibid.

2 Ibid.

were sent as they became available from the various sources of manufacture.

The Supply of Ordnance Stores to South Africa.

The quantities of stores demanded continually surprised the authorities in London. They were quite outside all previous experience. This was partly due to the force being much larger than any that had ever previously been sent abroad, and partly to the exceptional wear and tear of articles caused by South African conditions. General MacDonald, for example, reported that his men's shoes and clothing were ruined by four days of operations on the Western front.[1] A further reason was the formation of additional ordnance depots in South Africa each of which required a large supply of stores to support any force which might be operating in its area. This process started even before the outbreak of war with the formation of base divisional Army Ordnance Store Depots at East London and Port Elizabeth.[2]

There was great anxiety among commanders in South Africa in the early months of the war over the very low quantities of supplies available. In November 1899 Buller cabled the War Office: 'I regard the reserve both of supplies and of ammunition in this colony as dangerously low.'[3] His fears were clearly justified as colonial forces raised in South Africa had the greatest difficulty in procuring even the most basic stores. The officer commanding the Kaffrarian Rifles, for example, having failed to obtain 300 greatcoats for his men

1 Report on Operations at Koodoosberg Drift by H.A.MacDonald 10 February 1900. Roberts Papers WO 105 5.

2 Telegram GOC South Africa to Secretary of State. WO 108 66.

3 Ibid 6 November 1899. Roberts Papers WO 108 74 Vol VI.

from the commissary at King William's Town, requested them from the Chief Ordnance Officer (COO) Cape Town. He too was unable to supply them and when pressed on whether he could procure them by purchase could only pass the request on to the Secretary for Defence of Cape Colony.[1] Similarly the Commandant of Volunteers in Cape Colony reported to the Secretary for Defence in November 1899 that boots were unobtainable from Imperial Stores.[2]

The War Office had already cabled that no clothing or harness could be sent to South Africa until issues to troops being mobilised in the United Kingdom had been completed. However, one million rounds of small arms ammunition was sent for the use of locally raised forces.[3]

In the early days of the war there was some futile telegraphic correspondence over demands for stores simply because the War Office could not believe the need for the quantities demanded. A report that the small arms ammunition reserve in Cape Colony in October 1899 was under 3 million rounds was received with incredulity as three months before there had been 7 million rounds in hand or on the sea.[4] In fact 4 million had been issued to Natal as a reserve for the greatly expanded forces there and the GOC Natal still required another

1 Telegrams between OC Kaffrarian Rifles and COO Cape Town 21 - 23 October 1899 and COO to Secretary for Colonial Defence 23 October 1899. Secretary for Defence Correspondence, Cape Town Archives DD 1/61 A4031.

2 Commandant of Volunteers to Secretary for Defence November 1899. DD 1/61 30/56.

3 Secretary of State to GOC Cape 12 October 1899. WO 108 66.

4 GOC Cape to Secretary of State 17 October 1899 and Secretary of State to GOC Cape 17 October 1899. WO 108 66.

4 million rounds urgently. After yet another query on its necessity the demand was met.[1]

Also short was gun ammunition which was expended at rates far beyond what was usual in the small colonial campaigns of the late Victorian era. A fortnight after the start of hostilities the GOC Natal cabled 'The question of additional gun ammunition is of the utmost importance. I understand that there is only some 5,000 rounds of ammunition, 15 pounder BL ... in reserve in the colony. During today's engagement the two 15 pounder Field Batteries engaged fired nearly 1,000 rounds between them. More rounds for the present guns are urgently required.'[2] In fact artillery ammunition was being shipped as fast as it could be obtained, but consumption was so much heavier than had been anticipated even after the lessons of the opening engagements of the war that demands for additional supplies continued to be sent despite assurances that all that was possible was already being done. In January 1900 the pleas of the GOC Cape, who was responsible for ordering stores from England, were reinforced by a personal telegram from Lord Roberts pointing out that he had 42 12 pounder guns (i.e. seven Royal Horse Artillery batteries) which had to be supplied with ammunition. He added that he hoped the Director General of Ordnance (DGO) would spare no effort.[3] These superfluous exhortations had no effect on the supply of ammunition

1 Telegrams Secretary of State to GOC Natal 17 and 24 October 1899 and GOC Natal to Secretary of State 19 and 23 October 1899. WO 108 66.

2 GOC Natal to Secretary of State 25 October 1899. WO 108 66.

3 FM Lord Roberts to DGO 18 January 1900. WO 108 66 no.2535.

but do serve to show the anxieties of the commanders in the field. The problem increased in January 1900 when the Navy became unable to supply further ammunition for the 28 12 pounders it had landed and this too had to be supplied from London.[1]

Meanwhile every available gun was pressed into service. The War Office, trying every source, uncovered a record of two obsolete muzzle loaders (howitzers) owned by the colonial government and kept at King William's Town. The GOC Cape was asked to send them with all available ammunition to Natal. Eventually one was sent with 900 rounds.[2] Heavy use, and the consequent wear and tear, led to a demand for new guns as well as more ammunition. A request in January 1900 for two 15 pounder guns showed that none were available from England or India. The DGO could only suggest that unserviceable ones should be sent home for repair. In February the DGO ordered that unserviceable guns of any type should immediately be sent to the UK for repair.

Anxiety over the lack of stores in South Africa lasted some months. In December 1899 the GOC Cape cabled that there was no khaki clothing left in the country and demanded to know what was coming in what ships.[3] Among the items said to be urgently required were 5,000 helmets, 10,000 khaki suits and 20,000 pairs of boots.[4] Most of these items were already at sea on their way to South Africa and more had been prepared

1 GOC Cape to Secretary of State 6 January 1900. WO 108 66 No. 2289.

2 Secretary of State to GOC Cape and reply 25 and 28 October 1899. WO 108 66 nos.876a and 927.

3 GOC line of communication Cape to Secretary of State 11 December 1899. WO 108 66 no.1727.

4 Ibid 12 December 1899. WO 108 66 no.1760.

for shipment. Even so the huge demands of campaigning in South Africa quickly forced the ordnance department there to demand still larger quantities. Quite apart from wear and tear there were some special requirements. For example Methuen's force engaged on the Western front carried rolled up greatcoats into action. (It is not clear why since these operations took place at the height of the South African summer.) These were dark in colour and provided an admirable mark for the Boers when British troops lay flat. 50,000 yards of khaki was therefore demanded to cover the greatcoats but the GOC was told that all the khaki available in the UK was needed for clothing troops there. However, within a fortnight the khaki had been shipped.[1] (The alternative of leaving the coats with the regimental transport does not seem to have been considered.)

The anxiety over the stores was not allayed for many months but, at least at base stores in South Africa, stocks never ran out completely. However, in March 1900 there were only some 2,000 serge frocks, trousers and cavalry cloaks in store and Roberts had the additional problem of the approaching winter to consider. He thought there ought to be 120,000 frocks and trousers and 5,000 cavalry cloaks held as a minimum (with similar increases in the stores of other items of clothing and blankets).[2] There were by now signs that the ordnance department was beginning to get on top of the problem, and where in previous months the War Office could only say that supplies were being shipped as soon as they became available

1 GOC Cape to Secretary of State 27 December 1899. WO 108 66 no.2072.

2 Roberts to Secretary of State 2 March 1900. WO 108 66 no. 3611.

but that dates could not be given, Roberts was now told that almost all his demand could be met within four weeks.[1]

The problems of artillery lasted longer. Even in April 1900 a request for more guns and carriages as an ordnance reserve was refused. Nine 12 pounders and 27 15 pounders had been asked for as there were none left in South Africa not actually in service. But not a gun of either sort was sent. Lansdowne told Roberts that the guns and carriages of the few remaining service batteries at home could not possibly be spared.[2] However, most other stores were by then being provided at an adequate rate though urgent needs for particular supplies did arise from time to time. Even the ammunition supply, so crucial to operations and the source of so much anxiety, was by then adequate. The supply of artillery ammunition was ended with the agreement of Roberts (a reserve being kept ready for immediate shipment in case of need) and the weekly supply of small arms ammunition was cut to nearly a third.[3]

By June 1900 the supply of many items which had been sent in large numbers as they became available rather than in reply to specific requests was discontinued (horse rugs, shirts, canvas shoes and waterproof sheets for example). Quantities in

1 Secretary of State to GOC Cape 9 March 1900. WO 108 66 no. 3787.

2 Secretary of State to Roberts 11 April 1900. WO 108 67 no. 4704.

3 Ibid 18 and 21 April 1900. WO 108 67 nos.4860 and 4932. Roberts to Secretary of State 20 and 27 April. WO 108 67 nos.4925 and 5101. By this time over 300,000 rounds of 15 pr. ammunition (1245 round each for 242 guns) and 102,466 rounds of 12pr. ammunition (1423 rounds each for 72 guns) had been sent. So too had 155 million rounds of small arms ammunition the supply of which was cut to 1 million rounds per week.

South Africa seemed adequate and more could be sent if specially demanded. Roberts was even able to release some heavy guns for China.[1] Small arms and accoutrements were however still barely adequate and a suggestion that drafts should be armed and equipped in South Africa instead of before they left England was abandoned.[2] However, later on Roberts sent back to England 1,000 cavalry swords and 20 millions rounds of small arms ammunition which were said to be urgently required at home.[3] By August and September 1900 supplies of most items were being discontinued because of the assumption, made in both England and South Africa, that the war was all but over. It was accepted that a large 'police force' would have to be maintained for a time but stores seemed adequate for that. As shipments ceased but fighting continued the stocks accumulated in South Africa began to decline. Increased demands were made on the War Office as a result and as at the start of the war the War Office reacted with disbelief. A demand for 20,000 rifles in December 1900 was met (ten days later) with the reply that the message had not been understood since it was not possible that they really wanted 20,000 rifles.[4] However, with De Wet's invasion of Cape Colony it rapidly became clear that the war was far from over and the rapidly increasing demands from South Africa were accepted.

Their acceptance did not always mean that they could be met and shortages began to be experienced yet again. A demand

1 Roberts to Secretary of State 28 June 1900. WO 108 68 no. 6509 and 15 July 1900. WO 108 68 no.6858.

2 Secretary of State to GOC Cape 30 June and 31 July 1900. WO 108 68 nos.6539 and 7306.

3 Secretary of State to GOC Cape 18 October 1900. WO 108 69 no.8851. GOC Cape to Secretary of State 23 October 1900. WO 108 69 no.8929.

4 GOC Cape to Secretary of State and reply 1 and 12 December 1900. WO 108 69 nos.9562 and9682.

for carbines in February 1900 could only be met by sending out obsolete single loaders[1] since no magazine carbines were available. At the same time the great increase of mounted men needed for guerrilla warfare exhausted the reserves of saddlery. As well as the large quantities needed to make good wear and tear new recruits for the South African Constabulary were coming in at the rate of 500 a week and 3,000 men were on their way from Australia. The mounted reinforcements from England also needed to be equipped and shipments of saddlery, clothing and equipment were suspended while this was done.[2] The increase in mounted men as a proportion of the force also unbalanced the accumulated ordnance stores. For example mounted men wore breeches instead of trousers. These rapidly ran out while 120,000 pairs of trousers, quite apart from those forming part of the stock of complete uniforms, remained unwanted.[3] Another commodity needed in larger quantities than before was pack saddlery. Some confusion was caused in the War Office by the almost simultaneous arrival of an urgent demand for pack saddlery and 2,000 complete sets which had been sent back as surplus to requirements some time previously.

The newly mounted troops were mounted infantry rather than cavalry and together with the newly raised town guards caused a great drain on the stock of rifles. Many of the cavalry regiments were also being re-equipped with them and some

1 Secretary of State to GOC Cape 1 February 1901 WO 108 70 no.10612.

2 Secretary of State to Lord Kitchener 28 January 1901 WO 108 69 no.10529. Secretary of State to GOC Cape 31 January 1901 WO 108 69 no.10569.

3 GOC Cape to Secretary of State 31 January 1901 WO 108 69 no.10582.

50,000 were sent out in the first two months of 1901.[1] This change also caused some dislocation in the accumulated stores and thousands of carbine buckets and slings now redundant were shipped home while items such as spurs which had previously been perfectly adequate were very short. To raise the stock sufficiently to have three months' supply on hand the War Office was asked to hasten the delivery of 110,000 pairs.[2]

By March 1901 it became clear that large scale warfare was going to continue for the foreseeable future and a full supply of clothing of all kinds was resumed. In April additional large supplies of winter clothing were demanded. Demands for stores specially needed by mounted troops also rose and in July 1901 a monthly supply of 94,000 pairs of horseshoes (of various sizes) was arranged. Despite occasional worries the supply of ordnance stores to South Africa had by then become sufficiently regular to avoid any serious problem. The advent of winter in 1902 led to familiar demands for increased supplies of winter clothing, such as 80,000 pairs of mittens and 70,000 horse rugs, but these were met with little difficulty.

The organisation of the ordnance department in South Africa.

The needs of the army were thus met as far as the shipment of stores to South Africa went. This, however, did not in itself equip the army. The ordnance department in South Africa was also responsible for receiving the stores at four base ports, distributing them to the 13 ordnance depots which were established in South Africa during the first year of the war

1 Secretary of State to GOC Cape 23 February 1901 WO 108 70 no.10982.

2 Ibid 14 March 1901 WO 108 70 no.11295.

and for issuing stores to troops. These tasks were undertaken with a strength of 70 officers and less than a thousand men though they were aided by 735 civilians and a large number of African labourers.[1]

Before the war there had been two ordnance depots in South Africa with Chief Ordnance Officers in Cape Town and Pietermaritzburg. The day after the Boer ultimatum was delivered in England additional depots were started at De Aar, Ladysmith and Durban. Shortly afterwards depots were established at Port Elizabeth, and East London (the other two Base ports), Naauwpoort, Queenstown and Mooi River. The establishment of these depots naturally increased the requirements of ordnance stores since many were duplicated to provide enough basic stores at each of the depots. Nor were the new depots merely small appendages to the pre-war ones. In February 1900 more supplies were asked to be shipped to Port Elizabeth than to Cape Town[2] and enormous quantities were collected at De Aar in the early months of the war.

The organisation of the depots was chaotic. In Cape Town for example there were ordnance buildings all round the town miles apart from each other.[3] The steady increase in the size of the force and consequently in the reserve of stores forced additional buildings to be taken over mostly on the docks or from the railway company. Owing to some early confusion some of these buildings were blocked by piles of coal and wood belonging to the Army Service Corps which took months to clear.

There was also a difficulty in Natal where there was a

1 Roberts Papers. Despatch 2 April 1901 WO 105 12.

2 GOC Cape to Secretary of State 23 February 1900 WO 108 66 no.3420.

3 Committee of Inquiry on Ordnance. WO 33 218.

rapid build up of forces not originally envisaged in the plan of campaign and much of the port and rail capacity was taken up with landing additional troops. Ordnance was one of the limiting factors (the other was horses) in the build up of mounted troops other than regulars. Immediately after the battle of Colenso Buller instructed the commanders of the lines of communication in Pietermaritzburg and Cape Town to raise as many mounted men as they could horse and equip.[1] A further problem was to build a sufficient reserve to re-equip the garrison of Ladysmith (some 12,000 men) as soon as it was relieved. Had the town been relieved at the first attempt in December 1899 it would have been impossible to provide the garrison with the uniforms, blankets, gun parts and watercarts needed to enable it to take the field. However, the ordnance department gained little by the delay as by the time Ladysmith was relieved the accumulation of stores was more than outweighed by the demands of Buller's force which also needed a complete refit. As a result there was still no possibility of an immediate move by the forces in Natal after the relief of Ladysmith.[2]

Attempts to maintain the peacetime system of issuing and recording the movements of stores quickly broke down under the strain of active service. The method of issuing stores in the first days of the war was straightforward enough since the troops drew from the nearest ordnance depot much as they would have done in England. However, the problem rapidly became more difficult as troops moved away from the bases and columns became

1 Buller Papers. Buller to General of Communications Pietermaritzburg and General Cape Town 17 December 1899 WO 132 13.

2 Roberts Papers. Buller to Roberts 1 March 1900 WO 105 13.

more numerous and more mobile. Ordnance depots were established at intervals along the railway lines and on the whole were well supplied. However, the further from the base depots and the further from the railway the forces were, the more precarious became the supply.

The transfer of stores from the ordnance depots to the troops which needed them during the later stages of the war was done in various ways. Direct issue to the troops based locally presented no problem and was exactly the same as issue in peacetime. Goods for troops at a distance could either be handed over to the railway authorities for despatch, sent by road or rail in the charge of convoy men from the depot or handed over at the depot to representatives of the units who would then make their own transport arrangements. From the point of view of the units however it was less satisfactory since it required the detachment of men who might be needed for other duties and who might anyway know little of ordnance or transport. Handing over the stores to the railway was in some ways the least satisfactory method since they were often 'looted' en route. However, as one officer pointed out, these losses were often only apparent losses since the 'looting' was frequently done by other military units in search of stores. Any forces which seized stores intended for other units would have had to be supplied from other, albeit more orthodox sources, if they had not done so.[1] It did however cause some confusion and was little consolation for the unit waiting for urgently needed stores which did not turn up. Moreover there was little doubt that some quite genuine looting was taking

1 Report of Lt. Col. Moulton-Barrett. Reports from Ordnance officers in South Africa on the working etc. of the Army Ordnance Department. WO 108 75.

place both by British troops and by Africans.

The despatch of goods in the charge of convoy men from the depots also created difficulties. A large depot supplying troops along hundreds of miles of railway might send up to ten trucks daily in various directions. This could take up to 20 convoy men which was one sixth of the strength of a depot like Pretoria. These men would be away for an unpredictable but possibly lengthy period. Quite apart from troops requisitioning stores and then being moved away it was quite usual for the ordnance train to beat the wire advising the appropriate force of the arrival of the stores. In either case there would be no one to meet them and the convoy men had either to stay with the train and try to deliver on the way back (which might take weeks) or take the stores back to the depot.

With all these complications it is not surprising that the system of accounts broke down completely. There was in fact no system for wartime accounting and at first the ordnance department attempted to continue the peacetime system. This was cumbersome and bureaucratic to a remarkable degree even in peacetime. The attempt to apply it in war may have been responsible for the many nervous breakdowns in the ordnance department. The system itself broke down rapidly as the officers of fighting units simply refused to comply with the absurd regulations. In theory every item had to be accounted for and its disposal recorded. Ledgers and pre-printed stationery existed for all these functions but they were not adapted for use on active service, particularly not by mobile columns living largely in the saddle. Attempts to apply the system at first led to ludicrous wastes of effort as columns

were pursued for months by the ordnance department to account for stores they had sometimes never even seen as they had been taken over by other units. The commercial method of writing losses off had never been allowed by the Treasury to penetrate the War Office. As a result a great deal of futile and expensive office work was expended by men who had much better things to do. In one case 17 letters had passed between South Africa and the Army Clothing Department in Pimlico about the disposal of a greatcoat issued by one of the Colonial Corps to an invalid.[1] The coat had not been traced and there is no record of the correspondence ever finishing.

The result of all these difficulties was frequently confusion. Items which were in plentiful supply were said to be non-existent, and erratic and unnecessary demands were made by ordnance officers on other ordnance depots and on the War Office. Combatant officers not unnaturally lost confidence in the ability of the department to supply them and this increased their tendency to take what measures they could to ensure supplies for their own units. For example officers frequently seized stores from ordnance trains which happened to be at stations in their area regardless of whom the supplies were ultimately intended for. This naturally dislocated the supply system even further.[2] Another method was to order the same supplies simultaneously from two or more ordnance depots

1 Ibid.

2 This practice was never completely stopped despite frequent Army Orders denouncing it. See for example Line of Communication orders by Lt. Gen.C.Tucker CB issued at Bloemfontein 30 January 1901. Military Governor Papers Orange Free State Archives, Bloemfontein. MG 2.

which also created confusion by creating a spurious demand for the items in question and possibly leaving stores inadequately guarded or even abandoned if two lots happened to arrive together without an ordnance officer in charge of them.

Such a situation would have taxed the powers of the most able and resourceful ordnance officer. Unfortunately the COO in South Africa, Colonel Clarke, was neither particularly able nor notably resourceful. His only previous war experience had been in the Sudan in 1884 and although he spared neither himself nor his subordinates, many of whom had nervous breakdowns, he was unable to control his department. As mentioned earlier the War Office sometimes queried demands, particularly in the early days of the war, which were fully justified and urgently needed. Later however such queries dropped as supply departments became accustomed to the scale of operations and the rate of wear and tear. Some demands still seemed so unusual however that in January 1901 Kitchener himself was asked for an explanation. After an initial enquiry he reported that the reason for large demands then being made was neglect to keep an adequate reserve in the country which resulted in very large demands being made to retrieve the situation.[1] Although the reserves were down to a low level at the end of 1900 the charge of neglect seems unjustified. The supply, transport and remount departments had been just as confident as the ordnance department, and from the same assurances, that the war was almost over in September 1900 and all consequently had to make sudden vigorous efforts to make up the lost ground,

1 Kitchener to Secretary of State 5 February 1901 WO 108 70 no. 10664.

when hostilities continued and increased at the end of the year.

However, when Kitchener replied to Brodrick he also promised that there would be further revisions of demands following a study of the individual items. Nonetheless huge demands continued to flood in and in March 1901 Brodrick cabled back to Kitchener the totals of outstanding items then on demand from South Africa. These included 5,000 tents and 250,000 shirts. Kitchener was asked whether he considered these demands reasonable.[1] He replied that he did not and that large cancellations would follow. Four days later the GOC Cape cabled the War Office referring to the exchange with Kitchener and cancelling orders for, among other things, 110,000 waterbottles, 169,000 rifle slings and 90,000 shirts.[2] The review of needs and orders continued and within four weeks further large cancellations followed. These covered a wide range of items including some bizarre demands for, among other things, 10,000 bill hooks, 5485 large reaping hooks, 3,000 sickles and 1,000 chamber pots.[3] Shortly thereafter Colonel Clarke was relieved of this duties and taken to hospital. Kitchener wrote privately to Brodrick that the problem had been not one of supplies but one of distribution which was mismanaged. 'Entire want of organisation seems to have prevailed at Cape Town resulting in extraordinary demands on the War Office - Col. Clarke seems to have gone off his head and

1 Secretary of State to Kitchener 18 March 1901 WO 108 70 no.11358.

2 GOC Cape to Secretary of State 28 March 1901 WO 108 70 no. 11527.

3 Ibid. 22 April 1901 WO 108 70 no.11910.

Colonel Hobbs is evidently inefficient.'[1]

Kitchener's strictures may have been deserved but he was himself responsible for some of the confusion which undoubtedly existed. For all his reputation (in 1901 anyway) as a great organiser he had a remarkable ability to sabotage existing organisations which, left to themselves, would function as well as if not better than the improvisations with which Kitchener would then replace them. A particularly noteworthy example of this was the reorganisation of the transport system during the war.[2] Another example concerned the whereabouts of the COO. The normal position of the COO during a campaign was with army headquarters. Brackenbury criticised Clarke for staying in Cape Town. However, Clarke replied that he had been ordered to remain in Cape Town by Kitchener when the latter had been Chief of Staff and, despite frequent representations, both by Clarke and the GOC Cape, Forrestier-Walker, had refused to allow him to come to the headquarters. Clarke added that 'It was this absence from the very centre of information which made my work such a difficulty and placed such a strain on me.'[3]

There was an officer with the headquarters in Pretoria, Lieutenant Colonel Barrett, but he found it very difficult to get access to Kitchener and anyway his main job was as ordnance officer for the columns based on Pretoria. Even in that job Kitchener was likely to intervene, ordering him for example to obtain stores from the Cape Town instead of the Bloemfontein

1 Kitchener to Brodrick 31 March 1901. Kitchener Papers PRO 30/57 22(31).

2 See pp. 139 - 148

3 Clarke to Brackenbury 13 May 1901. Among letters presented to the Departmental Committee of Inquiry on Ordnance 1901 WO 33 218.

ordnance depot. Why Kitchener suddenly decided on this is not clear. The result was that demands which were often too long to cable had to be sent by post to Cape Town which could take up to six days. Large amounts of the demands were frequently available at Bloemfontein and the ordnance officers at Cape Town would simply forward the demand there. Originally the demands from Pretoria had gone straight to Bloemfontein where the COO had fulfilled what he could and had ordered from Cape Town only those items he did not have. Periodically he would order enough general stores to keep his own stocks up to strength. Eventually the old system was reinstituted but not without difficulty since the new one had been Kitchener's own idea.[1]

Although it is possible to trace instances of almost every item being in short supply somewhere at some stage of the war it appears that on the whole, despite all the difficulties and the mistakes, adequate ordnance stores did reach the troops. Newspaper reports of troops going barefoot or in rags were seized upon because they were what people expected to hear. Where there were authenticated cases it was usually a consequence of tactical decision. A column might be pushed after the enemy for as long as it could move at all and the troops had strength and weapons to fight if necessary. Lord Methuen's columns after the pursuit of De Wet in August 1900 were poorly equipped for this reason. The most frequent shortages were in equipment for mounted men particularly saddlery, breeches, helmets and spurs. The shortages followed the great expansion of numbers of mounted men and were, as might be expected, in

1 Lt. Col. Barrett to Clarke 9 January 1901. Ibid.

the advance depots. They were usually short lived though there were sometimes months on end before particular depots could feel confident they had an adequate reserve of these items.

Even though adequate quantities of stores reached the troops it is not possible to say that the force was adequately equipped until the quality of stores is considered which includes the suitability of the pattern, the quality of the goods themselves and the serviceability of the whole of a man's equipment taken together.

The Quality of Stores.

The quality of goods was endlessly debated during and after the war both within the army where all officers commanding units and all ordnance officers were asked for detailed comments and outside it as part of the public debate which raged over the conduct of the war and the failures which marked its early months. Assessment is complicated by the total disagreement between equally qualified witnesses on whether particular items were fit for service or not.

Artillery

One of the most important debates concerned the quality of the artillery provided. Press and public denounced the British artillery as less modern, slower and shorter ranged than the largely newly bought Krupp guns of the Boers. It was also claimed that there was too little of it. This last point was true if comparisons were made with the armies of continental Europe but the British forces had many more guns than the Boers (who started with only 113 including pom-poms against over 300 with the British forces) and the disparity increased with every gun captured from the Boers who had no means of replacing them.

Much of the controversy was generated by stories of the power of the 'Long Toms' of the Boers. These were Creusot 6 inch guns firing a 94 pound shell and it was said that the British guns could not reach them. In fact there was a good deal of public confusion between the different roles of fortress, position, siege and field guns. Fortress guns were, as the name suggests, primarily intended for the defence of fortresses and since they were meant to be left in situ could be of almost any calibre. Towards the end of the war a 9.2 inch gun from Simonstown was successfully mounted on and fired from a railway truck. However, although it was sent off to war it never had the opportunity to fire in action.

Guns of position were intended to be moved along roads although they could be dragged across country if necessary. (The Boers proved adept at moving their 6 inch guns across country.) The army had 5 inch and 6 inch guns for this purpose and there were also naval 4.7 inch guns and long barrelled 12 pounders hurriedly mounted on improvised carriages which gave splendid service in the early days of the war before many of the army's heavy guns were sent. One naval 6 inch gun was also landed and took part in the relief of Ladysmith. All these weapons could also be used as siege guns.

The purpose of siege guns is self explanatory. The main types in use in the British army in South Africa were 5 inch and 6 inch howitzers. To some extent these could choose their own range but they were designed to be fired in a very high trajectory from fairly close to search behind fortifications. The 6 inch howitzer fired a shell of 120 pounds.

The vast majority of guns with the army were field guns,

either 15 pounders with the field artillery intended to accompany the infantry or 12½ pounders in the horse artillery for use with mounted troops. Every gun like every warship is a compromise between power and mobility. In both these guns the struggle had been decided firmly in favour of mobility since their role was to accompany the field force.[1] It is not therefore surprising that these guns could not match the power of the 6 inch guns of position of the Boers. It was however these that were first matched against them and the average infantryman while unaware of the distinctions between various types of artillery was sometimes painfully aware that he was exposed to enemy shelling which his own artillery appeared powerless to stop.

The guns were of course an expression of the tactical thinking of the War Office which was not geared to the type of war which developed in South Africa. The maximum range of field guns, about 4,000 yards, was set not by the design of the gun or the power of the propellant but by the fuse in the shrapnel shell (there were at first no others). Beyond that range the velocity of shrapnel bullets was too slow to have much effect. With explosive shells ranges of 6,000 yards could be achieved and even more if the trail of the gun were sunk, but over 8,000 yards the accuracy was so poor as to be useless.

The early experiences of the war showed the need for heavier guns. Three batteries of 5 inch guns travelled with the first army corps and a siege train with 8 six inch

1 The Indian Army had managed to achieve a different compromise with field batteries of 4 inch 30 pounders but these were 'horsed' by elephants.

howitzers and four 4.7 inch guns was quickly prepared and sent out.[1] In response to urgent requests from Buller a further eight 5 inch guns were sent out with both shrapnel and high explosive shells. The 5 inch gun proved to be one of the most popular in the war and almost all commanders of garrisons were anxious to have one. They fired a 50 pound shell 10,000 yards accurately and ranges of 13,000 yards could be achieved by sinking the trail. The comparative lack of mobility was not, of course, a handicap for forces on the lines of communication.[2]

Complaints about the rate of fire of field guns were perhaps better founded. The British army which had been one of the first to experiment with, and the last to convert to, breech loaders had been considering quick firing systems since 1893. A decision in principle to re-equip the field artillery with quick firers had been taken in 1898 but tests were still in progress when the war started. The aim of a quick firing system was somehow to absorb the recoil of the gun so that it could be reloaded and fired without being relaid. Most of the guns sent to South Africa had some sort of spade attachment but this did not entirely prevent the recoil of the gun carriage and could only be regarded as a temporary solution. However for all the public furore there is no evidence that the rate of fire materially influenced

1 Secretary of State to GOC Cape. 2 December 1899 WO 108 66 no.1542.

2 Those posts without 5 inch guns were happy to use 5 inch howitzers instead and shrapnel shells were provided for them. GOC Cape to DGO 10 January 1901 and Secretary of State to GOC Cape 16 January 1901 WO 108 69 no.10233 and 10313. An example of the confidence they inspired in infantry officers was a cable from the Commandant at Rhenoster of 22 June 1901. 'Roodeval Spruit all quiet ... Small number of Boers seen 5 miles west. Fired 5 inch gun at them.'

the results of any action during the war. It should also be remembered that since the guns could only carry 48 rounds with them the two rounds a minute they could fire would use all their ammunition in under half an hour anyway, and it was often difficult to move further ammunition up to the firing line.

A further criticism of the artillery was the failure to provide pom-poms, a 37 mm automatic gun, models of which were made by Vickers and Maxim-Nordenfelt. These fired one pound shells and the opinion of the ordnance department, which had considered them before the war started, was that they were useless. From a purely material point of view there is no doubt they were right. However the effect on morale of troops subjected to its fire was quite overlooked. The venomous noise it made and the disconcerting sight of a line of small explosions as its shells landed produced an effect out of all proportion to its man killing potential. A number of these were finally sent out for the British forces but apart from their considerable value as a range finder for the infantry they achieved very little. However, there was no doubt of their popularity with the troops and intensely demoralising effect on those bombarded with them.[1]

The small calibre weapons were on the whole highly praised. It was the first campaign where the Maxim machine gun firing rifle ammunition was widely used and it proved very popular. It was noticeable that cavalry officers were the least impressed though most thought the weapon useful. (Douglas Haig on the other hand thought it a much over rated weapon.) Infantry

1 Report on Vickers Maxim 1 pounder Automatic Guns. WO 108 75.

officers strongly approved of it. There was some complaint over the rate of jamming though as the reports ranged from 'practically never' to 'invariably' it is probable that the capability of the crews had at least as much to do with it as the quality of the gun. Many of the jams that could definitely be attributed to faulty material stemmed from defective ammunition rather than defective guns.[1]

The rifles were also largely approved by those who used them. There were two marks of Lee Metford and one type of Lee Enfield in use (all of .303 calibre), though the Lee Enfields were slowly replacing all other types. Despite some public criticism, and unfavourable comparisons with the Mauser, most officers preferred it to the Mauser. There were some manufacturing faults in the Lee Metfords (in hot weather there was a danger of wood shrinkage allowing the main rivet to work loose; if this happened the butt fell off) but the basic rifle was accurate and reliable. Such faults as there were were easily remedied. During the war there was no clip so that the magazine could only be charged one round at a time. Once it was emptied in action the rifle became in effect a single loader. This required only a minor modification to the magazine. The barrel of the Lee Enfield was found too long for convenience in handling and after the war it was shortened by about five inches without sacrificing any of the rifle's accuracy (hence it became the legendary Short Magazine Lee Enfield - SMLE). The cavalry carbine version of the same weapon was generally condemned as inaccurate and short ranged. Many officers of mounted troops rearmed their men with rifles.

1 Reports of Equipment from South Africa. Machine Guns WO 108 75.

The bayonet was used far less often as a weapon than as a general purpose tool. It was far more often a knife, wire-cutter, picketing peg, scrub cutter, digging tool, fort builder or tin opener than fixed to the end of rifles and used to assault the enemy. Such comments as there were about it concentrated on its non-offensive aspects, General Cooper saying it would be better for wood cutting if it were two inches longer and General Stephenson suggesting that it would be more useful in the shape of a hooker.[1]

Swords, lances and pistols were roundly denounced as useless. Lances, apart from being useless in battle and conspicuous and therefore dangerous in scouting, were frequently so badly made that the heads fell off. Pistols were almost equally useless and in the hands of men unused to them could be a positive menace. The major of one battery having seen his reservists at practice on board ship let them have revolvers but refused to issue any ammunition for them. Cooper said they were 'Of no use ... and dangerous to the wearer and his neighbours.'[2] Buller reported firmly: 'I do not believe in pistols. If officers or warrant officers want arms they should carry a light carbine.'[3] The general opinion about swords was summed up by General E.L.Knox who had watched a party of about 20 Boers charged by half a squadron of hussars at Talana. 'The two parties met at full gallop, and the Hussars did their best to cut down the enemy ... The result was ... one man killed

1 Reports by Officers Commandingunits in South Africa 1899 - 1901 Vol I WO 108 76. Major General C.D.Cooper entered the 103rd Foot in 1868. He became Brevet Colonel Royal Dublin Fusiliers in 1899 having seen no war service. Colonel (local Major General) T.E.Stephenson joined the Essex Regiment in 1874. He became Brevet Colonel in 1899 like Cooper without war service.

2 Ibid Vol II.

3 Ibid.

(by a point) and about eight men wounded but none appeared to be much cut about and I believe more damage would have been done if the men had been armed with heavy sticks.'[1] The GOC Cavalry Division, General French, described the regulation sword as 'the very worst that could possibly be used for any mounted troops at all.'[2]

Clothing.

Opinions on the quality of the clothing differed wildly and this makes it difficult to assess the overall position. For example, of two of the ordnance officers asked for their opinion of the quality and sufficiency of clothing one replied 'Nothing has been more remarkable than the lack of sufficient clothing for issue' and went on to complain of the quality of pants, cavalry cloaks, felt hats and serge material generally and the other replied 'Amply sufficient and of good quality.'[3] Different consignments inevitably differed somewhat in quality and officers differed in their expectations and in the experiences their troops underwent.

Although many officers reported particular items of poor quality at different times there is no evidence of widespread dissatisfaction. Serge was considered a less serviceable material than drill and there was agreement that serge articles were on the whole less well made than drill ones. Head gear

1 Ibid. Lt.Col.E.C.Knox was one of the few officers of the Victorian Army to have served in the ranks. After three years in the 18th Hussars he was commissioned in 1882 and became Colonel of his regiment in 1900. He served in the Sudan on the Gordon Relief Expedition 1884-5.

2 Evidence of French to the Elgin Commission PP Eng.1904 XLI q.17230.

3 Reports from Ordnance Officers in South Africa on the Working etc. of the Army Ordnance Department. WO 108 75. The first officer was Maj.F.D.Milward and the second Maj. A.F.Palmer.

proved to be a problem. Helmets were found to be of little use and in some cases to be far from rain proof. In a campaign where troops were neither likely to be subject to much bombardment nor to be clubbed, soft hats were much to be preferred. Not only did the helmet make it difficult to ride or run in comfort but anyone lying down with a helmet and a pack found the helmet was pushed over his eyes. However, the ordinary field service caps were also unpopular because of the inadequate protection they gave against the sun. The cap had led to 66 cases of sunstroke during the summer manoeuvres on Salisbury Plain in 1898 but had not been changed.[1]

Boots were, as always in campaigns of this period, of great importance as marching was the main means of transport for troops. A poorly made boot was not merely uncomfortable but could reduce the effective ranks of the army as surely as enemy action. Both the lack of complaints and the considerable feats of marching achieved during the war suggest that the quality was perfectly adequate. The popular idea that the War Office could be relied on to send out millions of left or right boots but not both was disproved though there were for a time too many size 5s, 11s and 12s which only catered for the demand of six per cent of the army between them and too few of the most commonly needed sizes (6, 7 and 8s).[2]

The military authorities came under much criticism for the alleged failure to provide adequate warm clothing. Although the usual reply was to enumerate the huge quantities of clothing sent out[3] unease persisted and a number of private charitable

1 Hansard LXVII col.38.

2 GOC Cape to Secretary of State 19 May 1901 WO 108 70 no.12454.

3 See for example Hansard LXXX col.346 (Lansdowne speaking to the House of Lords on 8 March 1900) and XCII col.334 (Brodrick to the House of Commons on 1 April 1901).

appeals were set up to provide the troops with sufficient warm clothing. There can be little doubt that the clothing possessed by many of the troops was inadequate but the reason was neither the failure of the War Office to send out adequate supplies nor the poor quality of what was sent out.

There were two problems. Firstly there was the difficulty of supplying troops continuously on the move, described above. The problem applied particularly to clothing since it was a bulky item to transport and other items such as food and ammunition invariably took precedence if transport was limited. The other problem was the maintenance by the War Office of the peacetime regulations requiring the soldier to pay for new clothing except at certain intervals. This was nonsensical on any active service and particularly in South Africa. Buller recommended that all re-equipping in the field should be a free issue except if there had been wilful damage by a soldier.[1] A number of free issues were made during the war, notably by Roberts who issued sets of underclothing and shirts to all troops involved in the march on Bloemfontein. However, the maintenance of the rule generally meant that there was often a shortage of clothing for troops who could have been supplied but who could not afford it.

Although at first the government was embarrassed by the private benefactions and protested that it was providing perfectly adequate supplies for the troops it soon accepted the donations and took responsibility for transporting the comforts thus provided to the army. There were of course as many difficulties in transporting privately provided comforts from the

1 Reports from Officers Commanding units in South Africa 1899 - 1901 Vol X WO 108 76.

base depots to the front as transporting any other stores. However, a suggestion (from a naval man) that a further appeal should be made for funds to transport comforts to the front was firmly rejected by the Army Board.[1]

Accoutrements.

A wide variety of patterns were tried during the war, none of which was a complete success. The main problem was to carry sufficient quantities of small arms ammunition safely and conveniently. Most regulars started off with ammunition pouches. These were widely condemned.[2] They were heavy and uncomfortable and their disadvantages were most obvious during action when they were most needed. To start with, a man lying down to take cover could not lie flat and would be very uncomfortable. The ammunition would be inaccessible unless he moved which was likely to expose him to enemy fire. If he did manage to get the pouch open he would probably lose as much ammunition as he managed to get into his rifle. Even with the pouches closed ammunition losses could be heavy. After a test in which 400 men had doubled for 100 yards 2,000 rounds were picked up.[3] This was not only serious for the individuals who might find themselves without ammunition at a crucial moment but was a major source of supply to the Boers in the later stages of the campaign. A small commando could replenish its supplies by travelling half a day behind a British column.

1 Minutes of the Army Board 6 April 1900 para.866 WO 108 79.

2 See reports by Officers Commanding units in South Africa 1899 - 1901 Vol III WO 108 76.

3 Ibid.

Bandoliers and waistbelts were also used and were made either of leather or of webbing. Both had their protagonists but both had disadvantages, particularly in bad weather. In heavy rain the leather tended to get stiff and to shrink which made it very difficult to withdraw the ammunition. Webbing on the other hand was likely to expand and much of the ammunition would then fall out. Even without bad weather the loss of ammunition by mounted troops, particularly from rounds just falling out, was considerable. The problem was not really overcome until rifles were adapted to take clips and the bullets were issued in clips instead of individually.

Other equipment.

Apart from isolated consignments there were few complaints about the standard of manufacture of other ordnance stores but there were a number of faults in the pattern and packaging of stores which the strains of the South African campaign quickly showed up.

Packing of stores, although a relatively minor issue, can make a considerable difference to the convenience and so efficiency of operations in the field. In a number of small but significant ways the methods of the ordnance department showed a lack of imagination and were properly criticised. Many items appeared to be packed more for the convenience of the contractor or the department than the user. Packs were sometimes too heavy for two men to lift and too large to go through the door of a hut. There were also odd numbers of items in packs which made accounting that much more difficult. Boxes of rifle ammunition held 1,100 rounds where 1,000 would have been much simpler and

revolver ammunition was issued, for some obscure reason, in packs of 276 rounds. Similarly packs of forks held 1,008. Administration could also have been made easier by clearer labelling of cases. The most frequently declared item was 'etc.' which was unhelpful and it was often difficult to distinguish explosives.

There were few complaints of cases being too fragile though one officer did say that the packing of hats should be strengthened. A number of officers suggested that some items were so firmly packed that it was impossible to get at them. This was particularly true of small arms ammunition where the grooved lids of the boxes were on so tight that it was/impossible to move them. Complaints of this were so numerous that an Army Order of 9 December 1901 required any instance of this to be reported to the Principal Ordnance Officer.[1]

The greatest number of complaints about manufacture concerned saddlery but almost any particular grievance can be matched by another officer's approval of the pattern complained of. Different styles of saddlery suited different types of horses, and since opinions were so widely divided on the suitability of the various horses it is not surprising that a similar divergence is shown in the question of saddlery. There can be no doubt that a considerable amount of unserviceable saddlery was issued but as with everything connected with mounted troops the sudden and unforeseen expansion created a large demand which had to be satisfied quickly. This often meant that local purchase had to be resorted to regardless of quality. One lot of local saddles bought up proved to be

1 WO 108 13. The same difficulty over 20 years earlier was alleged to have contributed to the disaster at Isandlwhana.

made of canvas and wood glued together. They disintegrated the first time it rained.

The most usual complaint against other items was excessive weight. Many officers felt that some durability could safely be sacrificed to lightening the soldier's load, and it was universally agreed that the infantry was overloaded and that more transport was needed.[1] Although individual items were of reasonable quality the totality of a soldier's equipment was 'universally condemned'.[2] Hector MacDonald wrote privately to Kitchener that the soldier was treated more as a baggage animal than a fighter and simply could not fight well as then equipped.[3] This was the real fault of the ordnance perhaps best illustrated by the experience of those who had to use it:

> It took some of us two solid hours to get ready for this parade - the amount of impedimenta strapped on and hung round each saddle was enormous. The saddles themselves were stamped with the date 1870, and were of the heaviest cavalry pattern, the frame-work being made of iron. In front of the saddle was fixed a pair of wallets, which hung over the withers of the horse; in these we carried a shirt, a pair of socks, sponge, towel, soap etc., and anything else we could stuff in; outside each wallet was stuffed a boot.
>
> Under the straps of the wallet were thrust, beside the boots, a hatchet and wire nippers, over all was fastened the khaki overcoat, made up in a tight roll. Behind the saddle was strapped a thick roll, consisting of blanket and waterproof sheet; a thick wooden picketing peg tipped with iron; a string bag to carry

1 Reports By Officers Commanding Units in South Africa 1899 - 1901 Vol III WO 108 76.

2 Notes by Col.Grierson on return from South Africa WO 108 29. A list of items carried by the soldier is at Appendix D

3 MacDonald to Kitchener 29 January 1900. Kitchener Papers PRO 30 57/17.

hay for the horse when required. A white enamel mug was secured to the top of this pile by the strap passing near the handle. On the near side of the saddle hung the horse's nosebag, supposed to contain the full ration of 10 pounds of corn; behind this hung the trooper's mess tin ...

On the off side of the horse hung the rifle bucket, which, when the man was in position, held the butt of the rifle ...

Under the saddle was a horse blanket and a numnah ... outside the saddle and girths came the surcingle (a thin leather band about 3 or 4 inches wide, which kept the whole in position). The total weight which the horse had to carry, besides the rider was about 7 stone. The accoutrements of the rider were also considerable. Round his waist was a belt which held the bayonet at the left side, and two pouches containing 50 rounds of ammunition each, in front. On the left side hung the khaki haversack, behind were the field glasses; on the right side his water bottle; over his left shoulder the bandolier which held 50 and in some cases 100 more rounds. The rifle itself, a Lee Enfield, weighed ten pounds. Thus hampered it was no easy task to mount. Grasping the reins and the mane in his left hand, with his foot in the stirrup, and clutching desperately at as much of the cantle of the saddle as his rifle allowed with his right hand, the unfortunate yeoman attempted (often in vain) to swing his leg over the erection behind the saddle. This frequently ended in disaster. His spur having caught the horse, he immediately started, and the result can be better imagined than described.[1]

Despite the almost total lack of reserves of stores which

1 H.S.Gaskell: With Lord Methuen in South Africa. H.J.Drane, London 1906 pp.31-33.

should have been maintained before the war, the army thus got the stores it needed to undertake and maintain operations. There was some delay in equipping the force at the start notably in fitting our irregular forces raised in South Africa. However, delay was minimised by using the mobilisation stores of the second army corps to complete the first where necessary, and by sending out units without waiting until they were complete in every particular. For example, all the units of the first army corps went with uniforms made of khaki drill. Serge was sent after them as it became available. One unit among the reinforcements sent to the garrison just before the war even sailed dressed in scarlet.[1]

During the war adequate supplies were maintained to the army as a whole though there can be little doubt that, partly because of tactical needs and partly because of the absurd repayment regulations, many troops must have gone inadequately clothed and shod at one time or another. It is probable, however, that all such occasions would have been short lived and would usually have affected isolated forces while they were out of contact with the lines of the main army. After the capture of Pretoria there was a more general shortage of boots mainly due to interruptions to the single line of railway and the need to give priority to troops and food supplies. Lansdowne, impelled by a desire to deny a Daily Mail report of the troops going barefoot, cabled for information and was reassured that the shortage had been overcome within a few weeks.[2]

1 The Northumberland Fusiliers who sailed on 16 September 1899. The Times 18 September 1899.

2 Secretary of State to Roberts 14 July 1900 and reply 18 July 1900. WO 108 68 nos.6829 and 6926.

The shortage of artillery ammunition which caused such concern seems to have had no effect on the course of operations. There is no evidence of guns ever being silenced or of batteries limiting their fire because of lack of ammunition (outside the besieged towns). In the celebrated case of the loss of 10 guns at the battle of Colenso it is now clear that there was not even a problem of getting ammunition to the firing points, let alone of a more general lack. 'After the battle ... the Boers collected 12 ammunition wagons with 1300 rounds and six of the deserted guns were loaded.'[1] There is no evidence of any shortage of small arms ammunition.

The quality of the stores provided is difficult to assess. However, apart from swords, lances and pistols, most items had more defenders than detractors. It is easy and entertaining to amass a list of absurdities (helmets and saddles that disintegrated in the rain, caps so inadequate that dozens of troops could get sunstroke on Salisbury Plain, rifles where the butt fell off if it got too hot, and so on) but to do so is misleading. Most stores, including most headgear, saddles and rifles, were perfectly serviceable. Occasions where there was a shortage of stores, or those provided were of poor quality, were publicised by those expecting, perhaps subconsciously hoping for, another example of administrative chaos like the Crimean War. In fact there was no such breakdown. Indeed the main fault of the ordnance supplied was not that it was inadequate but that the amount of equipment reduced the soldier's efficiency as surely as under-equipping him would have done.

1 Prof.C.J.Barnard: General Botha at the Battle of Colenso 15 December 1899. (South African) Military History Journal Vol I No 7 December 1970. South African National War Museum in association with the South African Military History Society.

Within the limits of what it had been set to do the ordnance department was largely successful in conditions of unprecedented difficulty. What the war showed was the need to reconsider the totality of a soldier's equipment in relation to the needs of a new sort of war.

FOOD SUPPLIES AND FORAGE

The Resources of South Africa

It was known before the war that the local resources of South Africa were quite insufficient to provide foodstuffs for any large force. Even the supply of meat, which was the most plentiful commodity, was uncertain. The Transvaal, partly because of a population increase and partly because of the losses in the rinderpest epidemic, was no longer self-supporting and Johannesburg alone required 5000 oxen and from 20,000 to 25,000 sheep to be railed in monthly from the Orange Free State and Natal.[1] These two areas were fairly rich in sheep and cattle but Free State Livestock could not be relied on when planning an advance as every effort to drive it out of the reach of the army could be expected.[2] In Cape Colony a rise in meat prices in the years before the war and the consequent importing of Australian meat suggested a shortage but some blamed the increases on a combination of butchers,[3] a view supported by the ease with which meat contracts were later made.

Cereal production was inadequate for ordinary needs over the whole of South Africa. The Free State was the best provided for but had none to spare, there was thought to be little in the Transvaal and both British colonies imported large quantities. It was therefore

1. Notes on the Lines of Communication in the Cape Colony by Major Altham DAAC. Intelligence Division 1899 WO 33 153.
2. Reconnaissance Reports on the lines of advance through the Orange Free State. Secret. WO 33 152.
3. Altham: Op. cit.

clear that if a field force were sent, breadstuffs and forage would have to be sent with it. For sheer bulk forage was the more important and the local grass did little to ease the burden. For half the year what grass there was was brown and withered. Local animals, who were accustomed to it, could survive but it was no use for imported animals, especially for the habitually stall-fed English cavalry horses. From October to March, when the grass was green and abundant, it was sufficient to provide for oxen but mules did not graze at all and even oxen had to be supplied with food in the other months of the year. While the grass crop was new when the war started (this was not a coincidence) wheat and oats were short, the previous harvest being nearly exhausted and the new one not due until January.[4]

It was no new experience for a British force to import the bulk of its food into a theatre of war. Indeed even the small pre-war garrison of South Africa was, in part, supplied from England to enable it to build up a reserve. By 1899 even the normal quantities of supplies available in South Africa were becoming uncertain as rumours of war prompted cautious merchants to allow their stocks to dwindle rather than run the risk of heavy loss. In June 1899 the GOC Cape cabled

> .... regarding food supplies impossible to give full details. Probable scarcity depends entirely on war rumours and on movements of troops from peace stations .... I consider 60 days reserves should be kept in the command; with the supplies now in hand or on passage out we are complete to this scale except (1) Natal 650,000 grocery rations, (2) Cape Colony 250,000 grocery rations, 16,000 pounds of compressed vegetables, 300 emergency rations ....[5]

4. Except in the Western Province of Cape Colony where the wheat, oats and mealies harvest time was November. But there the grass, which cropped from April to November, had just given out.

5. GOC South Africa to Secretary of State for War 26 June 1899. WO 108 66.

These were sent out.

Thereafter demands continued steadily. In August sixty days complete supplies for 2000 men and 3oo animals were requested with additional meat and biscuit. The same cable requested some of the smaller items essential to ensure the health of troops - 12,000 pounds each of tobacco, soap and jam and quantities of chocolate, cocoa, rice, split peas, disinfectants and lime juice.[6] In September the GOC Natal wired for further large supplies of all sorts, stating that these were required for the reserve in addition to all stocks in hand or due to arrive.[7] Later 5000 gallons of rum were shipped to Natal and authority was given for local purchase to augment this supply if necessary.[8]

Preparations before the war.

None of these considerable quantities included anything for any expeditionary force which might be sent; they were merely for the garrison. Yet, as the headquarter staff repeatedly pointed out, unless a considerable reserve was accumulated any such force would be at risk. As early as June 1899 Wolseley had suggested to Lansdowne that large quantities of supplies could be collected at Cape Town and Pietermaritzburg without arousing public notice, but nothing was done.[9] The following month Buller again raised the question and recommended that magazines should be formed on the projected lines of advance. Wolseley endorsed this and thought that 'no time should be lost in the formation of magazines on the intended lines of advance. Three months supplies of all sorts for one Army Corps

6. Ibid 8 August 1899.
7. Ibid 11 September 1899.
8. Secretary of State for War to GOC South Africa 27 September 1899. Ibid.
9. Memorandum. Wolseley to Lansdowne 8 June 1899. PRO Cab 37/50 No 38

and a Cavalry Division should be provided'.[10] All these papers went to the Cabinet but no action was taken.

When war came this procrastination had the inevitable result of laying an extra and unnecessary burden on those responsible for the supply of the army, at a time when great pressure was, anyway, unavoidable. Against this was presumably to be set the possible saving of £176,000 if war was avoided, this being the estimated cost of setting up depots and filling them with one month's food. (It was calculated that food for the second month could be despatched after the proclamation calling out the reserves and still arrive before the troops.)[11] The reason for not acting can only have been the cost as the accumulation of food could have been kept secret and the customary argument that preparations might trigger off a conflict would not, therefore, apply.

Like the other departments the Supply Department had to wait until September 22nd for authority for any preparations involving expenditure.[12] This delay caused great strain and the Quartermaster General said later: 'I was exceedingly anxious for some considerable time as to whether we should be able to feed the troops in South Africa'.[13]

Organisation in England.

Of the six sections of the Quartermaster Generals department one (QMG 3) had charge of the food supply of the army. Its duty was to administer 'The supplies of food, forage, medical comforts, fuel, light, disinfectants and water for the army'.[14] The work involved in

10. Memorandum by Sir Redvers Buller 6 July 1899 with comments by Lord Wolseley. Ibid. No 43.
11. Lansdowne Memorandum 12 August 1899. Ibid. No 50.
12. Proceedings of the Army Board, 25 September 1899 para. 227 WO 108 79
13. Evidence of Sir C.M.Clarke to the Elgin Commission P.P.(Eng.) 1904 XLq2379
14. Evidence of Col. W.A. Dunne AQMG to the Elgin Commission P.P. (Eng.) 1904 XLq2933

performing this duty was summed up under twenty three separate heads including fixing and maintenance of reserves of supplies at home and abroad; ration scales; contracts (as with other departments contracts were placed by the DAC, while the department concerned dealt with specification and inspection); supervision of the supply reserve depot; arrangements for manoeuvres, mobilisation and active service; investigation of experimental goods;[15] the suitability of cooking and baking equipment; hospital supplies; supplies to fit defence schemes and preparations to meet sudden demands; estimates; fuel and light; water supply and regulations; and accounts and records for all the above services.[16] To perform these duties for the entire army, at home and abroad, there was an administrative staff of four. Not surprisingly this was found to be completely inadequate even for peacetime and, in 1898, the only way it was found possible to continue was by obtaining clerical assistance from QMG 6, the section which dealt with all questions relating to the Army Service C-orps. As this section dealt with all regimental problems for the corps which had forty companies with an establishment of 3,300, detachments of which were scattered in every station in the Empire, it was, with a staff of twelve, by no means overstaffed itself. The staff was adequate only when no unusual strain was placed on the department and so could not be relied on for help when it was most needed. In 1899 the officer in charge of QMG 3, Colonel W.A. Dunne, asked for at least one additional civilian clerk adding 'In time of war it will be necessary to further increase this staff'.[17] Nobody could accuse him of being alarmist.

Colonel Dunne was also responsible for the supervision of the

15. There was more work here than might be thought, with various new disinfectants and ideas for preserved and emergency rations being checked.

16. Appendix to the Report and Minutes of Evidence of the Committee on War Office Establishments 1900. Memorandum by Col. Boyd DAQMG. endorsed by General Sir George White QMG. WO 33 190.

17. Ibid.

supply reserve depot at Woolwich which housed the food reserves of the army and through which most supplies passed. The normal staff of the depot was fifty but by April 1900 it had risen to over 700. Even so, to receive, inspect, store, pack and despatch the supplies that poured into the depot it was frequently necessary to work all night and in the forage pressing section, where oil or gas light would have presented a grave fire risk as the air was full of hay particles, an electric generator was rigged to allow the work to continue.[18]

Inspection was by sample and though rejections were just as ruthless as in the ordnance department they do not seem to have caused the same resentment, possibly because it was still easy to sell foodstuffs even if made and packed to meet military needs.

The duty of packing meant more than just parcelling or crating goods up. All wines and spirits, for example, were bottled at Woolwich which gave considerable work. Two pipes of port (about 120 dozen) and similar quantities of whisky and brandy were bottled daily. So too were 1200 gallons of rum which was sent in one-gallon wicker covered jars. The forage department was one of the busiest of all. As each truss of hay was received it was inspected and those that were unsatisfactory went on an ever growing pile. Good hay was heaped on to a series of hydraulic presses where it was pressed into a bale about eighteen inches thick which w-ighed about 160 pounds and had the texture of wood. It was then sawn in half for ease of transport.[19]

When ready for despatch supplies were forwarded to the appropriate port by a section which handled ordnance as well as foodstuffs. It was not responsible for the ships but provided the link with the Admiralty which was. A major part of the job was to reduce friction with commercial companies involved, mostly railway companies. For

18. The Times 17 October 1899.
19. The Times 24 April 1900.

instance, a sudden demand for two months forage for a cavalry regiment would require a special train if it had to be sent to a port without notice. The utmost co-operation was required if sufficient rolling stock and engines were to be produced, not to mention an acceptance of disrupted schedules. Since the head of the department was a newcomer much of the work fell on a lieutenant. In the first six months of the war about half a million tons of assorted supplies and stores were despatched without a check.[20]

Sources of Food Supplies.

The purchase of foodstuffs was on the same basis as that of other goods. The supply department stated what was wanted and the DAC supervised the purchase, inviting tenders if there was time or making an arrangement with known suppliers if the matter was urgent. In the early part of the war it was often urgent because of the government's procrastination. The QMG. said later that if preparations had been made three or four months in advance 'it would have facilitated everything enormously'.[21] Because of the urgency and scale of the need for foodstuffs they were brought from wherever they were available. Forage came from Canada, New Zealand, Australia, Tasmania, Austria, Uraguay, Argentina and the United States. Meat came from Australia, Canada and the United States. Cheese was bought in New Zealand, Canada and Holland, flour in Canada and Australia and so on.

It was clear, even before the war started, that English sources would be unable to provide sufficient food quickly enough. On 3 October 1899 it was reported that a contract for 4,500,000 pounds of tinned meat had been placed in Louisville and that similar contracts had been

20. Ibid.

21. Evidence of Sir C.M.Clarke to the Elgin Commission P.P.(Eng.) 1904 XLq2475

made with firms in St. Louis, Cincinnati and Chicago.[22] Later, still larger orders were placed with these and other centres in America. Forage required the largest foreign purchases and even buying everywhere it was available the supply was only just enough. Dunne recalled afterwards that at one time the world markets were denuded until the new crop came in, as the War Office was buying 30,000 tons a month.[23]

The great demand for food meant that sometimes unsuitable goods had to be taken because nothing better was available. The clearest example of this was tinned meat. In the reserve held at Woolwich before the war three quarters of the meat was in six-pound tins and the rest in one and two pound tins which reflected the ease with which the various sizes could be obtained. The large tin was the normal commercial size. When the war came and large quantities were wanted quickly the vast majority of the tins were large but it was soon agreed, by everybody who had to use them, that this size was unsuitable. They were too bulky and inconvenient to carry when opened, particularly by mounted men. As a result men tended to eat what they could and throw the rest away which was not only wasteful but a health hazard. 'The whole veld was lined with tins with decomposing meat inside.'[24]

The problem was aggravated by the slowness of the home authorities to appreciate this point. When it was stated that the smaller tins were preferred they pointed out that they were costlier, not such good quality meat and did not keep as well.[25] All this was

22. The Times 3rd October 1899
23. Evidence of Colonel Dunne to the Elgin Commission P.P. (Eng.) 1904 XLq6329 and 6336
24. Evidence of Sir Wodehouse Richardson. Ibid XLq3583
25. Evidence of Lt. Col. H.G.Morgan. Ibid XLlq18405

true and they might have added that smaller tins increased the gross weight while strenuous efforts were being made to reduce it. But (after a personal intervention by Lord Roberts)[26] the objections outweighed all these points. Even so they did not alter the patterns of the commercial market and despite all efforts sixty per cent of the meat supplied during the war was in six-pound tins.[27]

Purchases within South Africa itself were limited for reasons given earlier. Apart from the first two months of the war, when Richardson bought everything edible by man or horse, the most important contract was that for meat. The main supply came from a contract, arranged by Colonel Richardson, the Director of Supplies at the Cape, with the South Africa Supply and Cold Storage Company. The contract was approved by the DAC in London after he had consulted a director of the company who happened to be in England. This contract became the subject of much criticism, all of it directed at Richardson, because the agreed price gave the company what many considered to be an excessive profit. This was largely because the company had discretion over whether to supply fresh meat or frozen meat and the price was the same for both. Much of the meat supplied in the early days of the contract was frozen meat and at that time the price for frozen meat at the Cape was only about half the contract price. Peacetime prices were lower still.

Richardson, who knew of and had approved the proposal to supply frozen meat, was undisturbed but the Director of Contracts who had expected only fresh meat was furious. He took the unusual step of forcing the company to reduce its price for frozen meat and

26. F.M. Lord Roberts to Secretary of State for War 5 March 1900 WO 108 66 no.3681

27. Evidence of Alfred Major to the Elgin Commission P.P. (Eng.) 1904 XLq6329 and 6336

pay back the excess on any frozen meat already supplied, the rebate amounting to £28,000.[28] The company resented this as a very high handed action they had not deserved, for they had not concealed their intentions.

Richardson never changed his belief that he had been right to make the contract and that the profits from it were not excessive. The company had contracted to supply meat to the troops anywhere in Cape Colony, at the same price, whether troops received frozen meat while camped next to the railway or fresh meat several days march away from it. If the latter the company was bound to drive the cattle to where they were wanted and slaughter them as required which could be an expensive operation and would greatly reduce the overall rate of profit. It was impossible to provide frozen meat more than about five miles from the railway, so the company was taking a considerable risk by guaranteeing to supply meat wherever the troops might be including, later, the Free State and the Transvaal. At the start of the war, as troops arrived and were entrained for the fronts, most of them, in fact, could be and were supplied with frozen meat. Moreover the prolonged stay of Methuen's force on the western line allowed much more frozen meat to be supplied than had been anticipated. Later much more fresh meat had to be supplied. Besides, frozen meat had advantages for the army as well as for the contractor. To have a cattle farm and slaughter house next to a military camp was unpleasant, inconvenient and could be dangerous unless careful sanitary precautions were taken. Frozen meat avoided all these difficulties.[29]

28. Evidence of Alfred Major (DAC.) to the Elgin Commission P.P. (Eng.) 1904 XLq6363 - 6365

29. Evidence of Sir Wodehouse Richardson to the Elgin Commission P.P. (Eng.) 1904 XLq3391. Also Col. Sir W. Richardson: With the Army Service Corps in South Africa. London. 1903. p47

In Natal the Director of Supplies, Colonel Morgan, avoided such difficulties by setting different prices for fresh and frozen meat. When the contract for the rest of South Africa expired at the end of 1900 Morgan, who had become Director of Supplies for the whole of South Africa, renegotiated it with the South Africa Supply and Cold Storage Company after failing to find any other firm capable of taking it. The differential price was incorporated and prices as a whole reduced, after Kitchener had taken a hand himself, to a rate which Kitchener estimated could save £1,200 a day. It was also agreed that captured slaughter cattle should be bought by the contractor.[30] This contract expired on 1 April 1902 and was replaced by one with a new firm, the English and Colonial Company, apparently created specially for the purpose of taking over the contract. Recruiting for the new company was actively assisted by senior supply officers,[31] and prices to the army were still further reduced.

The only other significant purchases in South Africa were of hay and jam. In 1901 the harvest, unlike the year before, was good and in November a contract was made for 30,000 tons of hay to be delivered over six months. This did not seriously reduce demand on foreign supplies but may have eased the burden on the ports a little. Some local jam was purchased for immediate use towards the end of 1901 and in January and February 1902 a further 1,500,000 pounds was bought but thereafter the supply seems to have dried up. Another 250,000 pounds was said to be available, but very expensive, and it is not clear whether

30. Evidence of Col. Morgan to the Elgin Commission P.P. (ENG.) 1904 XL1q18351 - 18375 and telegrams GOC. Cape to Secretary of State for War 30 November 1900 and 8 January 1901, Lord Kitchener to Secretary of State for War 3 January 1901 and DAC. to Lord Kitchener 7 January 1901. WO 108 69 nos. 9544, 10176, 10084 and 10147.

31. Col. Morgan to Maj. Atcherley 14 January 1902 and reply 27 January 1902. WO 108 72 nos. 16216 and 16413.

this was actually bought.

One other minor source of supply was Lourenco Marques where the Consul General was authorised to buy foodstuffs when it was necessary to prevent them reaching the enemy. By October 1900 1,000,000 meat and 2,000,000 breadstuff rations were in Lourenco Marques ready to be moved into the Transvaal.[32]

An unusual source of fresh foods was the Military Farms Department. Farms were originally started, after the occupation of Pretoria, for the recovery of debilitated animals and, while it was a natural step to use them to provide grazing and forage for these animals, it was imaginative to plant vegetables and start dairy farms for the benefit of the whole army. The success of the farms led to the jibe that Kitchener would soon be paying dividends on the war. From haphazard beginnings twelve districts were created to cover South Africa, each with a Chief Superintendent of Farms, and a Chief Inspector of Military Farms was appointed to supervise the whole department. In the final months of the war the farms were so developed that military hospitals were fully supplied with milk and vegetables and frequent issues were made to troops. The variety of produce can be seen from a request made in December 1901 for seeds for onions, radishes, lettuces, brussels sprouts, cabbages, cauliflowers, carrots, turnips, parsnips, mangold wurzels, pumpkins and marrows.[33]

32. Secretary of State for War to GOC. Cape 7 September 1900
GOC. Cape to Secretary of State for War 11 September 1900
Secretary of State for War to GOC. Cape 13 September 1900
GOC. Cape to Secretary of State for War 17 September 1900.
WO 108 69 nos. 8085, 8142, 8173 and 8235. Also Richardson op. cit. p. 138 and Roberts to Milner 1 August and 8 August (twice) 1900. Roberts Papers PRO WO 105 34.

33. GOC. Cape to Secretary of State for War 9 December 1901.
WO 108 72 no. 15702.

At the start of 1902 the War Office tried to put the farms, which were worked by civilians under the control of the Army Service Corps, under civil administration. This brought a very strong and emotional protest from Kitchener who evidently misunderstood the proposal and thought that the supply of fresh foods from the farms was to be stopped. Milner, too, opposed the idea because he feared legal difficulties over ownership. This powerful and (at this stage of the war) unusual combination succeeded in getting the decision reversed. In return Kitchener agreed to ensure that the farms were limited to production for the army.[34] Evidently some surplus produce had been marketed.

By the end of the war there were some seventy of these farms operational. No rent was paid but after the war the land was returned to its owners, often much improved. Traction was usually free as the weakened oxen handed over by the columns could be used for light farm work to help their recovery. Debiting the farms with the cost of all equipment, supplies and labour used and crediting them with the value of their produce at local prices they made over £25,000.[35] The amount they produced may be estimated from a request in

34. Secretary of State to Lord Kitchener 20 December 1901
Lord Kitchener to Secretary of State 28 December 1901
Secretary of State to Lord Kitchener 6 January 1902
Lord Kitchener to Secretary of State 7 January 1902
Secretary of State to Lord Kitchener 8 January 1902
Lord Kitchener to Secretary of State 9 January 1902
Secretary of State to Lord Kitchener 15 January 1902
Lord Kitchener to Secretary of State 16 January 1902
Ibid nos. 15864, 15963, 16076, 16105, 16124, 16138, 16235A and 16255.

35. Evidence of Col. Morgan to the Elgin Commission P.P. (Eng.) 1904 XLlq18464 - 18466

May 1902 for 85 tons of potatoes and fifty tons of onions each week, to cover the season when the farms were unproductive.

The Despatch of Food for the Field Force.

Even the requirements of the increased garrison in South Africa before the war had placed a considerable strain on the supply department, and though demands for meat and biscuit for the garrison were met, after consultations by the Army Board, hay and oats asked for were ordered to be purchased locally and this source proved inadequate long before the field force arrived.

On October 2nd 1899 the chief officers in the Cape Colony and Natal were instructed to take over from mule ships any unexpended forage.[36] To ensure there was some, the remount officer at New Orleans was authorised by the DAC. to load hay up to a total of 1000 tons on vessels bound for South Africa. On 21 October the GOC cabled that oats were urgently required and that 5,000,000 pounds should be sent at the first opportunity. Four days later he cabled that a complete failure of grain was feared unless large supplies were shipped immediately to both colonies. The War Office replied that 3,183 tons were already on the sea in five different ships and that further shipments would follow. The telegram added that all men and horses coming out brought with them fifteen days shore rations.[37]

36. Secretary of State for War to GOC South Africa 2 October 1899. WO 108 66

37. GOC. Cape to Secretary of State for War 21 October and 25 October 1899 and Secretary of State for War to GOC. Cape 26 October 1899. Ibid.

This reassurance, though doubtless welcome, did not remove anxieties. The provision of fifteen days supplies was a standard part of mobilisation arrangements and was not a new factor in the calculations. Thus on October 25th the General commanding communications in Natal cabled that he could, with help from the Cape and local purchase, keep up forage supplies but that unless more supplies were coming from India 374,000 pounds each of meat and biscuit should be sent immediately. To this the War Office could only reply that they were sending food as fast as possible.[38]

Anxieties about the supply situation were widely shared in England and South Africa and were the inevitable result of the refusal to sanction expenditure earlier. By the end of October ample supplies had been ordered, but to order them was not to place them in South Africa. The average period between the order for supplies and their arrival in South Africa was about three months.[39] There was then a further delay while supplies were distributed to the troops. Thus when urgent expenditure was authorised for all departments on September 22nd it was far too late. The QMG ordered one month's supply of food and forage on that day and one week later Lansdowne authorised full provision of supplies necessary to enable an Army Corps, Cavalry Division and line of communication troops to proceed to South Africa.[40] By 2 October the QMG was able to report to the Army Board that he had ordered two months supplies for the above force. Also at that meeting Clarke, benefitting from Brackenbury's forceful argument that the system under which the heads of departments worked was quite impracticable, was

38. GOC. Lines of Communication Cape to Secretary of State for War 25 October 1899 and reply 28 October 1899. Ibid. nos. 875A and 930.

39. Evidence of Sir C.M.Clarke to the Elgin Commission P.P. (Eng.) 1904 XLq2379

40. Proceedings of the Army Board 29 September 1899, para. 251 WO 108 79.

given a free hand to make such purchases as he might consider essential and urgent without waiting for authority.[41]

Though this was sensible and saved time for a number of people in England, it did not significantly reduce the time needed for the delivery of food to South Africa. Until the supplies, belatedly ordered, could reach South Africa the officers on the spot had to try and obtain sufficient food locally which, for reasons given earlier, was difficult. Food was purchased at any price and regardless of quality and ships stopping at any South African port with foodstuffs on board had them bought up.[42]

As described above an adequate supply of meat was obtained but other supplies caused much greater anxiety. Even using everything the War Office sent out and buying everything available in South Africa or on ships calling there, Richardson, the Director of Supplies, was unable to do much more than feed the arriving troops and start a small reserve. By the end of October he had three months rations for 13,200 men and 10,700 animals in forward stations in Cape Colony which was quite inadequate for an operational reserve, even for the original field force of 63,000 men and 25,000 animals, excluding oxen.

Buller arrived on October 31st expecting to find two and a half months supplies for all forces. When he discovered the true position he wrote a strong letter of complaint to the War Office and demanded that four months supplies should be maintained in South Africa as a reserve.[43] While the letter was on its way he complained and demanded

41. Ibid 2 October 1899 para. 281.

42. Evidence of Sir Wodehouse Richardson to the Elgin Commission P.P. (Eng.) 1904 XLq3403.

43. Evidence of Sir Wodehouse Richardson to the Elgin Commission P.P. (Eng.) 1904 XLq3407, 3413, 3416

by telegram. On November 1st he estimated the numbers for whom three months reserves should be maintained at 70,000 men and 35,000 animals. He added:

> Reserve supplies as well as supplies that can be obtained in local purchases almost exhausted. Supplies of everything but flour, fresh meat, should be sent here in fast steamers.[44]

It is not clear why, after sending a letter demanding a four month reserve, Buller should cable on the assumption of a three month reserve, particularly when the usual reserve was calculated at two months. Perhaps Buller thought that if the Home authorities agreed to a three month reserve demanded in his telegram his demand for four months, when his letter arrived, would be more easily accepted. Perhaps it was another sign of indecision. Most likely it was just a mistake.

Whatever the reason both were accepted. On 16 November 1899 the QMG recommended that a reserve of ninety days be worked up to and maintained, giving Buller's representations as his reason. The Army Board agreed. A week later Buller's letter was put before the Board. It said that four months reserves were an 'absolute necessity' and the Board recommended that the demand should be complied with.[45] By that time a total of four months complete supplies had been ordered.

None of this, however, had any immediate effect on the position

44. GOC. South Africa to Secretary of State for War, 1 November 1899. WO 108 66 no.983.

45. Proceedings of the Army Board 16 November 1899 and 23 November 1899, paras. 479 and 489. WO 108 79.

in South Africa and Richardson recalled later

> We had the greatest difficulty with regard to other supplies (i.e. other than meat) .... we kept cabling and cabling home to the War Office to hurry out supplies. We really did not know what to think when no supplies arrived.[46]

Some supplies, intended for the Boer States or Kimberley, were still in British hands waiting for despatch when the railways were cut. Such goods were seized but these fortunate gains were offset by the influx of refugees from Johannesburg. Richardson noted in October 'Tens of thousands of refugees are now at the ports eating up everything like an army of locusts'.[47]

In Natal the difficulty was not so great, if only because they kept, at first, to the more modest aim of a two month reserve. The officer responsible for supplies there at the start of the war was Colonel Ward, later described by Sir George White as the best supply officer since Moses. When Ward arrived on October 7th 1899, there were two months supplies for the small garrisons at Ladysmith (1870 men) and Eshowe (200 men) and one month's supply at Pietermaritzburg for 2000 men. More important there was at Durban, or due to arrive there, two months supply for the 12,000 men in or ordered to Natal.[48] To add to this Ward bought everything he could locally and exerted all his energies in filling up Ladysmith. By the start of the seige he had 65 days supply of breadstuffs, 50 days of meat, 46 days groceries and 32 days of forage there for the entire force. Without these efforts it

46. Evidence of Sir Wodehouse Richardson to the Elgin Commission P.P. (Eng.) 1904 XLq3402

47. Richardson: op. cit. p.42.

48. Evidence of Col. Sir E.D.Ward to the Elgin Commission P.P. (Eng.) 1904 XLq5697 & 5705 XLq5726 - 5734

would have been impossible to sustain the siege but it is possible that there might not have been a siege had not Ladysmith been so full of stores that it was impossible to withdraw them. Ward said afterwards that it would have been possible to collect the supplies anywhere in the colony, but that having collected them, using every train for several weeks, it was impossible to withdraw them.[49]

For the forces left outside Ladysmith the immediate stocks of food were quite large. For the reduced garrisons there were 65 days at Maritzburg, 100 days at Estcourt and Eshowe and 50 days at Colenso.[50] These stocks were known both in Cape Colony and in London and the authorities in both were, therefore, considerably surprised to get a large and urgent demand, including 200 tons of preserved meat and 50 tons of sugar, from Natal.[51] The basis for this demand was not clear, it was roughly one month's supply for the entire force in Natal, but as most of the force was in Ladysmith and could not be supplied until the town was relieved, the urgency of the demand was obscure, particularly as no relieving force could start until the landing of much larger quantities of supplies than those demanded. Perhaps the demand was for 50 days for the troops outside Ladysmith, made by the GOC lines of communication before he realised the stocks held. As Ward was caught in Ladysmith (the demand was sent the day after communication with the town was cut) it is not

49. Ibid.

50. GOC L. of C. Natal to Secretary of State for War, 2 November 1899. WO 108 66 no. 998A.

51. GOC South Africa to Secretary of State for War, 3 November 1899. Ibid no. 1013A.

unlikely that there was some initial confusion. Buller wrote to Wolseley:

> I am very glad I came as Sir George White does not seem to have understood the idea of the value of a separate organisation for a line of Communication - Except his CRE he kept everybody in Ladysmith and made no preparation for his L. of C.[52]

The confusion was also apparent to Richardson who wrote:

> There seem to be two officers in Natal, one at Durban sending everything away and another with the General of Communications at the advanced depot demanding immense quantities of supplies.[53]

As it happened the question of who the supplies were for and how urgent they were, were of formal interest only because the Cape authorities had none to spare and the War Office could only repeat that they were shipping food as fast as possible.[54]

In the Cape Colony, where things were much more serious, Richardson's diary recorded a growing anxiety. At the end of October

52. Wolseley Papers. Letters from Buller no. 8
53. Richardson op. cit. p.75.
54. GOC. South Africa to Secretary of State for War, 3 November 1899 and Secretary of State for War to GOC Cape 6 November 1899. WO 108 66 nos. 1013A and 1050.

he wrote.

> As regards supplies, I hear the C. in C. at home is under the impression that six months supplies for an Army Corps is already available in South Africa. No doubt this is a mistake. We have no reserve supplies here now.[55]

On November 7th he wrote: 'I anxiously await the arrival of supplies .... I am at my wits end to know what to do'.[56] A week later he noted that still no supplies had arrived except those that troops brought with them. On the 21st he recorded 'Every station is howling for supplies, but next to nothing has arrived so far'.[57] He began to grow sceptical of War Office Assurances: 'We constantly receive W.O. advices that enormous quantities of supplies have been ordered to be shipped; but as no ship is named and the supplies do not arrive we do not know what to think'.[58]

This was not quite true. In response to repeated complaints on the subject the War Office did cable the names of ships, their sailing dates and cargoes, but it was true that few of the supplies had arrived. Moreover the ration strength was steadily increasing. By the middle of November it had risen to 116,000 men and 51,000 animals in the two colonies and was expected to rise much more as volunteers and railway employees were engaged.[59]

55. Richardson: op. cit. p.42. Where he got the idea that Wolseley thought there were six months supplies is not stated. There is no other evidence for it and it seems most unlikely. Wolseley was certainly getting very absent minded but this seldom took the form of crediting Lansdowne with great energy in military preparations.
56. Ibid p.58.
57. Ibid. p.62.
58. Ibid p.63.
59. GOC. IN C. to Secretary of State for War 16 November 1899. WO 108 66 no. 1263.

More troops were also sent from overseas as the military situation grew increasingly serious. Between November 1899 and January 1900 four infantry divisions, a cavalry brigade, four brigade divisions of artillery and twenty militia battalions were ordered out from England, together with two regular battalions from the Mediterranean and a cavalry regiment and two horse artillery batteries from India. Had any significant part of these reinforcements reached South Africa before large scale food shipments, the efforts of local supply officers must have been swamped, but the period of danger was coming to an end. On 28 November Richardson noted in his diary: 'Supplies are beginning to arrive.'[60] and on 20 December that 'I no longer have to search the horizon for a ship which I hoped would contain supplies but which generally brought troops who at once began to eat the little food I had collected'.[61]

Shortly thereafter the South African ports were deluged with supplies. The huge quantities ordered were now all being delivered as well as the estimated monthly needs of the force which were sent month by month. Richardson said later that after the first week of December (1899) they were never short of supplies again.[62] Buller, who had maintained a barrage of complaints to the War Office, also began to be satisfied. On 2 December he received a gentle remonstrance from the War Office saying that supplies of all sorts had been sent as quickly as possible, some in mail steamers (one of Buller's suggestions to speed things up) and some in specially chartered ships. He was assured that authority for a 120 day reserve had been

60. Richardson: op. cit- p.63.

61. Ibid. p.76.

62. Evidence of Sir Wodehouse Richardson to the Elgin Commission P.P. (Eng.) 1904 XLq3443.

given 'but this must of necessity take time'. He was told to report in due course whether supplies were arriving to his satisfaction and five days later he conceded that they were.[63]

An abrupt change of tone is recognisable, at this stage, in the telegrams exchanged between England and South Africa about supplies. The note of desperation disappears from South Africa and the mixture of apology, reassurance and exasperation at being abused for not doing the impossible, goes from the War Office messages. The scale of work needed did not much diminish but there was a new air of confidence on both sides.

The only shortage that remained when the mountains of food began to reach South Africa was of emergency rations. Buller cabled on November 20th that some troops had landed in Natal without such rations and that all troops leaving England should have them,[64] and was told that emergency rations were not drawn by units on mobilisation. It is curious that these rations were not drawn by troops on the one occasion they might need them, particularly as they were supposed to carry them at all times when on active service. The cable added: 'Supply has run short, further supplies are being expedited'.[65] This deficiency was remedied by about February 1900 by which time 434,000 emergency rations had been shipped. Apparently this, with the normal monthly shipments, met all requirements for the next mention of them from South Africa was in June 1900 when the War Office was asked to send no more until further notice.

Emergency rations and supplies for reinforcements apart, there were few demands for any sort of foodstuffs for a considerable time.

63. Secretary of State for War to GOC. in C. 2 December 1899 and reply 7 December 1899. WO 108 66 nos. 1546 and 1651.

64. GOC. in C. to Secretary of State for War 20 November 1899. Ibid no. 1314.

65. Secretary of State for War to GOC. Cape, 24 November 1899. Ibid no. 1383.

There was a steady increase in reserves as fleets of ships disgorged their cargoes into ports that were rapidly becoming blocked and, far from demanding increased supplies, officers in South Africa began to ask for shipments to be suspended. On 10 January 1900 the despatch of flour was stopped and on the 25th the GOC Cape asked for cheese shipments to be halved. By the middle of March coffee, tea, chocolate and hay had reached the authorised levels for the whole of South Africa while the Cape was also adequately supplied with salt and oats and Natal with pepper and bran. The continuous deluge of supplies had by this time completely blocked the ports and, at the end of March 1900, the War Office was told to send no more biscuit, flour, pr-eserved meat, groceries or forage until further notice.[66] A few days later they were also asked to stop shipments of jam, tobacco, alum, lime juice, candles, cheese and rum.[67] The contrast between these cables and the near panic demands of November 1899 is a measure of the success of the supply department. In fact it was no more possible to stop the operation instantly than it had been instantly to place huge quantities of supplies in South Africa. Ships continued to be sent for the next fortnight and to arrive for the next six weeks. Thereafter they did stop and the War Office, no doubt anxious to avoid any repetition of the frightening early days of the war, sent a reminder that any further supplies should be ordered at least two months before they were wanted.[68]

66. GOC. Cape to Secretary of State for War 28 March 1900. WO. 108. 67. nos. 4344.

67. Ibid 5 April and 6 June 1900 Ibid nos. 4567 and 6002.

68. Secretary of State for War to GOC. Cape 12 April 1900. Ibid no. 4741.

Distribution of food within South Africa.

At the outbreak of war small food depots were scattered throughout South Africa to support the garrisons then in the country. There was forty days' food at Kimberley and the same at Mafeking where there was also a private store of about 400,000 rations and considerable forage without which the lengthy defence could not have been maintained. There were supplies for 30 days at Orange River, 80 days each at De Aar, Naauwpoort and Stormberg. In Natal there were 65 days supplies for the garrison.[69]

Richardson wanted to collect three months supplies for 12,000 men and 5,000 animals at De Aar, Naauwpoort and Stormberg[70] but there was just not enough food to do this and still leave sufficient in the base ports. Moreover, as he recognised, to establish large food stores before troops arrived to guard them was to invite capture. Conversely, if troops were sent up before a reasonable quantity of supplies had been collected they could not maintain their position. Ultimately this difficulty could not be resolved as the railway capacity did not allow troops and food to be sent up simultaneously, and it came to a question of weighing the risks. At Orange River and De Aar supplies worth £500,000 were amassed with very few guards[71] while at Stormberg and Naauwpoort the risks were judged too great.

By the end of November 1899 three months supplies for 56,800 men and 28,000 animals were distributed in South Africa in depots on the

69. Richardson: op. cit. pp.25-6.
70. Ibid p. 27.
71. Evidence of Sir Wodehouse Richardson to the Elgin Commission P.P. (Eng.) 1904 XLq3405.

western, midland and eastern railway lines in the Cape and along the Durban - Colenso line in Natal.[72] Apart from this a depot of 28 days supplies for Methuen's force was formed at the Modder River and he had fresh bread and meat trained up daily from the Orange River Station. By the middle of December the supply problem had become, and was to remain, largely a transport problem; there was food in plenty in the docks or on ships waiting to berth.

As well as the problem of setting up depots, demands from field commanders were sometimes so large that, in the early days, the still small forward depots were unable to meet them and these demands, too, had then to be met from the base ports. Such demands were occasionally made in times of stress without considering if they were really necessary. These signs came to be recognised by the supply officers.

> When I receive a huge telegraphic demand for preserved provisions I am now pretty certain that we have had an unsuccessful engagement; lime juice is a sure sign that our troops have suffered a reverse and that the ASC. officer is afraid railway communication will be interrupted.[73]

Even with the build up of supplies there were still difficulties and frustrations. There was a hiatus when Buller was superseded because nobody knew Roberts' intentions. There were also locally created difficulties and minor supply problems were endless. Early in

72. Richardson: op. cit. p.65. For more details of the distribution see Appendix ∈

73. Ibid p.74.

January 1900 Richardson recorded some of his troubles in his diary.

> When one general sells or gives away quantities of food to Boers and then complains he has insufficient for his own troops; when another builds supplies and wagons into his defences; when one colonel doubles the grocery ration at his station without troubling to see how long his supplies will last and without reporting what he has done; when another draws bread in the morning for his battalion, leaves it out in the open during a thunderstorm to spoil, and then demands and obtains a second issue in the afternoon, it is almost time to put one's foot down.[74]

Some of the difficulties were bizarre. For three days after Spion Kop the meat ration for the Natal force was increased to one and three quarter pounds daily. One company commander told an already harassed supply officer that nineteen of his company were vegetarians and asked what substitute could be offered for the extra beef ration. He was brusquely told to turn them out to graze.[75]

The change of front when Roberts arrived required a great deal of work but supplies were by then arriving so rapidly that there were no serious difficulties. Early in February a total of 2,843,000 soldiers' and 1,460,000 animal rations were amassed between the Modder and Orange Rivers along the railway line. Moreover stores had also been sent up the other lines to await the opening of the direct route to Bloemfontein. 2,000,000 soldiers' and 1,000,000 animals' rations

74. Ibid p.79. The first general mentioned was probably Methuen who was trying to establish a market where he could get fresh meat and vegetables.

75. Bennet Burleigh: The Natal Campaign. London. Chapman and Hall. 1900. p.356.

were at De Aar, 1,500,000 animal and 2,000,000 troops' rations had been placed along the Port Elizabeth-Naauwpoort-Arundel line and 1,500,000 soldiers' and 700,000 animal rations waited on the East London-Queenstown-Sterkstroom line.[76] It was recognised that some delay at Bloemfontein, while the town was filled with sufficient supplies to permit a further advance, was inevitable but these dispositions ensured that it would be kept to a minimum whichever railway was opened first.

All these precautions would have been quite adequate for the march to Bloemfontein but for the disastrous loss of the main convoy. 150,000 soldiers' and 30,000 animal rations were lost and troops were immediately put on half rations. Moreover Roberts' determination to press on required some of the slaughter cattle to replace debilitated transport animals. This culminated in Richardson finding that he had two oxen with which to feed 35,000 men on the following day. He immediately, but illegally, published an offer of one pound for every ox brought to him and one shilling for every sheep. What Lord Roberts thought of the resulting dispersion of effort is not recorded but the next day Richardson got 600 cattle and 2000 sheep and thereafter always had plenty of meat.[77] Indeed, while grocery and breadstuff rations remained cut an extra meat ration was issued.[78]

The position on reaching Bloemfontein was potentially dangerous. The army, whose supplies had been replenished during the halt at

76. Richardson op. cit. p.85. For more details of the distribution see Appendix F.

77. Ibid p.99.

78. Evidence of Lord Roberts to the Elgin Commission P.P. (Eng.) 1904 XLq10843

Paardeburg, had only eight days' groceries, five days' bread and one day's forage in hand.[79] Not only was the railway to the Cape closed but considerable Boer forces still lay to the south. There was great relief when Richardson was able to find about 27 days supplies in Bloemfontein itself.

Once the railway was open supplies were poured into Bloemfontein in preparation for a further advance. Ward, who had been freed by the relief of Ladysmith, took over as Director of Supplies for the field army and Richardson returned to the Cape as DAG for supply and transport on the lines of communication. Despite their efforts it was weeks before the army was able to move forward. Rail capacity was limited, the demands of other departments pressing and the force ate daily between 800 and 1000 tons of any supplies sent up.[80]

Baking caused difficulties not merely because of the numbers involved but because of poor organisation. According to the mobilisation tables the field bakery was a Corps unit. Logically this would have required bread for 35,000 men to have been baked at one time which was clearly impracticable. Even under a more reasonable system there were far too few bakers and those there were lacked equipment. In December 1899 Richardson asked for every steam baking oven available, six oil-engined dough making machines and fifty more bakers. The War Office replied that 24 ovens of various patterns were being procured but that oil-engined machines for dough were not recommended and they proposed to send manual ones. Richardson then asked for machines powered by

79. Ibid.

80. Richardson op. cit. p. 112.

whatever was most suitable and said that he could provide coal for them if necessary.[81] Five months later the dough making machines duly appeared in Bloemfontein. They were not powered by anything and the two men required to work each machine could only make dough at roughly the rate of one man without it.[82]

Despite such difficulties supplies were maintained. At the end of June 1900, while all the depots mentioned earlier were kept adequately stocked for the forces working from them, additional depots in the Free State, at Springfontein, Bloemfontein, Winburg and Kroonstad, contained a total of six weeks rations for 40,000 men and 10,000 animals. Similarly, in the Transvaal, depots at the Vaal River, Johannesburg, and Pretoria had six weeks food for 77,000 men and 31,000 animals. In Natal there were supply depots at points on the railway line as far north as Newcastle with over four months supplies for the 53,000 men and 20,000 animals there. There were base reserve depots with large stocks at the four ports and these replenished the inland stores as required. As troops moved farther from the coast and Boer raids on the railway line became more frequent more intermediate depots were established.[83]

81. GOC. Cape to Secretary of State for War 16 December 1899, Secretary of State for War to GOC. Cape 23 December 1899 and GOC. Cape to Secretary of State for War 27 December 1899. WO 108 66 nos. 1842, 2009 and 2077.

82. Richardson op. cit. p.113.

83. Ibid pp. 120-124.

Resumption of supplies from England and reorganisation in South Africa.

Naturally these additional depots and the normal consumption of food gradually reduced the reserve built up and demands on the home authorities were resumed. In the interim the men of Carrington's Rhodesian Field Force, by now 5000 strong, had been added to the ration strength and responsibility for supplying the garrison and prisoners of war on St. Helena was placed on South Africa. As a result, at the end of May 1900, sizeable quantities of groceries were asked for and in June biscuit and meat were demanded. Thereafter demands for supplies of all sorts began to increase. Once again a note of urgency is evident; on 12 July Forestier-Walker cabled that if no biscuit had by then been shipped a quantity should be put on the nex-t mailboat and six days later he cabled that the biscuit would soon be urgently required.[84] This seems to have been a little overanxious. The statements of supplies, which were cabled fortnightly throughout the war, show a store of 10,800,000 pounds on the date in question which would be about fifty days supply, and as there was a rather larger quantity of flour, also in hand, more than three months breadstuffs were available.

It may be that the memory of the dangerous early period of the war created unnecessary nervousness in both England and South Africa. In August the War Office started to ship food on its own estimates of what would be required, while ensuring that intermittent demands from South Africa were met. This caused some confusion. In the middle of August 1900 the War Office proposed

84. GOC. Cape to Secretary of State for War 12 July and 18 July 1900. WO 108 68 nos. 6808 and 6938.

to send enough preserved meat, coffee, tea and lime juice for one month; biscuit, sugar, salt, pepper, compressed vegetables, rum, jam, hay, oats and bran for two months; and 100,000 pounds of candles. This proved not to be what was wanted at all. No more preserved meat was wanted for at least two months, only one month's coffee and compressed vegetables and no lime juice at all were wanted but tea was needed for two months instead of one.[85] Then, twelve days later, Forestier-Walker sent a huge demand including 7,000,000 pounds biscuit and 47,000 gallons of rum. The demand was made no clearer by adding that much of it had already been cabled for.[86]

Whether the War Office understood exactly what was the total demanded is not clear. They replied that certain supplies in excess of quantities demanded were on their way to keep up a four month reserve, and that deliveries would be spread over three months to try and avoid blocking the ports.[87] This seems to have been good enough for demands slackened off again though there were still some large ones including, in September 1900, one for 3,000,000 pounds of preserved meat none of which, it had been said three weeks before, would be wanted for at least two months. But such demands were rare and the fortnightly statements of supplies show a fairly constant high level.

The change that came over the war after Roberts' departure affected the supply department as it did all the others. The Natal

85. Secretary of State for War to GOC. Cape and reply, 14 and 16 August 1900. Ibid nos. 7630 and 7686.

86. GOC. Cape to Secretary of State for War 28 August 1900, Ibid no. 7925.

87. Secretary of State for War to GOC. Cape 31 August 1900. Ibid no. 7972.

force was merged with the main army and the Director of Supplies for Natal, Colonel Morgan, took over as Director of Supplies for South Africa. Ward and Richardson went home, the former to become Permanent Under Secretary at the War Office. Kitchener's policy to combat the guerrilla tactics of the Boers was to have columns moving all over the country clearing their areas of Boers and supplies that might be useful to them. But an area cleared of all supplies was as inhospitable to the British as to the Boers so the policy required a multitude of depots, stocked with every type of provision, at which the columns could replenish their supplies. To maintain a suitably large reserve in all areas meant that in South Africa as a whole much larger reserves than previously had to be maintained particularly of forage, for all the columns were mounted. Thus one of the first demands made, when Kitchener took over, was for an additional 10,000 tons of oats monthly until further notice.[88] As well as this the number of men to be fed was steadily increasing as prisoners and destitutes were added to the ration strength. By December 1900 the supply department was feeding some 230,000 men.

As a result demands grew in size and frequency and the QMG suggested that it would be simpler to resume the system of monthly shipments of all commissariat supplies based on the ration scales, with supplementary demands being made from South Africa when necessary. The GOC Cape, who had already written making the same suggestion, agreed. He stated that the shipments should aim at maintaining in South Africa or on the sea 27,000,000 rations each

88. GOC. Cape to Secretary of State for War 29 November 1900. WO 108 69 no. 9531E.

of biscuit and preserved meat; 42,000,000 rations of all groceries; 21,000,000 rations of compressed vegetables, lime juice and rum; and 95,000 tons of assorted forage.[89] These totals were considerably more than those previously considered adequate. Apart from reasons mentioned for this there was a desire to keep an increased stock at the five base ports (Lourenco Marques could now be used) to provide for sudden demands, prisoners about to embark, depots newly established, the needs of flying columns entering districts previously unoccupied and to replace the contents of lost convoys.

As before the speed and scale of the despatch of supplies from England proved too much for the South African ports and railways to manage. More rail capacity than had been anticipated was needed to move troops to meet sudden threats and the ports could not be cleared fast enough with what was available. Moreover the War Office apparently underestimated the issue of fresh meat and bread when calculating the quantities of preserved meat and biscuit and, in February 1901, the GOC Cape asked that the shipment of these supplies be stopped for two months. The War Office agreed to do this as soon as practicable while pointing out that the authorised reserve had not been reached and the strength to be fed was increasing.[90] This was exactly what had happened before and as, after the first dangerous period, there was never any liklihood of food running short it suggests that the

89. Secretary of State for War to GOC. Cape 2 January 1901 and reply 7 January 1901. Ibid nos. 10049 and 10150. A later telegram reduced the demand for forage to 75,000 tons a month, partly because large purchases were being made locally to prevent the Boers getting it and partly because any larger quantity would merely block the ports. The additional grocery rations were to compensate for considerable pilfering.

90. GOC. Cape to Secretary of State for War 12 February 1901 and reply 20 February 1901. WO 108 70 nos. 10780 B and 10919.

reserve had been set much too high. When the two month suspension had elapsed the War Office was asked to discontinue shipments of preserved meat, biscuit and cheese until further notice.

The supply situation was made a little easier at this stage by the transfer, for quite separate reasons, of responsibility for indigent refugees and undesirables to the civil authorities. In the first three weeks of May 1901 this was the main item in a reduction of the ration strength by 14,000.[91] In June 1901 shipments of chocolate, pepper, compressed vegetables and jam were stopped and those of sugar, pea soup, lime juice and salt halved but the respite was only temporary. On June 25th 1901 the number being fed by the army was 251,000 men, 173,000 horses and mules and 14,000 oxen.[92] In three months this rose to 312,000 men, 244,000 mules and horses and 64,000 oxen. Towards the end of July shipments of cheese, bacon and ham were called for. In September 1901 biscuit, salt and sugar were demanded and forage shipments were doubled. In December 1901 1,000 tons of flour a month was asked for.

Large demands of most commodities continued until the end of the war. Tobacco was discontinued in March 1902 but with a ration strength of 327,000 men and 265,000 horses and mules little else could be. Under Kitchener's system the proliferation

91. GOC. Cape to Secretary of State for War 23 May 1901. Ibid no. 12540. The aim of this move was, of course, to improve the administration of the concentration camps.

92. GOC. Cape to Secretary of State for War, 21 June 1901. WO 108 71 no. 13020B. 14,000 is a very low figure for oxen. Almost certainly 34,000 is meant but no correction was sent. A month later the figure was g-iven as 380,000 which is even more obviously wrong.

of depots and blockhouses (whose garrisons had to be able to stand alone for a few days if necessary) all of which needed supplies required ever increasing reserves of food. The ideal aimed at was that no brigade column should be more than two days from a depot which would have food and necessaries for a large force for months.[93] This had the further advantage that if one depot were raided it would have little overall effect. Anyway the only alternative would have been to increase the transport with the columns to enable them to keep the field longer between depots which was unacceptable because of the resulting reduction in mobility.

The Ration Scale and the Quality of Supplies.

The daily ration for troops in South Africa, as laid down in Army Orders of November 6th 1899, included one pound of biscuit or one and a quarter pounds of bread, one pound of meat, to be increased whenever possible, small amounts of tea and coffee, sugar, salt and pepper, and one ounce of compressed vegetables or half a pound of any fresh vegetables obtainable. There were also occasional issues of jam (four ounces), lime juice and rum. Later the amounts of tea and coffee were increased and jam became a daily issue.[94] Apart from relatively rare temporary shortages caused by tactical difficulties there can be no doubt that these

93. The Times 20th February 1901.

94. For the detailed ration scale see Appendix G

rations were actually issued to the troops.[95]

The successive Commanders in Chief in South Africa were all satisfied with this supply. Roberts admitted that the men were not always as well fed as during peacetime but said that the periods on reduced rations were short and that supplies were generally sufficient. Buller commented: 'I thought that on the whole the ration was good and the supplies were good'. Kitchener thought 'The supply of food and forage to the South African Field Force .... has always been sufficient and of good quality', though he did admit that 'there were occasions when the soldier did not receive quite his full ration, but this was due more to considerations of mobility'.[96] These sentiments were echoed by all the officers who spoke on the subject and endorsed by the report of the Elgin Commission. Colonel Morgan even thought the ration too much and, producing a ration biscuit for the Commissioners, commented 'No man living could eat a pound of that hard biscuit'. He recalled that in 1896 on the Nile he had fed 87 mules solely on the biscuit thrown away by one infantry regiment and that the mules 'came back quite fat'.[97] He forebore

95. The most obvious example was when half rations were ordered on the march to Bloemfontein after the loss of the main convoy. A unit could, of course, be unlucky and have to remain on short rations for a longer period because of a succession of small difficulties, for example, the 8th Division became known as the 'starving eighth' when this happened. There may have been reasons other than luck for the repeated failure of this Division to meet the convoys prepared for it. It was a scratch, slow-moving Division and its commander, Sir Leslie Rundle, became known as Sir Leisurely Trundle. W.S.Churchill: My Early Life: The Reprint Society. London. 1944. p. 352.

96. In evidence to the Elgin Commission P.P. (Eng.) 1904 XLq10501, XL1q15545, XLq190.

97. Evidence of Col. Morgan. Ibid. XL1q18400.

to comment on the condition of the regiment.

This reminiscence does not prove what he evidently thought it did. That men were sometimes unable to finish quantities of a near inedible biscuit is not evidence that they were not hungry, and despite the unanimous testimony of officers to the contrary there is clear evidence that the diet was inadequate. There were many complaints of hunger. One trooper wrote home: 'I have learnt by experience what to take and have stuffed my saddle wallets full of food and nothing else'.[98] Another wrote: 'I have gone from door to door in some towns asking and begging for bread', and another: 'For the last month weariness and hunger have been the only sensations we have been capable of'.[99] Cases of neurasthenia were numerous.[100] Experiments carried out in 1909 showed conclusively that men on these rations lost weight and girth and became haggard and worn.[101] The calorific value of the ration was less than that given to a convict of the day doing hard labour and was quite inadequate to meet the exertions and strains of active service. The ration was particularly low in fat and sugar and though, later in the war, the daily issue of jam partially remedied the sugar deficiency the others remained. In 1913 a new field ration was authorised with a calorific value 25 per cent greater than that of the South African ration.[102]

98. H.S.Gaskell: With Lord Methuen in South Africa. London. 1906. p.54.
99. Both quoted in Hansard LXXXVI col.1578.
100. Maj. P.S.Lelean RAMC: Sanitation in War. Churchill. London. 1915. p.9.
101. Report on two Experimental Marches carried out for the purpose of deciding a scale of Field Service Rations. 1913. P.P. Eng. 1914 LI p.659ff.
102. Ibid and Lelean op. cit. pp.8-10.

It is strange that none of the staff, regimental or medical officers in the war appear to have noticed this deficiency. One reason may have been that the bare ration was not always the only food available. Additional issues of fresh foods such as meat and vegetables were made when possible. Other foods might be purchased through the Field Force Canteen, a completely new department, organised by Colonel Morgan. It was a phenomenal success from which was to grow the NAAFI. Morgan started in Natal aiming to sell food, necessaries and small luxuries at the cheapest possible price. Troops' necessaries were sold at just under cost, troops' luxuries and officers' necessaries at just over cost and officers' luxuries at three per cent over cost. When the two armies joined in the Transvaal the system was extended to cover the whole of South Africa and turnover and profits soared. Morgan registered the Canteen as brokers in all four colonies and claimed one per cent brokerage on all transactions which, with a monthly turnover of £500,000 towards the end of the war, gave a considerable extra profit. All the profits from the enterprise were returned in various ways to the soldiers. In Natal £14,000 was distributed to the next of kin of the dead. All the wounded in South Africa received gratuities and as each regiment left the country it was given £200 for its Regimental Institute. At the end of the war the Canteen, with a balance of £470,000, was remodelled as the South African Garrison Institute and the money used to erect club houses and similar facilities and to provide working capital.[103]

No such institution was available to supplement the forage ration and it is even clearer that this was insufficient despite

103. Evidence of Col. Morgan to the Elgin Commission P.P. (Eng.) 1904 XLq18432 - 18436

the quantities sent to South Africa. The ration, which was set at twelve pounds of grain for horses and eight for mules with an allowed substitution of two pounds of hay for each pound of grain up to a maximum of eight pounds of hay, was based more on the availability of transport than on animals' needs. The acting Principal Veterinary Officer protested that it was a starvation diet and was proved right. Indeed it was implied in the very order that gave the ration for it added that in depots near the coast, when sufficient forage was available, large horses should get twelve pounds each of hay and grain, other horses should get ten pounds each and mules eight pounds grain and six pounds of hay.[104] In other words, when there was no transport difficulty, the ration for animals doing little or no work was almost double that for animals doing the most strenuous work. Moreover it was not always possible to issue even the authorised ration.

The record for the quality of foodstuffs was much better, largely because of the ruthless inspections. Most forage condemned in South Africa had been damaged on the voyage. Fires in hay ships were not particularly rare and if the hay was shipped wet or got wet on the voyage, which was very likely to happen to deck cargoes, it was often unusable, but the quantities involved were small. August 1900, when of 34,614 tons of assorted forage 1,353 tons were unfit for issue, was a quite exceptional month. Nearly 850 tons of this was from one damaged deck cargo. Mishaps to deck cargoes were so frequent that in September 1900 the authorities in London and South

104. Army Standing Orders 6 November 1899 quoted in Richardson op. cit. p.52.

Africa decided, independently, that no more should be sent.[105]

There were also various complaints of foodstuffs for human consumption. In March 1901 67,000 pounds of one brand of jam was destroyed after analysts had found it was made from bad fruit and had, moreover, absorbed appreciable quantities of zinc from its container.[106] Similar metallic contamination was found in certain brands of lime juice.[107] Generally, if serious fault was found with a consignment no more of the brand would be accepted and this may have helped to reduce instances. For example, when a brand of condensed milk was found to average one bad tin per case, 250,000 tins were scrapped and replaced by those of another brand.[108] Only rarely was inferior or adulterated food deliberately offered by a contractor. One such item, which passed inspection and reached South Africa, was a consignment of butter. It turned rancid and, after analysis, proved to contain large quantities of boracic acid coloured by a coal tar dye.[109]

Also rare was deterioration from age, as the turnover was too great. An exception was emergency rations, consumption of which was 'nominal'. The first discovery that some of these had gone bad was made at Woolwich and the authorities in South Africa were told to inspect their own stocks. About 500,000 of all brands

105. GOC. Cape to Secretary of State for War 20 September 1900 and DAC. to GOC. Cape 24 September 1900. WO 108 68 nos. 8300 and 8351.

106. Ibid 12 March and 3 April 1901. WO 108 70 nos. 11263 and 11624D.

107. Secretary of State for War to GOC. Cape 11 July 1901 WO 108 71.

108. GOC. Cape to Secretary of State for War 10 May 1900 WO 108 67 no.5443 and 13 August 1900 WO 108 68 no.7611.

109. GOC. Cape to Secretary of State for War 27 November 1901. WO 108 72 no.15508.

were found bad and subsequently destroyed.[110]

Losses of tinned meat were also sometimes due to age. In one case this came from careless purchasing for one brand bore labels saying that tins should not be kept more than two or three months. As the reserve was four months it should have been obvious that these were unsuitable. Some meat went bad because of careless crating, tins being punctured with the nails used on the crate. Sometimes this was only discovered when the meat was opened, at others it was more obvious. Gases from putrefaction made some tins swell so much that the lids were forced off their packing cases. The quantities involved were not significant, barely a hundred tons. When it is remembered that, in the later stages of the war, the reserves of food had a gross weight of some 250,000 tons and there was a steady turnover to allow the army to consume about 1500 tons of food and forage daily,[111] the examples of bad supplies mentioned may be seen in their true perspective.

Water Supply.

The supply of water presented different problems from other supplies. It could neither be stored in adequate quantities in convenient places nor transported with a force for any long period. As a result marches had to be in stages that would take the force involved to sufficient supplies. Intelligence on the whereabouts, quality and capacity of wells and dams was good and enabled commanders to make the fullest use of available sources. Because

110. Secretary of State for War to GOC. Cape 8 October 1901 GOC. Cape to Secretary of State for War 5 December 1901 and 30 January 1902. Ibid nos. 14718, 15638 and 16457.

111. Richardson: op. cit. p.141.

the need for water is so imperative there was no question of not meeting it. There was much hardship from thirst but, except temporarily in battle, it was never allowed to become too serious. Even in battle efforts to supply water were often successful; at Spion Kop water was carried up the hill in biscuit tins.[112] It was, however, difficult to get water to the firing line and this sometimes produced dangerous symptoms. Lord Esher wrote:

> Young A.Douglas told me some wonderful (sic) stories about the thirst madness which overcomes the men in battle. One of the worst wounds anyone got in his company was from a man who .... bit him under the arm, to try and get a drink of his blood. Many of the men sucked their own blood, driven mad by thirst.[113]

Out of the heat of battle, however, a sufficient supply of water was generally maintained, though only with great difficulty. The original provision of one water cart per battalion was quite

112. Col. Morris AAC. to GOC. 5th Division 28 January 1900. Roberts Papers WO 105 5.

113. Esher to M.V.B. 25 May 1900. Letters and Journals of Lord Esher. London 1934. Vol. 1 p.264.

inadequate[114] and the tank carts (each holding 100 gallons) were almost impossible to clean.[115] There were, too, water barrels to be carried by mules but the two barrels needed to give a balanced load were far too heavy for one mule.[116] Because of these difficulties, and the scarcity of water in South Africa, Roberts asked for 2000 Indian water carriers and these helped greatly.

The quality of water was often poor. Sometimes this was unavoidable, sometimes it was avoidable and due to gross carelessness. There was, too often, no check on supplies, no sentries on impure sources and no signs directing men to the

114. The carts allowed 100 gallons of water per battalion of (at full strength) 1,024 all ranks. Daily water requirements of each man were: in barracks 20 gallons; in standing camp when clothing was washed 5 gallons; other camps 3 gallons; bivouacs (drinking and cooking only) 1 gallon; drinking only (minimum) 3 pints. In addition to the men there were the animals. Horses needed 10 gallons a day, oxen 8 gallons and mules 6 gallons each. Lelean op. cit. p.218.

115. Reports by Officers Commanding Units in South Africa 1899 to 1901 Vol. V. WO 108 76.

116. MacDonald to Kitchener 30 January 1900. Kitchener Papers PRO 30 57/17.

nearest pure source.[117] Roberts recalled 'I remeber finding a hospital at Bloemfontein pitched immediately over the main water supply'.[118] Arrangements for purifying water were subject to great difficulties. Various filters were in use but they all had disadvantages. Even the best could not clear very muddy water and was so complex and fragile that it was easily broken.[119] The safest method was boiling but fuel was often too scarce and anyway the men disliked drinking boiled water.[120] Though the increased tea ration overcame part of this problem, as it was designed to do, the other difficulties remained. During the war 13,250 men died of disease, mostly typhoid, the major cause of which was polluted water.

117. Evidence of Prof. Alexander Ogsten to the Elgin Commission P.P. (Eng.) 1904 XLq11090.

118. Evidence of Lord Roberts. Ibid. XLq10452

119. Reports by Officers Commanding Units in South Africa 1899 - 1901. Vol. VI. WO 108 76.

120. Evidence of Surg. Gen. Jameson DGAMS to the Elgin Commission P.P. (Eng.) 1904 XLq11930.

Remounts

The Remount Department before the war.

The Remount Department (RD), like the other supply departments, had to face an unprecedented scale of activity during the war. Not only was the size of the army and the length of operations entirely unexpected but even the proportion of mounted troops needed was much greater than in previous campaigns. Moreover the wastage of horses was far beyond all previous experience. In the Crimea the annual rate of wastage had been 80 per cent, in South Africa it was 120 per cent.[1] The importance of the supply of horses was further enhanced by the unusual nature of the war. After Kitchener took over mounted troops provided most of the offensive power and infantry were increasingly relegated to garrison and communications duties. Thus the supply and care of horses was not only on a greater scale but was of more crucial importance to the effective prosecution of the war than ever before.

The department as it existed at the start of the war was quite unfitted for such a responsibility. It was relatively new and had no experience of war conditions. Before 1887, when the RD was established, cavalry regiments were horsed by their respective colonels and special officers bought horses for the artillery and engineers. Since 1887 no major English mounted contingent had been required for war, the government of India provided horses for the Indian army and other garrisons outside the United Kingdom included only two cavalry regiments and four field batteries between them. So in the whole of its existence the job of the Remount Department had, in practice,

1 Report of a Court of Enquiry on the Administration of the Army Remount Department. (Hereafter Remount Court.) PP 1902 LVIII p.19.

been to supply the peacetime needs of the home army which required the purchase of about 2,500 horses annually. The department had the additional duty of preparing to meet the requirements of mobilisation of up to two Army Corps (the maximum envisaged in the Stanhope Memorandum). This was done by maintaining a register of reserved horses which in an emergency could be bought up immediately. Under this system an owner undertook to provide so many horses of certain types which could be immediately bought at a previously agreed price. His stock was inspected annually to ensure that he could meet his undertaking (individual horses were not registered) and he was paid ten shillings a year per head. If he failed to produce the horses promised when they were demanded the owner could be fined £50 for each animal missing. It was laid down that 25,000 additional horses would be needed in the event of war,[1] though this took no account of supply or line of communication needs, or of wastage. On 28 December 1898 the reserve of registered horses stood at 14,558[2] and it was assumed the remainder could be procured on the open market.

Thus neither the purchasing nor the work needed to maintain the reserve was very onerous. It required only a steady routine by a small number of officers and clerks and these were not used to any sudden exertion. Moreover there was no preparation for any expansion that might be needed.

The Remount Department was a section of the Quartermaster General's Department (QMG 4) but in practice was largely independent. Unlike the heads of the other sections, who

1 Evidence of Truman to the Elgin Commission PP Eng.1904 XLI 12855.

2 Report of Committee on War Office Establishments WO 33 190.

were colonels, the Inspector General of Remounts (IGR) was a major general, General W.R.Truman. He was new to the post, having been appointed on 1 January 1899, but not to the department where he had been for seven years previously an assistant inspector of remounts (AIR). Though the QMG remained responsible he had little to do with the daily running of the department which, in peacetime, coped adequately enough. This independence was reinforced by a physical separation. Because of lack of space in the War Office itself several departments had had to find accommodation elsewhere and the Remount Department, shortly to be asked to horse the largest army the Empire had produced, was situated in a fourth floor flat in Victoria Street.[1] There was a single telephone line to the War Office.

A further consequence of the small scale of work done by the Remount Department was that all the horses needed could easily be found in the United Kingdom. The reserve, of course, had to be limited to the United Kingdom. As a result nothing was learned of foreign sources of animal supply. In 1886 three hundred horses had been bought in Canada for the express purpose of finding out about the potential market there but the then Secretary of State ordered that future purchases should be made within the United Kingdom. A single exception to this had been made in 1896-7 when 2,000 Argentine horses were bought for the South African garrison.[2] These were bought by Truman himself, then an AIR, and the knowledge gained was extremely valuable. Of course it would have been a simple

1 Remount Court. Report. PP Eng.1902 LVIII p.33.

2 Evidence of Truman to the Elgin Commission PP Eng.1904 XLI q.12880.

matter to gather information without actually purchasing. The Intelligence Department could have called for reports from military attaches in appropriate countries, but they were never asked to do so.[1] There was some information on mule sources in the IGR's office but it had not been updated since 1895. There was no information on horses and none was sought.

There was no good reason for this. The staff, though small, was not overworked by contemporary War Office standards. To deal with the tasks outlinedabove there were at the London headquarters the IGR, a Deputy Assistant Adjutant General (DAAG) mainly concerned with office work (which was largely a routine matter of printed forms), an AIR who registered horses and helped with purchase in England, and five clerks. They were rather crowded as it was a small flat. The clerical establishment was described by Truman as 'adequate' and he, alone of the QMG's section heads, did not foresee any need to increase the staff of his section to deal with an emergency.[2] There were four other officers in the Remount Department of whom two were at Woolwich dealing with horses for the artillery, engineers and the Army Service Corps, and two were in Ireland to buy cavalry and mounted infantry horses.

This staff would probably have sufficed for the purchase of the 25,000 horses thought to be needed in the event of war, but none of them could have been spared for overseas purchase which was clearly necessary as soon as a war in South Africa was contemplated. Much of the transport there had to be mule transport and mules could not be bought in any numbers from

1 Evidence of Sir Charles Clarke to the Elgin Commission PP Eng.1904 XLI q.12976 and to the Remount Court PP Eng.1902 LVIII q.4692.

2 Report of Committee on War Office Establishments WO 33 190.

England. As early as June 1899 Wolseley suggested to Lansdowne that officers should be sent to markets for mules to make arrangements to buy as soon as telegraphic instructions to that effect were received.[1] Nothing was done for five weeks but when on 15 July the QMG asked, with the backing of the Army Board, for authority to send officers and vets to New Orleans, New York, Charlestown, Spain and Naples it was quickly granted.[2] The first orders for purchase were sent to these commissions on 22 September (as soon as money was granted for essential preparations).

Small purchases of horses in South Africa were made from July 1899. There was a proposal to obtain a remount farm in Cape Colony which the GOC South Africa favoured but which was finally vetoed, after long negotiations, by the QMG. All the initiative in the months before the war seems to have come from South Africa rather than the Remount Department. For example on 1 September 1899 the GOC South Africa cabled

> Daily losing opportunity of direct purchase of horses and draught mules at a moderate rate from the Transvaal Republic and OFS ...
>
> I again urge steady local purchase of animals ... totalling say 600 draught mules and 200 MI cobs ...[3]

These were at last approved. Several hundred horses were bought in South Africa before the war to bring the garrison

1 Wolseley to Lansdowne 8 June 1899 PRO Cab 34/50 no.38.

2 Proceedings of the Army Board 15 July 1899 para.18 and 17 July 1899 para.23. WO 108 79. In fact nobody was sent to Charlestown at this stage as the GOC South Africa reported that 6000 mules were available in South Africa, but the others left before the end of the month.

3 GOC South Africa to Secretary of State 1 September 1899 WO 108 66.

up to strength and to mount local forces being raised by Special Service Officers.

However, draught horses for the Artillery and Engineers were unobtainable in South Africa and a purchasing commission was accordingly sent to Australia where it arrived on 30 September 1899. Its first task was to buy 260 draught horses to replace normal wastage in South Africa for the following year but when war came it had much more work to do. Presumably, like the mule commissions, it was sent as a precaution lest war should break out for otherwise the needs could have been supplied from England.

Less easily supplied from England were cobs, and since the supply in South Africa was believed to be limited a commission left for Argentina on 13 October 1899, two days after the war started. The animals which Truman had bought there for South Africa two years before had been well reported on. Moreover the fact of Truman's having been there and so being able to give information to the purchasing officers gave it an added advantage over other potential sources.

The procurement of animals.

All horses needed by combatant units leaving England in the first months of the war were found within the United Kingdom. Only 3,682 were actually taken from the reserve, the rest of the horses in the reserve were used as a threat to keep down prices in the open market. The commissions sent earlier to mule markets got their first purchasing orders on 23 September. The officers at New Orleans and Naples were ordered to get 3,000 mules each while 1,000 were ordered from

Spain.[1] Officers' mounts caused some difficulty. South African cobs were said to be unsuitable and enquiries made in the West Indies uncovered no supplies there.[2] On 4 October 800 cobs for officers were ordered from Ireland, Australia, (300 each) and Argentina (200). At the same time 1,600 Mounted Infantry (MI) cobs were ordered from Argentina and 700 from South Africa.[3]

As more troops were mobilised and sent out more horses and mules were needed to equip them and the sources rapidly became inadequate. As a result horses were bought in the United States from March and in Canada from May 1900. Also in March 1900 the RD took over from the Imperial Yeomanry who had been buying for themselves in Austria Hungary. Thereafter buying from all sources was more or less continuous.

Facilities in the countries of purchase varied. In Argentina the railways and accommodation at Buenos Aires were good as they had been built up to deal with a prosperous cattle trade.[4] In Canada the railways were good but the trucks were often poor. This led to much discomfort and some loss among animals, particularly as the distances were so very great. Calgary to Montreal is 2,264 miles and when the exhausted animals reached Montreal the only accommodation was the railway stockyards.[5] There were similar difficulties

1 IGR to Maj. Scobell, Col. Waldron, Maj. Williams all 23 September 1899 WO 108 66.

2 OC Barbados to QMG 27 September 1899 WO 108 66.

3 Proceedings of the Army Board 4 October 1899 WO 108 79 para. 301.

4 Remount Court. Report PP Eng.1902 LVIII p.9.

5 Ibid p.11.

in the United States but local laws governing the transport of animals ensured that on their long railway journeys they were periodically rested, fed and watered. This, or course, added to the time of the journey and one of the vets with the purchasing commission recalled 'it took very nearly as long to move them from the place where they were first purchased to our port of embarkation at New Orleans as it did to get them from New Orleans to the Cape.'[1] Accommodation at New Orleans and later at Kansas (which was used for a receiving station for animals bought well away from the East coast) was poor. This was finally overcome by the use of ranches at Chalmette, just outside New Orleans, and Lathrop near Kansas. In Australia such problems were avoided by buying only in the ports. Dealers were told what was wanted and it was left to them to bring suitable horses to the purchasing commission.

The system in Austria Hungary was rather different and was the subject of much criticism because of high prices and poor horses. There the whole operation was carried out by a single dealer named Hauser who established a monopoly of horse supply in the area, which covered much of Eastern Europe and European Russia. He was originally employed by the Imperial Yeomanry committee who had agreed to provide their own horses and had been asked by the IGR not to compete in the overseas markets he was using. The committee bought about 4,000 horses in England,[2] where individual Yeomen were often farmers and could offer, or knew where they could get, horses. Indeed

1 H.Sessions: Two Years with Remount Commissions. Chapman and Hall, London 1903 p.222.

2 Evidence of Col. Lucas DAG Imperial Yeomanry to the Elgin Commission PP Eng.1904 XL q.6655.

later in the war this knowledge might have been valuable to the Remount Department but it showed no interest.[1] Since the Yeomanry could not buy in the Americas and were told that few suitable mounts were available in South Africa, they went to Hungary. By the end of March 1900 when the RD took over horse purchase in Hungary (and responsibility for supplying the Yeomanry) the IY committee had bought some 3,800 horses there and Hauser had made himself virtually indispensable. The Remount Department adopted the system it found. Thereafter the monopoly became ever more firmly established and even had later officers wished to break it they would have been unable to do so. Some made enquiries of other dealers but they were found either to be unable to make large contracts or to be employed by Hauser.[2]

The reasons for this lay in Hauser's huge organisation. He had a network of 54 agents, each with several buyers. In some of the areas they worked in horses might have to travel for ten days before they even reached the railway. Once on the railway the services of station masters about every hundred miles were engaged to feed and water the animals. Halting places at Stryj[3] and Agram (Zagreb) for 1,500 and 3,000 animals respectively were established and there was stabling for 1,200 animals at Fiume. Nobody else could hope to offer such an organisation which Hauser had started to build when

1 Evidence of Col. the Earl of Scarborough to the Elgin Commission Ibid XL q.7283.

2 Evidence of Truman to the Committee on Horse Purchase in Austro-Hungary PP Eng.1902 X q.327-8.

3 I have been unable to locate this with certainty but Stryy 42 miles SSW of Lvov now in the Ukraine but then in the Austrian Empire seems the most likely.

he got the first Yeomanry contracts and had steadily improved thereafter. The criticism arose from the very high prices he was able to charge as a result.

The buying of mules in various countries was also by purchasing commission. In the United States the officer in charge, Colonel Scobell, dealt with large dealers as was done buying horses. He knew a great deal about Texan mule markets as, jointly with his brother, he owned property in Mexico. When he left the contacts he had built up continued to be used.

The Spanish authorities made available the Madrid bull ring which enabled the agent to bring together animals for final inspection by the commission. There was also a file of soldiers permanently on guard as many of the sellers were Spanish gypsies who were inclined to resent the rejection of their animals, particularly if they had spent much time bishoping them.[1] In the early days of the commission the supply of mules was rather slow but it became both quicker and cheaper when an agent in Cordoba who was found to be demanding commission from sellers, as well as collecting from the British, was dismissed. All mules bought in Spain were shipped from Gibraltar which caused additional problems as the railway stopped at San Roque, seven miles short of the colony. The last part of the journey was difficult with little food or water and poor accommodation at Gibraltar. The officer in charge, Coloney Paley, was informed of the deficiencies but took no action and failed to pass the report on either to the

1 Sessions: op.cit. pp.60-72. Bishoping was a method of tampering with a mule's teeth to conceal its age. The gypsies were very expert at this.

IGR or to the Chief Staff Officer Gibraltar. He also failed to inform the Governor of Gibraltar that mules were to be shipped from the colony and the first anyone in the colony knew of it was the arrival of the first batch of mules at the frontier. When the Spanish mules finally got to South Africa they were found to be of poor quality. In June 1900 the GOC Cape urged that Spanish shipments should be discontinued.[1] In a further cable of July 1900 he described the effect of Spanish animals on the Army's supply as 'disastrous'.[2] No more were sent after that month. Colonel Paley was later condemned as inefficient by a Court of Inquiry into the Remount Department.[3]

The head of the purchasing commission in Italy, Colonel Waldron, managed his affairs rather better. He purchased through a single contractor and seems to have been the only officer to use the knowledge of the Military Attache in the country to which he was posted. However, he persisted in sending large numbers of stallion mules which caused great trouble when they got to South Africa. After repeated complaints from hard-pressed officers there, who had to leave their other duties to castrate these mules,[4] the supply was stopped.

With the exception of Italy and Spain commissions in the various countries continued buying animals until the end of the war. There was a hiatus in all markets towards the end

1 GOC Cape to Secretary of State 7 June 1900 WO 108 67 no.6010.
2 Ibid 3 July 1900 WO 108 68 no.6614.
3 Remount Court. Report PP Eng.1902 LVIII p.23.
4 GOC Cape to Secretary of State 2 and 7 December 1899 WO 108 66 nos.1534 and 1649.

of 1900 when it was confidently assumed that the war was coming to an end. This assumption, made by virtually everybody in England, was strengthened by the confident pronouncements of Lord Roberts. As early as July 1900 the IGR began making provisional arrangements for the end of the war.[1] However, demands for horses and mules showed no signs of slackening and towards the end of August Roberts was asked if no reduction was possible, particularly in view of the number of horses captured in the Orange Free State.[2] He replied that he would reduce the demand for remounts as soon as possible but that most of the captured Boer horses were useless as they had suffered from lack of forage as much as the English horses.

South African demands continued to be met but the pressure to reduce them also continued. When in September 1900 the GOC Cape was told that 11,700 horses and 3,000 mules would be landed by 15 October to meet all his demands, he was asked whether any more would be needed and told to consult Roberts before replying.[3] On 24 September he replied that the supply would be enough until the end of November.[4] That seemed to give the London authorities confidence that operations were indeed coming to an end for **an** 24 September the officers in Austria and Canada were told to wind up their businesses as soon as possible, close their accounts and return home. On the same

1 IGR to GOC Cape 20 July 1900 WO 108 66 no.6969.

2 Secretary of State to FM Lord Roberts 23 August 1900 WO 108 68 no.7830. Three weeks earlier it had been reported that Hunter had taken 3046 horses in the OFS. FM Lord Roberts to Secretary of State 3 August 1900 PRO WO 108 68 no.7406.

3 QMG to GOC Cape 19 September 1900 WO 108 68 no.8228.

4 GOC Cape to QMG 24 September 1900 WO 108 68 no.8365.

day the officer at New Orleans was told to cease purchasing,[1] but was not at that stage ordered home, which proved fortunate. On 5 October 1900 the GOC Cape cabled for 3,000 additional mules for the new British South Africa Constabulary and a week later, in reply to a direct question, could not estimate the date when mules might be released for transfer to India.[2] This was followed ten days later by a demand for 5,600 horses of various types and 2,000 mules. The telegram added that this supply would probably be needed monthly.[3] This naturally slowed the rundown of remount activity. On the day after the above cable Captain Marsham, the remount officer at New Orleans, was told not to reduce his commission as another order would follow.[4] It was sent the following day. Also on that day Colonel Hunt, in Sydney, was given another order and told to report the state of the market for all classes of animals. Meanwhile Colonel Stevenson, the Inspector of Remounts in Natal, who had been ordered home on the disbandment of Buller's army, was told to stay in South Africa.[5]

By November it was becoming clear that the rundown had been premature. An offer of mules from South Africa to India was cancelled and more orders were placed in the United States and Australia. Even so on 6 December Colonel Willan, in Vienna,

1 IGR to Col. Willan, Capt. Marsham, Maj. Dent all 29 September 1900 WO 108 69 nos.8463, 8465 and 8465 respectively.

2 GOC Cape to Secretary of State 5 October 1900 WO 108 69 no. 8593 and 12 October 1900 WO 108 69 no.8747.

3 Ibid 22 October 1900 WO 108 69 no.8720A.

4 IGR to Capt. Marsham 23 October 1900 WO 108 69 no.8935.

5 IGR to GOC L.of C. Natal 25 October 1900 WO 108 69 no.8954.

was ordered to close his accounts and come home.[1] This order was rapidly reversed. On 10 December 1900 the IGR asked hopefully if there was any alteration in the monthly requirement of animals. There was. The reply a week later said that Kitchener would like the monthly supply of cobs raised from 2,500 to 5,500.[2] The unexpectedness of this communication may be judged from the reply which went out under the name of the Secretary of State instead of the IGR asking if he 'rightly understood' and calling for a detailed explanation of how these horses were to be issued. The explanation was sent together with a demand that any fresh mounted units should be sent fully horsed and that 25 per cent of their establishment should be added to each monthly consignment.[3] That was the end of any thoughts of cutting back on remount supply and purchasing continued unabated until the end of the war. The slackening of supply while it was thought the war was ending was to have some serious consequences.[4] But it should be noted that this was not the result of the remount department failing to supply the quantities of animals demanded. The reduction in demand came from the command in South Africa. What demands were made were more than met. In the six months ending 31 December 1900 28,502 horses and 11,000 mules were demanded and 29,841 horses and 11,043 mules were supplied. By comparison in the same period of 1901 62,532 horses and 12,000 mules were demanded and 71,220 horses and 12,163 mules were supplied.[5]

1 IGR to Col. Willan 6 December 1900 WO 108 69 no.9629.

2 IGR to GOC Cape 10 December and reply 12 December 1900 WO 108 69 nos. 9687 and 9801.

3 Secretary of State to GOC Cape 22 December and reply 27 December 1900 PRO WO 108 69 nos. 9893 and 9955.

4 See below pp. 326-327

5 Evidence of Kitchener to the Elgin Commission. PP Eng 1904 XL q 206

Apart from this confusion over whether the war was ending or not the only difficulty in maintaining a steady supply was found in the United States. The large scale of operations there, and the very military air that attended them, attracted much attention and, among the anti-British sections, hostility. There was one attempt at sabotage which failed and was not repeated;[1] but from April 1901 there was an intermittent legal battle to stop the export of American animals. On 3 April 1901 an individual named Samuel Pearson successfully applied to a New Orleans court for an order to the British remount officers to show cause why an injunction should not be granted to prevent the export of mules, on the grounds that they were contraband of war. This had the effect of temporarily preventing the shipment of mules.[2] The War Office ordered that all purchases in the United States be stopped and told Colonel Dent, the remount officer in Canada, to hasten his purchases as much as possible. In fact it proved difficult to add significantly to Canadian shipments because of heavy snow impeding deliveries to the ports.[3] The injunction proceedings, originally due to be heard on 6 April, were postponed to 9 April and in the interval the Department of Justice cabled the District Court in New Orleans that no United States court could sit in judgement between two foreign governments.[4] On 11 April the District Court suspended judgement.[5] On the following day the

1 See above p. 73

2 The Times 4 April 1901 and Col. de Burgh to IGR 4 April 1901 WO 108 70 no.11,668D.

3 IGR to Col. Dent 4 April and reply 5 April 1901 WO 108 70 nos.11,642 and 11,651.

4 The Times 8 April 1901.

5 Col. de Burgh to IGR 11 April 1901 WO 108 70 no.11,716.

United States Cabinet met and the proceedings at New Orleans formed the main topic. The Attorney General was asked to investigate and report. The prevailing view was reported to be that the legal action infringed the right of the government and that neutralist proceedings could only be brought in the name of the United States. It was also pointed out that if any individual could get such restraining orders the commerce of the country might be seriously endangered.[1] This point may have been forcibly put by the dealers who were supplying the British with animals. By the end of November 1901 the War Office had spent some $13,000,000 in the United States. On 13 April the court finally dismissed the suit for an injunction but Pearson then petitioned President McKinley for an injunction as he was entitled to do.[2] The State Department announced that the petition would be considered and that if it was accepted the US government would itself take action in the courts. There the matter rested for some months while the purchase and export of animals continued at an even greater rate than before.

In December 1901 Pearson again appeared in the public eye with a claim that Botha had told him that if the United States would end the export of mules the war would end in four months, with the Boers dictating terms. Pearson added that he had seen President Roosevelt (McKinley having been assassinated in the interval) but had had no answer to his petition. He said that he would raise the matter in another court himself as soon as he could raise enough money. Whether because Pearson again went to court, or because of rising popular agitation or because

1 The Times 13 April 1901.

2 Ibid 15 and 19 April 1901.

of the US Attorney General's investigations is not clear but the American government did finally put pressure on the British government to halt its remount operations. On 8 May 1902 Colonel de Burgh added to a routine message the warning, 'note that there is much agitation against us here.'[1] In fact, though he did not know it, the matter had gone far beyond popular agitation. President Roosevelt had already sent for Colonel Kitson, the British Military Attache in Washington, and asked whether Lord Lansdowne, then Foreign Secretary, would not rather withdraw military officers from the country than have the President request himto do so officially.[2] Lansdowne's prompt reply that he would infinitely prefer to avoid any controversy over the legality of preceedings at New Orleans may suggest that he had doubts about it. It may equally well show a natural desire to avoid any additional acrimony over the administration of the war in general. Whatever the reasons Lansdowne took immediate steps to comply with the President's wishes. He asked whether the US government would allow the work to be done by civilians and ordered the abandonment of official stationery. He promised to raise the matter at the next Cabinet meeting. Meanwhile the American cabinet also considered the subject again and while there was no doubting the legality of the purchase of commercial supplies, they questioned whether there should be an organised branch of the British War Office on American soil for the purpose.[3]

1 Col. de Burgh to IGR 8 May 1902 WO 108 73 no.17,843.

2 Pauncefote to Lansdowne 6 May 1902. Cabinet Papers PRO Cab 37/61 no.84.

3 Pauncefote to Lansdowne 7 May 1902. Cabinet Papers PRO Cab 37/61 no.88.

The Governor of Louisiana was reported to consider his state was under the military occupation of a foreign power. On 8 May Lansdowne told the British Ambassador that the Cabinet wished to defer to the President's views and that the military remount agency would be removed from New Orleans. He hoped that the American government would avoid anything embarrassing until this could be done.[1] Four days later Colonel de Burgh was ordered to break up the remount depot by 4 June which he proceeded to do.[2] He was, of course, overtaken by the end of the war, which meant that the actual disruption caused by this lengthy contest was limited to the few days in April 1901 when the original court decision was awaited.

With the purchase of animals in their various countries, their transport to the ports and their shipment to South Africa the responsibility of the Remount Department in England ended. Remount work in South Africa came under the control of the Commander in Chief there, and the sole contribution of the IGR was to recommend officers for employment on remount duty. Even then they had to be approved by the QMG and were always liable to be taken for other duties once they got to South Africa.

Remount work in South Africa.

Before the war there had been two remount depots in South Africa, at Stellenbosch in Cape Colony and Nottingham Road in Natal. As soon as serious preparations for war began these were found to be inadequate, particularly in personnel. On 22 September 1899 (when money was granted for essential

1 Lansdowne to Pauncefote 8 May 1902. Ibid no.89.
2 Col. de Burgh to IGR 12 May 1902 WO 108 73 no 17,901.

purchases) the GOC South Africa cabled

> Do you expect me to take action for cobs for Regimental and Staff Officers? ... Up to the present time too few purchasing officers and crowded state of remount depot prevented any attempt to buy in the 500 ... Every officer who could be spared from here and Natal employed purchasing. I again urge that purchasing, remount and veterinary officers asked for in my ... cables should be sent at once.[1]

Most of this demand was met by detailing five of the ASC companies who arrived on 24 October for remount work, but though nearly the whole Army Veterinary Department (AVD) eventually went out and their number was trebled by civilians, the shortage of vets remained throughout the war.

However, with the help of the five ASC companies additional depots were established at De Aar, Naauwpoort, Queenstown and Port Elizabeth and these handled the initial work of the army. In the opening months of the war this was not particularly difficult as there was little mounted work done. The forces under Methuen and Buller were primarily infantry and the cavalry under French, which had anyway brought its own horses, was engaged in spoiling operations around Arundel and Colesberg. These called for little hard riding and wear on horses. However, the steady increase in the numbers of mounted infantry and colonial troops meant a steady increase in work and as the war progressed the need for horses became steadily more acute.

There was much confusion in the early days of the war when some local troops and the Yeomanry and Volunteers from England were supposed to provide their own mounts. At various stages

1 GOC South Africa to Secretary of State 22 Sep 1899 WO 108 66

of the war there were at least five separate sets of buyers (the remount department, local troops, the City Imperial Volunteers, the Yeomanry and the Duke of Cambridge's Own) bidding against each other and forcing prices up.[1] In time this problem disappeared as the remount department took over responsibility for supplying all forces in South Africa. But it soon became clear that the five ASC companies were not enough to deal with cavalry and artillery horses as well as cobs, sick animals and mules. When Lord Roberts arrived he assigned a number of special service officers to help and ordered a native remount establishment from India.[2] But having thus helped he inadvertently dealt the remount department a shattering blow by his transport reorganisation.[3] The sudden demand for extra ASC personnel caused by the loss of the services of regimental transport officers was met by withdrawing all ASC officers and men from the remount depots, which all but collapsed. Within ten days, however, a scratch civilian and native establishment was set up which, with the help of Indian NCOs and syces arriving with Indian remounts, managed to maintain the service until the arrival, in March 1900, of seven hurriedly organised base remount depots from England.[4]

The establishment of a base remount depot was seven officers and 274 other ranks, but of the seven that landed two had no officers and the other five had no men. Even these attenuated depots were not allowed to remain. On 19 May 1900

1 W.Richardson: With the Army Service Corps in South Africa. London 1903 p.87.

2 Ibid p.86.

3 See pp. 139 - 148

4 Col. Birkbeck: Report on Remount Depots 17 July 1900 WO 108 75.

the men of one depot were withdrawn to join the cavalry depot at Bloemfontein and on 8 June the rest of the depot formed a squadron and never returned to remount duty. A month later the men of another depot were ordered to Kroonstad to be mounted and join the ranks of the field army.[1] They too did not return.

The work that had to be done by the much changed remount organisation included the landing and classification of animals, purchase, forwarding by rail to advance depots and issuing to units. In South Africa the remount depots had to deal with mules as well as horses and also had to cope with sick and debilitated animals. They did not however issue horses to cavalry units. A cavalry depot was established at Bloemfontein which took over this duty, though the depot itself was supplied by the remount department. A remount depot at full establishment was supposed to be able to deal with 1,000 horses. The only complete month during which the seven English remounts depots, far from their full strength, were operating was April 1900. In that month 11,147 horses and 5,561 mules were landed or purchased in Cape Colony alone, while 1,824 horses were landed in Natal.[2]

Thereafter, though the officers remained, most of the manpower was native or civilian. Moreover the scale of work increased, particularly in 1901-2 when the use of mounted troops grew. Inevitably inexperience, combined with overwork, reduced the efficiency of the depots. Not even the officers were experienced in this particular branch of work. Only two

1 Ibid.

2 Ibid.

officers could be spared from the diminutive home establishment for South Africa. One of these died in the first nine months of the war. In July 1900 34 out of 35 remount officers in the Cape Colony had no experience of the department and 15 of them had not even had any experience in mounted branches of the army.[1] The remount service was not helped by being given officers who had proved their inability in other duties. This form of dumping became so notorious that the verb to 'Stellenbosch' (after the large remount depot just outside Cape Town) passed into the language.[2]

Some of the difficulties found by inexperienced officers in dealing with animals could have been overcome if better veterinary help had been available. However, the veterinary, like the medical, department was woefully inadequate. There were some 60 veterinary surgeons in the department, nearly all of whom were sent to South Africa. The ideal which had been aimed at was one vet per 500 animals (roughly one per cavalry regiment or artillery brigade). Even that was low by contemporary European standards. Numbers of vets in continental armies varied from one per 313 animals (France) to one per 120 animals (Russia). However, in South Africa there was only one vet per 1,200 animals even allowing for the large numbers of civilian vets. There was only one army vet per 6-7,000 animals.[3] The difficulty was made worse by the bad relations between the remount and the veterinary branches,

1 Ibid.

2 Though not much heard these days it is still there. 'Stellenbosch: to relegate to a post where incompetence matters less'. Chambers Twentieth Century Dictionary. Revised Edition 1970.

3 Hansard XCIV col.1272.

neither being prepared to accept subordination to the other. These 'unsatisfactory relations' as the Director General of the Army Veterinary Department (a Veterinary-Colonel happily named Duck) called them led to good advice being ignored. For example when Duck himself, who had served six years in Africa, advised Colonel Tollner, the principal purchaser of English horses, that English cavalry horses were unsuitable and that a more compact, smaller horse was needed, Tollner replied 'You may be right or wrong, but if I bought the class of horses you suggest they would all jeer at me.'[1]

After the experiences of the first year of the war a more satisfactory organisation was evolved. An Inspector of Remount Depots and Veterinary Hospitals was created and given very little office work which enabled him to be constantly inspecting. This, at last, put both remount and veterinary services under one head and made a considerable improvement. The Assistant Inspector of Remounts, Colonel Birkbeck, had an office at Johannesburg where most of the paper work was done. Under these two were four senior Remount Staff Officers at Cape Town, Bloemfontein, Newcastle and Elandsfontein who administered the department in the four colonies. In addition to these there was a Remount Staff Officer for each of the three railway lines in Cape Colony and one in Basutoland where some 13,000 cobs were finally purchased.[2] To complete the organisation there were three Remount Claims Officers, one in each colony except Natal, to deal with claims relating to

1 Evidence of Duck to the Elgin Commission PP Eng.1904 XL q.321

2 There was much press criticism of the failure to buy Basuto horses earlier in the war but until the occupation of Bloemfontein very few were forthcoming. After it became clear who was going to win purchase became much easier. However, even in January 1900 the War Office was denounced. See for example The Times 9 January 1900 where a correspondent claimed to have been offered 15,000 Basuto ponies.

commandeered animals and a protection board in Cape Colony to administer herds driven in for safe keeping.[1]

The size of the department administered by these officials grew steadily. By July 1900 there were 12 base remount depots across the length and breadth of South Africa, from Stellenbosch to Salisbury and from Kimberley to Durban. By the end of the war there were 24, ten of which were staffed exclusively by civilians. By the end of 1901 the number of Field Veterinary Hospitals had grown to 50.[2] In addition there were 17 remount farms established to look after horses driven in for safe keeping to prevent their being used by the Boers. The farms were also used as convalescent homes for British horses recovering from sickness or wounds. Opinions about these farms varied, as did their quality, but although the idea behind them was a good one most of them suffered from a crippling staff shortage. This made impossible the programme of feeding and exercise which could have made the horses useful. As a result the farms were never properly exploited for remounts and the estimated losses on them were about 80 per cent.[3]

The work of the remount department in South Africa must be seen against this background of changing organisation and improvisation. The first large cavalry operation was the relief of Kimberley with which Roberts began the march on Bloemfontein. This involved a tremendous ride across open country by the whole cavalry division. The exertions combined with under-feeding gravely weakened the horses but they were allowed no rest. The withdrawal of Cronje's force had to be

1 Answers to questions from various branches of the QMG's Department. Additions by Col. Birkbeck 5 Sep 1902 WO 108 76.

2 Major General F.Smith: A Veterinary History of the War in South Africa 1899-1902. London 1919.

3 Ibid.

cut off to allow the infantry to catch up and the cavalry division had another desperate ride which only just sufficed to cover the Paardeburg drift as Cronje reached it. Thereafter the demand for remounts was pressing. As a result horses in South Africa were taken for service very often as soon as they landed and with no time to recover from their voyage. Much the same happened in the other mounted branches. On 12 February 1900 the War Office was told that the great increase in mounted infantry had absorbed all cobs including those so far landed from India and Argentina. The GOC Cape called for 1,500 immediately and 2,000 monthly.[1] A week later much the same story was told by the artillery. The GOC Cape cabled that heavy demands by batteries to replace losses at sea added to a heavy expenditure of horses on the Modder River had reduced the Royal Artillery reserve to just 50 horses.[2]

A heavy and imperative demand therefore fell on the remount depots at a time when, as described, they were undermanned and disorganised. It was thus impossible to train and condition remounts. All that was attempted was to keep back those animals which were more than ordinarily wild.[3] The process was, of course, self reinforcing. Animals had to be issued and worked before they were ready and so were more liable to weakness and disease. Overwork and underfeeding took an even greater toll and these remounts were quickly used up and more were needed to replace them. And so it went on. Once the process had started it was very difficult to

1 GOC Cape to Secretary of State 12 February 1900 WO 108 66 no.3171.

2 Ibid 19 February 1900 WO 108 66 no.3311.

3 Birkbeck. Report on Remount Depots. WO 108 75.

stop it, given the need for continuous operations. The need for ever greater number of horses was stressed continually from South Africa with Roberts often making personal appeals:

> ... Waste horseflesh also very great although horse sickness season not yet begun. Please arrange for early and steady supply remounts for batteries of Horse Artillery, Cavalry, Field Artillery and Mounted Infantry. Without mobile force I can do nothing in this country.[1]

A fortnight later he cabled that he was anxious to bring to the notice of the Secretary of State the urgent necessity of a constant supply of horses. He underlined this by reporting a dead loss of 558 horses during the relief of Kimberley and a further loss on one day (March 7th, the day of the battle of Poplar Grove) of 54 killed, 47 wounded, 62 died of exhaustion and 110 others pronounced unfit for work. He added: 'Success (of) campaign so materially depends on mounted troops being efficient that trust there will be no want of good serviceable horses.'[2]

When the army reached Bloemfontein it was as short of horses as of everything else and the seven week delay was at least partly due to the need to remount nearly the entire mounted force. Given the need for other supplies of all sorts and the limitations of the railway this was inevitably a slow job. Lord Roberts later said that the delay at Bloemfontein was mainly due to the lack of food and remounts.[3] On 22 March Roberts' Military Secretary cabled the Cape that at least one

1 FM Lord Roberts to Secretary of State 24 February 1900 WO 108 66 no.3448.

2 Ibid 9 March 1900 WO 108 66 no.3795.

3 Evidence of Lord Roberts to the Elgin Commission PP Eng.1904 XLq.10843.

remount train should be sent from Stellenbosch daily as the army could not move until remounts came up.[1] A week later Roberts told General Brabant, the GOC Colonial Division, who was operating independently in the Free State and who was himself desperately appealing for remounts, that he regretted being unable to send him any as 3,000 were still wanted at Bloemfontein.[2]

This very proper concentration on mounting the main army meant that all detached formations were starved of remounts that they badly needed. This was particularly true of Natal since shipments were all directed to the Cape ports. In March 1900 only 56 horses were landed at Durban[3] and Buller told Roberts on 26 March 1900 that he would be unable to start for at least a week because of the difficulty of getting sufficient remounts for Warren's force guarding Ladysmith.[4] He said later that Warren needed 2,000 mounted men and there just were not the horses to provide them.[5] So great was the need for horses that remount officers there decided to act on their own. The officer commanding the Durban remount depot told the IGR that he had contracted privately for 2,900 Australian and 1,000 American horses. Truman, who had made considerable efforts to avoid the possibility of different Imperial agents bidding

1 Military Secretary to Chowder Cape 22 March 1900. Roberts Papers WO 105 35.

2 Roberts to Brabant 29 April 1900. Ibid.

3 Statement of Col. Stevenson AAG Inspector of Remounts Natal quoted Birkbeck: Report on Remount Depots. WO 108 75.

4 Buller Papers: Buller to Roberts 26 March 1900 WO 132 17.

5 Evidence of Buller to the Elgin Commission PP Eng.1904 XLI q.15461.

against each other (as had already happened in South Africa) was very annoyed. He replied that he already had agents buying in both countries and arrangements were in hand for meeting all demands. He ordered that no future contracts should be made without reference to him and asked whether the contracts could not be cancelled.[1] The following day the QMG cabled direct to the GOC Cape telling him to forbid the making of contracts outside South Africa without reference to England.[2] Meanwhile the Inspector of Remounts in Natal, Colonel Stevenson, managed to cancel the American contract and promised to try and reduce the Australian one. This may have avoided the possibility of British agents bidding against each other but did not provide remounts for Natal. However, Roberts diverted shipments there and in the first week of April 1,824 horses landed at Durban.[3]

Even when the main armies moved off again there was no relaxation for the remount depots. Detached forces whose demands had been deferred now took all the remounts available. There was never a stage where the supply had really caught up, a point underlined by Roberts who told Lansdowne that it was impossible to have too many horses.[4] All demands were more than met but any small surplus was quickly absorbed.

By the time Roberts reached Pretoria his force had virtually dismounted itself again. As at Bloemfontein it was weeks before sufficient remounts could be railed up to permit a further advance. In June Roberts told Kitchener that

1 OC Remount Depot Durban to IGR 20 March 1900 WO 108 67 no. 4111. IGR to Inspctor of Remounts Durban 21 March 1900 WO 108 67 no.4146.

2 QMG to GOC Cape 22 March 1900 WO 108 67 no.4169.

3 Statement of Col. Stevenson AAG Inspector of Remounts Natal quoted Birkbeck: Report on Remount Depots WO 108 75.

4 FM Lord Roberts to Secretary of State 15 April 1900 WO 108 67 no.4802.

there were 2,000 dismounted men in Pretoria. He suggested that if Kitchener could get the animals to Kroonstad dismounted men could be sent there with their saddles to collect them.[1] Later he approved Kitchener's policy of refusing to allow anything but supplies and remounts on the railway and added that mounted infantry horses were badly needed.[2] On 17 August the GOC Cape reported that since 1 July he had supplied the main army with 2,000 artillery horses, 5,000 cavalry horses, 6,000 mounted infantry cobs and 2,500 mules.[3]

The reasons for the limited rail capacity have been discussed earlier but even apart from these difficulties the entraining of remounts, which had to be railed to their destinations, presented special difficulties if the animals were to arrive reasonably fit, or indeed alive. Quite early on reports of the conditions of animals on trains caused disquiet in England. In the middle of May 1900 the War Office told the GOC Cape that complaints had been received of the long detention of animals in trains without food and water and that he should take action to deal with it.[4]

In fact little seems to have been done. When Birkbeck was asked whether the system for forwarding animals by rail had been satisfactory he replied 'Distinctly the reverse' though he added that it was as good as possible in the circumstances.[5] The basic problem was that with animals packed side

1 Roberts to Kitchener 13 June 1900. Roberts Papers WO 105 36.

2 Ibid 1 July Ibid.

3 GOC Cape to Secretary of State 17 August 1900 WO 108 68 no. 7695.

4 Secretary of State to GOC Cape 15 May 1900 WO 108 67 no.5551.

5 Answers to questions from various branches of the QMG's Department. Additions by Col. Birkbeck 5 September 1902.

by side into a truck it was impossible to feed and water them without detraining them. Even to do this every 12 hours required considerable organisation to have staff and appliances at the right station, and it held up the train for at least three hours. With the uncertainty of traffic caused by natural breakdowns and enemy action animals often went much longer than 12 hours without succour. The only alternative was to place the animals head to head in the trucks with a space between. This would have enabled them to be fed in the trucks but it would have reduced the capacity of the trucks by about one third and there were not enough trucks to maintain the supply of remounts if this were done. As a result animals that had had some chance to recover some condition after their voyage often lost it again in long train journeys, and those that had not were made worse or were dead on arrival.

The problem continued, or even increased, during the guerrilla war. The numbers of mounted troops increased and the vicious circle whereby the huge demand for horses required animals to be rushed into service before they were ready, and the weak and unfit animals so treated fell out or died, thus increasing the demand, was accentuated. It was not helped by the rundown in supply caused by the assumption that the war was coming to an end in 1900. Rather like the dismounting of the cavalry division during the Kimberley and Paardeberg operations the sudden upsurge of activity when it became clear that the war was far from over created a sudden demand for horses as fast as they could be sent. Many were even more unfit than usual, died quickly and had to be replaced and once

again the remount department lost ground it could not regain.[1]

Great attempts were made to try and build up a rested, fit reserve of animals that would break the circle of wastage. It was not until Kitchener took command that full use of South African horses was made. They were, at least, fully acclimatised to begin with. By purchase, capture and, after the introduction of martial law, commandeering, over 158,000 South African horses were obtained for the army. Despite this columns continued to be weakened or even immobilised through lack of horses.

There can be no doubt of the effect the lack of good horses had on operations. In 1902 the then Chief of Staff consulted Kitchener's Military Secretary (Lord Birdwood, subsequently Field Marshal and C.in C. India) on the factors limiting the number of mounted troops. 'In calculating maximum number of mounted troops we can put into the field, which is the ruling factor, the trained men or the horses?'[2] Birdwood replied firmly that the supply of horses determined both the total number of mounted men and their effectiveness.

1 This view has been disputed. Major General Smith, the historian of the veterinary aspects of the war, states that 10,000 more horses were supplied than were demanded in the last quarter of 1900 and that 'the temporary stoppage of purchases could (not) have materially affected unfit animals being sent into the field, and certainly affords no support for the view that the ground thus lost could never be wholly made up.' (Maj.Gen.F.Smith: A Veterinary History of the War in South Africa 1899-1902. London 1919 p.148) But the point is not the excess of supply over demand but the total numbers. In the last quarter of 1900 there weresome 10,000 horses supplied compared with 19,000 the quarter before and 25,000 the quarter after. Moreover the 25,000 was in response to an unprecedented demand for 35,000 which suggests a desperate attempt to make up leeway. Incidentally his statement that supply exceeded demand by 10,000 in the last quarter of 1900 is nonsense.

2 Hamilton to Birdwood 11 February 1902. Chief of Staff Letter and Papers CoS 523. WO 108 15.

He could mount all reinforcements coming out but only at the expense of columns already in the field. These would get horses less rested than they otherwise would have been 'which means a sacrifice of fitness to quantity.'[1]

The only way in which the cumulative process of wastage requiring the issue of animals before they were fit, and the issue of unfit animals increasing wastage, could have been ended was by a complete cessation of hostilities for a period of weeks. This would have enabled the remount department to have rehorsed the columns with fit and rested animals. Ironically such a cessation of hostilities took place during the negotiations that led to the peace of Vereeniging. On 30 May 1902 it was reported that 'The rest enjoyed by the British columns recently has had a most beneficial effect on both men and horses, the latter being in splendid condition. The Remount Department has been able to catch up with the wastage, and all the columns are now in magnificent form for taking the field.'[2] The war ended the following day.

Even allowing for the inherent difficulties of having to issue unfit horses, the colossal wastage suggests that either the animals bought were basically unsound or that they were misused, or both. Certainly many of the newly raised mounted infantry companies, which Kitchener formed, knew little about caring for horses. Much of the strain of overwork and underfeeding was doubtless unavoidable for operational reasons but careful handling could have mitigated its effects. Both Roberts and Kitchener were clearly aware of this and issued

1 Birdwood to Hamilton 11 February 1902. Ibid.

2 The Times 30 May 1902.

a steady stream of Army Orders and Circular Memoranda with both general exhortations and detailed instructions on horse care. These sometimes dealt with the most elementary points. An order of March 1900, for example, pointed out that grain should be placed on a sack or blanket rather than on the ground, both to save grain and to spare the horses from eating earth.[1] Other orders drew attention to the need to keep horse loads light, dismount whenever possible, water animals frequently and advance on a wide front to avoid dust. Such orders continued to be issued until the end of the war which suggests that there was little improvement. In one such order Kitchener stated bluntly that wastage could have been reduced or avoided on many occasions and that animal casualties not justified by results reflected little credit on officers commanding columns.[2]

It is more difficult to assess the basic quality of the animals supplied. The question was pursued both by the War Office and the Elgin Commission. Many officers in South Africa were asked to record their comments on each of the types of horses and mules supplied. The result was an unhelpful chaos of conflicting views. About the only agreement was on the superiority of South African animals and this was largely due to their being already acclimatised and not suffering a long sea journey before issue. The variety of views reflected both different personal criteria in judging horses and the different quality of different consignments from the same source. They were little help in judging the work of the remount department or in planning for the future.

1 Roberts Papers. Army Order 2, 3 March 1900 WO 105 40.

2 Adjutant General/Circular Memorandum/No.32. 2 April 1901 PRO WO 108 13.

Aftermath.

Public disquiet with the prosecution of the war was particularly pronounced with the remount department. As reports reached England of the huge losses of horses and mules, of appalling conditions on South African animal trains and of military inefficiency because horses could not move fast enough to maintain contact with the Boers criticism mounted. Over £15 million was spent on horses and mules and prices paid for some animals seemed very high. Allegations of corruption began to be added to those of incompetence. The critics had plenty of ammunition. Over half a million horses had been supplied to the army, and of these over 347,000 had died or had been killed. Similarly over 53,000 mules had been 'expended'. Yet after the opening months of the war the army had never been satisfactorily mounted.

The disquiet was expressed in both the press and Parliament. The Times, for example, printed a variety of letters and articles over a period of nearly two years alleging a number of more or less serious faults including the despatch of diseased horses from the Central Remount Depot Woolwich; failure to collect horses in South Africa thereby not only failing to exploit a useful source of supply but leaving it for the Boers; leaving mounted columns inadequately horsed for months; failing to consult British military attaches abroad about possible sources of supply; and trying to buy horses in Russia at the worst time of year and in restricted districts without the necessary permits from the Russian War Minister.[1] There is no doubt that all these charges were

1 The Times 21 August 1900, 8 January 1901, 2 January 1902, 4 February 1902 and 17 February 1902.

justified. There were also reports about how badly horsed British troops were which, while not directly attacking the remount department, inevitably added to public concern about its performance.[1] Discontent mounted to a peak towards the end of the war when criticism of specific points gave way to a general attack:

> ... notwithstanding the repeated appeals for horses and more horses, the supply is still lamentably short of the demand, and the dearth of remounts is rapidly assuming alarming proportions ... The wastage in horses throughout the campaign has been enormous ... An inferior class of horse has often been purchased; they have been despatched tardily. Arrived in South Africa they have been entrained and hurried on trek before they have had time to recover from the effects of the voyage and to become acclimatised ... a culpable indifference to the welfare of the most important factor of their fighting efficiency has permeated all sections of the army ...
>
> ... Spasmodic efforts have punctuated the whole campaign while a regular and systematic supply of men and horses ... has been entirely wanting.[2]

Protests in Parliament followed a parallel line. As early as March 1900 Sir Charles Dilke claimed that 'Most of our troubles in the present war have been directly attributable to inefficient equipment and supply of horses.'[3] At that time the statement was quite untrue but it does show that criticism began very early on. As the war went on his words

1 See for example The Times 31 July 1900 which blamed the poor condition of horses on inadequate feeding by the supply department.

2 The Times 1 March 1902.

3 Hansard Vol LXXX col.630.

as regards horses became steadily truer. A debate in June 1901 showed a much more widespread and better based distrust of the remount department's activities. Members from both sides of the House complained of wasteful methods, inadequate inspection, huge losses of animals and swindling by agents.[1] One member called for an enquiry into allegations that army officers were involved in corrupt dealings.[2]

These allegations referred to the purchase in Austria-Hungary first by the Imperial Yeomanry and then by the Remount Department. A committee of four Members of Parliament led by Sir Charles Welby, one of the staunchest government supporters and formerly Lansdowne's private secretary, investigated the charges of incompetence and corruption and reported that '... given a condition of great and unforeseen emergency, there is no ground for very serious criticism.'[3] The report did nothing to allay fears and when the evidence presented to it was belatedly published in 1902 criticism of the high prices, inferior animals and inadequate inspection which it revealed was redoubled. It had also become public knowledge that Truman held shares in a firm that he had used to the exclusion of all others as shipping agents. At a meeting between Truman, Clarke (QMG), Roberts (C.in C.), and Brodrick (Secretary of State) Truman was told that he must take steps to defend himself and his administration.[4] He demanded a Court of Enquiry

1 Ibid Vol XCIV cols.1245-1272.

2 Sir T.Blundell Maple. Hansard Vol XCIV col.1247.

3 Report of the Committee on Horse Purchase in Austro Hungary. PP Eng.1902 X p.7.

4 Evidence of Clarke to the Remount Court. PP Eng.1902 LVIII q.5355-5359 and The Times 18 February 1902.

which was immediately granted.

The report of the Court, which was an exclusively military one, had more than a touch of whitewash about it. It reviewed the proceedings of the remount department and concluded that it had 'on the whole, come favourably out of a long and searching enquiry.'[1] Evidence from Truman that his holding in the shipping firm of Houlder Brothers amounted to only £35 was accepted and he was cleared of any suggestion of either corruption or negligence. It had become embarrassingly clear during the hearings, however, that Truman was an exceptionally slow-witted man. He had frequent difficulty in replying to the court, not because he did not know the answer to a query, but because he was unable to understand the question. More than once a question had to be rephrased in simpler language and sometimes a line of enquiry was abandoned because General Truman could not grasp the court's meaning. As the court observed, this difficulty must have been prejudicial to him in conversations with the Secretary of State and high officers.[2] Truman's limited mental powers had become apparent in the War Office some time earlier. In April 1901 Brodrick and Roberts had expressed doubts about Truman's ability and had asked the Quartermaster General for his opinion. He recalled that he had replied '... although I did not consider the Inspector General of Remounts to be a man of exceptional ability, I ... believed he was doing work of unprecedented difficulty to the best of his powers.'[3] This very mild statement of the fact

1 Remount Court. Report PP Eng.1902 LVIII p.34.

2 Ibid p.33.

3 Evidence of Clarke to the Remount Court. PP Eng.1902 LVIII q.4734

that Truman was daily proving himself stupid was endorsed by the court.

The basic difficulty from which the remount department never recovered was the complete unreality of pre-war thinking. This afflicted all departments to a greater or lesser degree. The head of the remount department was peculiarly unfitted to provide the degree of improvisation and flexibility which, for example, Brackenbury brought to the ordnance department. In the circumstances it is not surprising that the remount department failed to overcome the problems which it faced. All demands for animals were met so far as numbers went but the department was never able to get sufficiently ahead to be able to cut wastage. Once started it kept pace with the situation but it failed to conceal the total unpreparedness for war which it shared with the rest of the War Office and the country.

Conclusion: The Lessons of the War

The war had started with feelings of great complacency and high expectations, even among those who had least enthusiasm for it. Sir Henry Campbell-Bannerman, for example, who as late as July 1899 had said 'I can see nothing whatever in all that has occurred to justify either warlike action or military preparation'[1] told the House of Commons in October 1899: 'I am glad that our government are at least not falling into an error which has ... been made by our countrymen in past times and that they are sending out - after some delay it is true - an ample force for the purpose ... Especially I would congratulate HMG on the choice they have made of the officers who are to have the main charge of the expedition.'[2] Similarly in the House of Lords a member said 'I am glad that HMG appear to have sent a large, I may say an overwhelming, force to South Africa.'[3] As usual on these occasions the army was described as the 'largest and best equipped force which has left these shores ...'[4]

These feelings were perhaps understandable. The force was certainly the largest since the Napoleonic wars and the newspapers had been full for months of all the preparations being made for war in South Africa. However, the impression of great preparations did not survive close inspection even for those not aware of the battles being fought within the

1 The Times 1 July 1899.

2 Hansard LXXVII col.71.

3 Lord Loch. Ibid cols.24-25.

4 By Captain Sir A.Acland Hood. Ibid col.61. cf The Times on the force sent out to the Crimea: 'the finest army that has ever left these shores.' Quoted in Christopher Hibbert: The Destruction of Lord Raglan. Pelican Edition 1963 p.38.

War Office to try and get money for the most elementary requirements. Milner for example wrote to the military pundit Spenser Wilkinson '... our military preparations have been of the wrong sort. What we wanted was quietly to add to our strength on the spot. What we have done is to make a show of arming without any substantial increase of force. Every day enormous headlines announce an increase of forces. What is it? Half a dozen S(pecial) S(ervice) officers or a company of engineers.'[1] However, even within the War Office the same confidence seems to have existed. Comparing the war with the Crimean war Wolseley wrote '... In the present case, however, we shall send out a much larger force from these shores & it will be one under the very ablest soldiers and thoroughly equipped for war - a very different condition of things from that which existed in the army sent to the Crimea in 1854.'[2]

The trauma which followed the disappointment of these expectations in the 'Black Week' in December 1899 when British forces suffered three successive defeats led to an extreme reaction against the War Office and every part of its administration that was quite undiscriminating. As a result the strident calls for 'reform' were blunted because they often failed to focus on what really did need improvement. As has been shown the working of the supply services of the army, taken individually and given the situation they faced at the beginning of the war, were, on the whole, remarkably successful. Administration both in the field and in the War Office achieved very good results, and adverse effects on operations have been

1 Milner to Wilkinson 26 July 1899. Wilkinson Papers CTP 13/18/12.

2 Wolseley to Frances (his daughter) 29 September 1899. Wolseley Papers W/P 28/61.

shown to be few and then largely unavoidable. Many of those difficulties that did arise came because operations were on such a vastly larger scale than anticipated. The Stanhope Memorandum was allowed to dominate all military thinking, not because any analysis suggested that the two army corps requirement was never likely to be exceeded but because it was cheap. The linked battalion system whereby every British battalion abroad was supposed to be backed by a battalion in the United Kingdom meant that there were usually about 70 battalions at home and the two army corps were therefore available at no extra cost in troops. Had the operations in South Africa involved only some 70,000 men instead of over 300,000 the evidence suggests that the whole administrative machine would barely have creaked.

Even with the larger numbers shipping was provided for troops, animals and goods with very little delay and, considering the volume of shipping, very few incidents. Much of the credit for this must go to the head of the section responsible for shipping, Colonel Cowans.[1] There was, of course, no naval opposition to be overcome and had there been such opposition the situation of the British forces, which relied so heavily on supplies sent from overseas, would have been much more perilous. The shipping of British troops and their food and equipment was not in itself new but the scale of the operation brought it in to a class of its own. Although there were complaints of the cost of the ships there were few about the operation itself. Some remount ships were justly criticised but those responsible for them were fairly rapidly weeded out and shipments by the end of the war were usually well conducted.

1 Cowans went on to become, as General Sir John Cowans, QMG from 1912-1919. As such he was responsible for the supply of much vaster armies still. He was again highly successful.

The ports in South Africa had to deal with a volume of traffic quite beyond their capability or experience. In these circumstances it is not surprising that blocks occurred or that relations between civil and military authorities with different, but in both cases legitimate, interests should be strained in some cases. However, the important point is that there is absolutely no evidence of these difficulties seriously impeding operations. The very great difficulties that had to be faced have been considered and on the whole they were successfully overcome. Apart from the strictly shipping problems and the outbreak of plague[1] there were other unexpected threats to the smooth running of the ports. In April 1900 Buller cabled the War Office: 'I am told that Messrs Cook and Son of Ludgate Circus are advertising tourist excursions to Ladysmith. If this be true please notify that no excursions will be allowed north of Durban.'[2] The same spectre hovered over the Cape where the GOC also cabled that no tourists would be allowed to proceed on trips to the battlefields.[3]

The problem of the railways was closely allied to that of the ports since the blockage at the ports was to a large extent a reflection of the lack of rail capacity to move the huge numbers of men and animals, and the vast quantities of stores away from the ports quickly enough. However, the capacity of the long single line, narrow gauge tracks was not susceptible to any speedy increase and there was no suggestion that any

1 See p. 81

2 Buller to Secretary of State 18 April 1900. WO 108 67 no. 4853.

3 GOC Cape to Secretary of State 18 April 1900. Ibid no.4872.

better use could be made of it than was made by Colonel Girouard[1] and his staff. Both in the running and in the repair of damaged track the organisation, which was largely improvised on the spot, functioned quickly and effectively. The main improvement that could have been made would have been the provision of additional rolling stock as soon as it was demanded. Instead, the demand was passed back and forth in London while the financial responsibility of different departments was debated in a leisurely fashion.[2] This, however, was symptomatic of a general malaise emanating from the Treasury rather than an example of administrative inefficiency. Not even a war could shake the Chancellor of the Exchequer from his pursuit of rigid economy. 'It is a pity,' said Sir Francis Knollys, Edward VII's Private Secretary, 'he is such a narrow minded man.'[3]

Road transport was, as has been shown, the subject of considerable controversy. Buller retained and defended the 'Regimental System' of transport which he had himself established while he was at the War Office. Roberts and Kitchener argued strongly for the new centralised system which they had established in South Africa. The experience of the war vindicated Buller though neither Roberts nor Kitchener was prepared to admit it. The transport system even in South Africa (outside Natal where Regimental Transport was retained) tended constantly to revert to the old system despite strong attempts to prevent

1 Girouard stayed in South Africa after the war as Commissioner of Railways for the Transvaal and Orange Free State. He subsequently became High Commissioner and then Governor of Northern Nigeria and later Governor and Commander in Chief of the East African Protectorate.

2 See pp. 102 - 103

3 Knollys to Sandars (Balfour's Private Secretary) 4 January 1904. Balfour Papers. Add.Mss.49684.

it doing so.[1] Kitchener's reputation as a great organiser was not enhanced by the wreckage of a sound diffused transport system and its replacement by a much more centralised and inflexible one. The weight of military opinion was with Buller though it was by no means unanimous. During various enquiries after the war many of the civilians involved declined to try and decide on a purely military question in the face of disagreement by equally qualified military witnesses. However, in 1904 the Esher Committee reported 'As regards the general question of transport we do not believe that the somewhat exceptional conditions which obtained in South Africa throw any doubts on the soundness of the principle of Regimental Transport.'[2] This was the signal for a reversion to the older system of transport which was complete by 1909.[3] It is not clear to what exceptional conditions the report referred. There were no conditions in the country itself which required the abandonment of Regimental Transport, the only difference from other campaigns being in the scale of operations. Even larger operations were to take place from 1914 to 1918 but the transport organisation that enabled them to do so was Buller's.

The supply departments suffered even more from the unexpected scale of operations than did the transport services. The lack of food reserves caused a dangerous hiatus at the beginning of the war but thereafter the energy of the Quarter-master General ensured that adequate supplies were maintained. The difficulties met have been described. Clarke was new to

1 See pp. 157 - 158

2 Report of the War Office (Reconstitution) Committee Part III p.9. PP Pap.1904 VIII.

3 Col. H. Melville: The Life of General Sir Redvers Buller. London 1923. Vol I p.301.

the job and inevitably took a few months to settle in. Having done so he was nearly unseated by the Queen's wish to find a suitable military post for her son the Duke of Connaught. Balfour described the War Office reaction to her proposal to Salisbury.

> Bigge[1] has unfortunately put into her head a second and I fear quite inadmissible alternative about Connaught. He has induced her to suggest that Evelyn Wood should go to Ireland, that the present QMG should become AG and that the Duke shd. become QMG. L(ansdowne) nearly fainted when I reported this project to him - He said - and I think with conclusive force - that the wheel in our machine on which is thrown the heaviest strain at the present time was that of the QMG Dept ... it has to feed and provide for 110,000 or 120,000 troops 7,000 miles away. It has to carry out the most difficult and complicated arrangements with the Admiralty, and its work, great at present, will become almost overwhelming as we go on adding to the no. of our troops in S(outh) A(frica). Clarke, the present holder of the office, is doing his work - according to L(ansdowne) exceedingly well. To bring in a brand new man who has had no experience in the work and who would have to learn it from the beginning wld. be madness even if the newcomer were a heaven born genius.[2]

This exceptional threat having been overcome Clarke went on to make a considerable success of his term of office. After the war he was appointed Governor of Malta and retired from the service in 1907. As he had proved by withstanding the strains of the war so well he was a man of robust constitution

1 Sir Arthur Bigge, later Lord Stamfordham, the Queen's Private Secretary.

2 Balfour to Salisbury 19 December 1899. Balfour Papers. Add. Mss.49691.

and lived for another quarter of a century in retirement dying at the age of 93.

In the ordnance department Sir Henry Brackenbury faced one of the most difficult tasks. He inherited a department in total disarray. There were no reserves, no capacity to increase production, and no attempt to make contractors keep to the contracts they had made. Small arms ammunition and clothing had to be changed completely in the most difficult period of the war. The re-equipping of the artillery was under consideration. The financial system under which he had to work was totally impracticable. Yet after persuading Lansdowne to give him a free hand in initiating war expenditure he made no attempt to use the difficulties he had inherited as excuses for any shortcomings in his department; '... if from that date anything went wrong, and there was defect in the supply, it was either because we could not get the stuff at home or abroad or because it was my fault.'[1] In fact the supply of ordnance to the army was better than anyone could have expected in the circumstances. Despite all the problems troops in the field were never short of guns, ammunition and essential stores, and, on the whole, those supplied were of adequate quality. Once again there is no evidence of lack of ordnance stores or their quality impeding operations, except in so far as the weight of the whole equipment to be carried would inevitably slow down the man or horse which had to carry it. The inferior quality of swords and lances mattered little in a campaign where there was seldom an opportunity to use

1 Evidence of Brackenbury to the Elgin Commission PP Eng.1904 XL q.1639.

either.[1]

Only in the remount department was there a demonstrable failure to serve adequately the needs of the army. The department suffered like the other supply departments from the lack of preparations and the assumption that all future wars would be contained within the scope envisaged by the Stanhope Memorandum. Unlike the other departments, however, it had at its head a man, not merely without the resource to cope with an exceptionally difficult situation, but one who was unusually slow-witted even for normal activity. Virtually none of the charges of corruption levelled against the department had any substance (an army vet in New Orleans was known to have taken bribes[2] but this was the only case proved). The sad truth was that in the pressure of the moment the officers of the remount department accepted a great many overpriced, poor quality animals without having to be bribed to do so. However, it was the way in which horses were treated in South Africa that wrecked the supply to the army. Under conditions prevailing there, the immediate issue of animals after long sea journeys, long rail journeys, inexperienced and incapable men in the remount depots and inefficient horse management by many of the newly mounted units meant that few animals survived for very long.

Even in this case, however, it is difficult to point to

1 The report of the Elgin Commission seized on the mis-sighting of 200,000 Lee Enfield rifles as a particularly serious error. So, in the abstract, it was but the fault was discovered after the issue of 25,000 of the rifles to the Volunteers and speedily corrected. No regular troops, who were armed with Lee Metfords, were involved and the effect on the conduct of the war was nil.

2 Earl of Middleton: Records and Reactions 1856-1939. London 1939 p.129.

specific actions which would have had different results with a better supply of horses. It seems impossible to doubt the general proposition that had British columns been better mounted, and so faster, the advantage of the mobile Boer commandos would have been less and so the guerrilla phase of the war at least would not have lasted so long. The one operation that has been quoted as an example of poor horses robbing British forces of a success they could otherwise have gained was the action at Poplar Grove on 7 March 1900. There the cavalry on a flanking manoeuvre came very close to capturing both President Kruger and President Steyn who were travelling together to encourage their forces. However, although there is no doubt that the cavalry horses were in a very poor state after their exertions around Kimberley and Paardeburg it is certainly arguable that French's slowness to act had as much to do with the result as poor horses did. French and Roberts were continually clashing over the state of the Cavalry Division[1] and French was therefore sometimes less than enthusiastic in following his orders.

Remounts apart, the supply services performed with distinction during the war and those involved were anxious to disabuse the public of ideas to the contrary. Roberts assured Lansdowne: 'I will certainly take the first opportunity that may offer, after my return home, of letting the public know how completely all my demands for the army in South Africa

1 A typical entry in his diary reads: '... Haig ... had an interview with the FM who told him he was afraid we were not attentive enough to feeding and watering our horses! Another of those incomprehensible ideas which enter Lord R's head. He seems to take no account of the tremendously hard work we have done (with the sacrifice of an entire division) and - the grand results!' Diary of General French 24 February 1900. Transvaal Archives, Pretoria. A1081.

have been met throughout the war.'[1] Somewhat less contentedly Bigge agreed with Balfour in January 1900 '... everything has now been supplied to our generals but brains.'[2] Balfour himself was convinced that the fault did not lie with the War Office:

> I not only think blunders have been committed, but I think they have been of the most serious kind, imperilling the whole progress of the war. But I do not think these blunders were due to War Office maladministration and, until I see reason to think so, nothing will induce me to say so. The chief blunders have been made, in my private opinion, by our Generals in the field but I do not of course think it desirable to make any such statement in public ...
>
> I cannot give my full opinions without blaming gallant men whom I do not wish to blame; but I entirely decline to make a scapegoat of people who I do <u>not</u> think deserve any such fate.[3]

This is to go rather too far. As was stated earlier the performance of the supply services reflects well on them taken individually and given the situation they faced at the outbreak of war. These are important qualifications. Taken together the supply services cannot always be said to have worked particularly smoothly. For example, huge piles of stores and forage built up at the ports because of limited railway capacity. Similarly large stocks of food and stores were sometimes dumped, inadequately guarded, at wayside railway stations until road transport was available to take it away

1 Roberts to Lansdowne quoted in Newton op.cit. p.193.

2 Bigge to Balfour 2 January 1900. Add.Mss.49683.

3 Balfour 24 January 1900. Copy of a letter. Balfour Papers Add Mss.49853.

or because, for reasons given earlier, nobody was expecting it. This was partly due to an unusual problem, a dislocation caused by a clash of technologies. Not many years before the war anything coming from England to South Africa, whether messages, stores or troops, would have travelled at the pace of a sailing ship. The voyage would have taken weeks, perhaps months, and the capacity of such ships was relatively small. Similarly once in South Africa any movements requiring the transport of more men or goods than could travel on horseback would have travelled at the pace of a man or an ox and any combined movements or communications between bodies of troops would have involved a common pace and a common carrying capacity and would therefore have been relatively easy to co-ordinate. But during this war there were several different types of communication. Cables existed between London and Cape Town and between the principal cities of South Africa. Communication of messages was therefore instantaneous. Steamships could bring thousands of tons of stores or thousands of troops in less than a fortnight. Trains could move hundreds of tons of goods or hundreds of men in perhaps as many hours as it would previously have taken days. Yet away from the railways the pace reverted to that of the man, the mule and the ox as it had been for centuries. The wagons used could move two or three tons of stores at a time, and then only in favourable conditions. Working these very different systems in combination with each other was a new problem for the army and there was some dislocation of which the stockpiles of stores in inconvenient places were one sign.

There was also very little co-ordination of the different

supply services by an organised staff. The Chief of Staff was more often used to undertake particular operations or tasks rather than the co-ordinating role his title suggests. The General Officer Commanding the lines of communication in the Cape Colony (in the first year of the war there was also a GOC lines of communication in Natal) generally co-ordinated demands on the War Office from all departments though some telegraphed independently as well which usually caused confusion. Within South Africa, however, the departments functioned fairly independently and at periods of particular strain, the first few weeks at Bloemfontein for example, the lack of an overall view and control of the supply services did cause difficulty.[1]

The other qualification is that the situation at the beginning of the war was not, of course, 'given', it was achieved through the combined action, or inaction, of the soldiers and the politicians in the War Office and the government. The failure to make adequate preparations was discussed earlier and was shown to be primarily because of a refusal to spend money, not simply on stores, though that was important, but on staff officers to collect and assess information on which a plan of campaign could be based and appropriate material preparations made. The lack of such studies clearly made the task of the generals in the field much more difficult.

The shortage of officers particularly affected the Intelligence Department which was successful in collecting information before the war, but had no capacity either to devise plans of campaign or to map the territories. There was also a problem of status which was not primarily one of

1 See pp. 101-102

money. The Director of Military Intelligence, as a Major-General and directly subordinate to the Commander in Chief, did not have the status of the other heads of departments of the War Office, with their direct access to the Secretary of State. Thus as Ardagh said, the department '... has not for many years had the influence on the military policy of the country which it ought to have.'[1] He made the same point, at rather greater length, in a valedictory minute when he retired as DMI in 1901:

> It is manifestly quite impossible for any of the heads of the great departments of the War Office to devote the necessary time to the details upon which the Intelligence Division opinions are based, yet I have often felt that these opinions would certainly have carried conviction had they been studied, and what I am anxious to attain is the acceptance on the part of the Secretary of State and the Commander in Chief of a presumption that these opinions shall hold the field until they have been successfully impugned and that they should not be summarily departed from without sufficient cause shown. I refrain purposely from entering into any particular instance in which this has occurred in the past, as my object is not to justify what I conceive the Secretary of State is satisfied requires no exculpation, but rather to assure that in the future my successor as DMI shall not be - as I have so often been - a <u>vox clamatis in deserto</u>.[2]

This note seems to have been accepted. Ardagh's successor, a Lieutenant-General, had his salary raised to the level of the

1 Evidence of Ardagh to the Elgin Commission PP Eng.1904 XL q.4966.

2 'The Intelligence Division' Ardagh to Secretary of State 26 February 1901. Ardagh Papers PRO 30 40 14 Vol II no.71.

other heads of departments in the War Office and was admitted as of right to the Defence Committee of the Cabinet and the War Office Council. His staff was increased by about 50 per cent.[1]

Another facet of the situation at the start of the war was the complete lack of ordnance reserves revealed by Brackenbury's minute of December 1899.[2] This too was remedied during the war. Brackenbury's minute as well as detailing the problem suggested the necessary solutions which required an expenditure of over £10 million. Lansdowne took the minute straight to the Defence Committee of the Cabinet and Brackenbury himself attendid the meeting at which it was presented. The only opposition came, predictably, from Hicks Beach who said that the government should not be prepared to spend so much on the word of a single official.[3] As a result two committees were appointed, one chaired by Beach's Permanent Secretary at the Treasury, Sir Francis Mowatt, to consider general stores, and a specialist committee consisting of a former Inspector General of Fortifications, Sir Robert Grant, the Director of Naval Intelligence and an artillery officer to consider the armament of fortresses and coastal batteries. The two committees heard evidence from officials of the ordnance and contracts branches of the War Office together with witnesses from commercial firms involved. They reported in March 1900 fully supporting Brackenbury and recommending expenditure of £11,621,870 over three years to provide reserves roughly equal to 25 per cent of all artillery

1 Evidence of Brodrick to the Elgin Commission PP Eng.1904 XLI q.21705

2 See pp. 213-215

3 Evidence of Lansdowne to the Elgin Commission PP Eng.1904 XLI q.21280.

and machine gun material then in use,[1] general stores for three army corps, one cavalry division and line of communication troops (about 135,000 men in all) for six months, and clothes for the same force together with a 'moderate reserve' and six months' working requirements. The committee also called for the modernisation of plant in the ordnance factories and additional storage space to be built to house their products. In addition to all this, and perhaps the most important of all, the report recommended the principle of automatic replacement of stores, without further authority, so that once these levels of reserves had been reached they would not be eroded.[2]

Despite the perilous state revealed by Brackenbury's minute, the war raging in South Africa and the unanimous reports of the committees appointed at his own request, Hicks Beach refused to accept the recommendations. According to the Treasury the demand for general stores (estimated cost £1,343,000) was 'not to be pressed' but £500,000 would be placed at the disposal of the War Office. The Treasury refused altogether to consider a six month working margin of clothing but would consider the other clothing requirements if the War Office could prove to the satisfaction of the Treasury that an improved system of clothing had been adopted. The proposal to increase the reserves of arms for coastal batteries was 'altogether refused', so was the recommendation to provide £1,586,338 for movable armaments for land fortresses though the Treasury would 'consider favourably' new armaments

1 Reserves for home and overseas coastal batteries were calculated on a different basis from each other. Hence 25 per cent is an average figure. However, the recommended reserve of material for field artillery, horse artillery and machine guns was exactly 25 per cent.

2 Report of the Mowatt Committee WO 33 163.

for a few important fortresses abroad. If the War Office accepted these terms the Treasury offered to sanction the remaining expenditure subject to a few minor points it did not bother to explain. If not the Treasury withdrew its 'concessions'.[1]

Lansdowne refused to accept this remarkably arrogant ultimatum and sought the support of the Cabinet: 'While I am anxious to meet the views of the Chancellor of the Exchequer, I must urge that his proposals, if adopted, would seriously hamper us in giving effect to what I understand to be the policy of the Cabinet.'[2] Even the combined weight of the Cabinet was insufficient to move Beach to accept the whole report, however, and Lansdowne had to rest content with £10,500,000. This was in itself no meanachievement but the loss of £1 million was of course reflected in serious cuts in the programme. Lansdowne wrote to Beach:

> ... we must do the best we can with that sum.
>
> The larger percentage of reserves of guns and mountings must of course be given up, and the remainder of the reduction, or most of it, must fall on the armament of land forts ...
>
> I am sorry to have given you so much trouble but after all we have gone through of late I regard this question of reserves as one of supreme importance.[3]

That was at least one lesson the war had successfully taught.

Brackenbury also took steps to ensure that no successor of his would be faced with the absurd situation of having to

1 Cabinet Papers Cab 37/59 no.51.
2 Ibid.
3 Lansdowne to Beach 29 May 1900. St Aldwyn Papers PCC 84.

reclothe the army whenever it was sent out on active service. This occurred quite apart from the special difficulty over the change from drill to serge. The forces' home dress was still the traditional scarlet though khaki had been used as a war uniform at least as early as 1867 (in Abyssinia)[1] and nobody would have dreamed of fighting anywhere in scarlet in 1899. Peacetime and wartime trousers were also different and, owing to a strange by-product of the drive for economy, so too was footwear. Soldiers received a free pair of boots every six months but they had to pay for any repairs needed. A boot known as 'the clump soled boot' had been evolved which, because of its method of manufacture, seldom needed repair though it had a tendency to cripple its wearer if used to meet the strains of active service. It was therefore necessary to have different patterns of home service boot and foreign service boot, a distinction that did not improve the War Office's reputation for sensible administration. Since troops at home also wore coloured helmets which had to be replaced any force going out had quite literally to be reclothed from head to foot. Brackenbury minuted the Adjutant General (who was responsible for patterns of clothing) 'I submit that a system such as above described is eminently unpractical and unsuited to the requirements of an army which is maintained to enable us to make war.'[2]

Within a fortnight of this minute a departmental committee was set up to consider soldiers' clothing. It reported finally

1 Brian Bond: Victorian Military Campaigns. London 1967 p.108. Byron Farwell: Queen Victoria's Little Wars. London 1973 p.170.

2 DGO to Adjutant General 11 January 1900. Appendix 1 to Report of the Departmental Committee on Soldiers' Clothing 1900-1901 WO 33 210.

on 11 November 1901 having submitted five interim reports. It recommended that there should only be two styles of dress, a full dress which might continue to be scarlet or whatever was traditional for particular units and a working dress which should be the same for all arms of the service whether at home or overseas. The committee further recommended the adoption of a lighter greatcoat, a single design of boot and that all dress should be made of wool unless special climatic conditions required khaki drill. All these recommendations were accepted.[1]

Meanwhile the indefatigable Brackenbury was also applying the lessons of the war to the equipment of the artillery. Reports from South Africa had shown the need for a longer ranging gun with, in the case of field artillery, a more powerful shell. Accordingly a new 13 pounder was designed for the horse artillery and an 18 pounder for the field artillery. Both were quick firers with a range of 6,000 yards. The demand for guns of position to move with the field army had also been met and a mobile 5 inch gun firing a shell of 60 pounds some 10,000 yards was developed. Every division was to have one heavy battery of four of these guns. By July 1901 the design and manufacturing details of all of these guns had been settled.[2]

It should not be forgotten that in the midst of initiating and advising on these very considerable reforms, which transformed the state of readiness of his department, Brackenbury was also successfully carrying on the day to day administration of supplying with ordnance by far the largest British army that

1 Report of the Departmental Committee on Soldiers' Clothing 1900-1901 WO 33 210.

2 Brackenbury to Wolseley 5 July 1901. Wolseley Papers. Letters of Brackenbury no.11.

had up to then existed. Inevitably the strain told upon his health. He wrote to Wolseley that, on 15 December 1902,

> I told the C.in C. I wished to resign that I had become sleepless and nervous, and was no longer fit to carry on responsible work - I saw Mr Brodrick the same day, and it was decided I should be relieved from 1 January. But it has since been decided that I am to try the effect of treatment and a rest, and see whether I am able to return to work in February.
>
> I have a great longing for rest, but on the other hand I have a strong desire myself to see through the work begun in 1899. By the end of March 1904, the modern armament of our fortresses should be complete, and we should have everything ready in Ordnance stores and clothing to equip an army of 135,000 men for service abroad, and maintain them in the field for six months - you will understand that I want to see this through, lest anything should slip before it is accomplished.[1]

Brackenbury did go back to see his reforms through and finally left the War Office in 1904 when they were safely established. Alone among the soldiers he impressed almost every civilian he met (Hicks Beach was, of course, one of the exceptions). His contribution to the successful prosecution of the war, and the placing of the army on a sounder footing after it, probably exceeded that of any other single individual. However, as the head only of a department within an office, and never having commanded in the field, he was barred from the public honours that might have seemed a just recognition. The King was not prepared to make an exception, for fear that honours might thereby be cheapened. The then Secretary of

1 Ibid no.12. 26 December 1902.

State for War, H.O.Arnold-Forster, pressed his claims unavailingly, as he told Balfour:

> Brackenbury, to my great regret, is leaving us in a few weeks. Even if his time had not expired his state of health would not allow him to go on with his work. He has done the state splendid service ...
>
> I should like him to receive a distinguished mark of favour. He has no children and in my opinion a Peerage would be an appropriate and not excessive reward; but I understand the King does not favour this, and prefers a Privy Councillorship. I do not agree, but of course I acquiesce having no option.[1]

The remount department was also reformed shortly after the war. The most urgent need was to place it under a competent head but since the Court of Enquiry had exonerated Truman's administration he could not well be dismissed. He was therefore allowed to continue until his retirement on age grounds in July 1903.[2] However, the reorganisation went on around him as the Quartermaster General himself took over the practical running of the department. Truman himself was not even consulted.[3] There were two main changes. Firstly the establishment of a regular system of annual reports on all foreign horse markets was arranged through British diplomatic missions abroad.[4] Secondly the nucleus of a number of remount establishments were formed in the United Kingdom to provide the trained manpower, so lacking in South Africa, to staff remount depots in time

1 Arnold Forster to Balfour 13 January 1904. Balfour Papers Add Mss.49722. Beach was to become first Viscount and then Earl of St. Aldwyn.

2 Evidence of Brodrick to the Elgin Commission PP Eng.1904 XLI q.21835.

3 Evidence of Truman to the Elgin Commission. Ibid q.12852-3.

4 Evidence of Clarke to the Elgin Commission. Ibid q.12919.

of war.[1] These two measures went far towards removing the causes of the inefficient mounting of the army during the war.

After the war, because of great public disquiet about the army and the War Office, the government appointed a Royal Commission to enquire into the military preparations and other matters concerning the war in South Africa. The Commission, which was chaired by Lord Elgin, was established not as a systematic attempt to profit from the lessons of the war but because, in the words of Lord Salisbury, 'Some proposal of this kind seems to me essential if we are to get out of a rather awkward corner.'[2] It was never intended that the Commission should achieve anything. Salisbury promised the King, who was opposed to the idea of having one at all, that 'every effort will be made to render the Inquiry innocuous, and those efforts will probably be successful.'[3]

In the event Salisbury must have considered himself unsuccessful for although the report of the Commission was inconclusive in that it was unable to recommend what steps should be taken to reform the War Office it fairly clearly showed that the existing system was unsatisfactory. Moreover the evidence presented, which was also published, showed in some detail the failure of the top civil and military authorities to work together. This was no secret following the clash between Lansdowne and Wolseley in the House of Lords over what

1 Evidence of Brodrick to the Elgin Commission. Ibid q.21831.

2 Salisbury to Balfour 4 January 1901. Balfour Papers Add.Mss. 49691.

3 Quoted in Philip Magnus: King Edward the Seventh. London 1964 p.296.

the Commander in Chief's duties really were,[1] but the extent to which it had vitiated effective preparations for the war now became apparent. It also became clear that nobody had been able to put forward a satisfactory solution to the difficulties caused by the conflicting claims of the Commander in Chief and the Secretary of State. Both Wolseley and Roberts demanded more power for the Commander in Chief but their suggestions were not politically realistic. As Salisbury had written earlier about Roberts' proposals: 'I do not think that Roberts fully realises the significance of our constitutional system, it may be good or bad, but we have got to make it work.'[2] Lord Esher in a minority report recommended that the position of Commander in Chief be abolished and the War Office reorganised on the lines of the Board of Admiralty.[3] A War Office (Reconstitution) Committee of three chaired by Lord Esher was established to submit detailed proposals along these lines.

The report of the Esher committee went over much familiar ground showing the excessive centralisation of the War Office despite previous attempts to reduce it. In the covering letter to the Prime Minister which accompanied part II of the report (which was in three parts) the committee reported that 'administration is as much centralised in the War Department today as it was ten years ago.'[4] In the report itself the Committee said that 'The army is tied and bound in the toils of excessively complex and minute regulations.'[5] They also reported

1 See p. 35

2 Salisbury to Brodrick 11 January 1901. Brodrick Papers PRO 30 67/7.

3 PP Eng.1904 XL pp.145-146.

4 Report of the War Office (Reconstitution) Committee Part II PP Eng.1904 VIII.

5 Ibid p.9.

that 'The department of the Accountant General has become a huge and costly machine which is supposed to control expenditure by the aid of involved regulations which serve to aggrandise its power over the military branches.'[1] Although much of this had been said before the firm action which followed was unprecedented. Following the 1901 Committee on War Office Decentralisation one cynical Member of Parliament in a Committee of the House 'wished to warn the Committee against the danger of taking this report too seriously, because it was the 41st Commission which had sat on the War Office since the year 1815, and the result of all these Commissions had been to land them in the position in which they found themselves a year and a half ago.'[2] He was right. The reorganisation of 1901 which followed the report amounted to very little. The principal effect on the administration of the supply services was to reduce slightly the amount of low level civilian interference and to give the soldiers a greater financial responsibility. A number of civilian clerks were replaced by soldiers.

However, the public mood was very different in 1904 after the publication of the Elgin Commission report and evidence and the demand for more fundamental change could not be ignored. Indeed Brodrick warned his Cabinet colleagues not to get carried away by popular feeling and reminded them of the success of the supply services in the war. 'In the present temper of the public mind, any announcement of change will be welcomed, and even the report of the Committee shows a tendency to regard everything as unsound in the conduct of the late war, although the successive Commanders in Chief in South Africa gave warm

1 Ibid p.15.

2 Hansard XCVIII col.160.

evidence, with rare exceptions, as to the quality of troops and material of war supplied to them, and as to the efficiency of the administration of these services from Headquarters.'[1] Despite his obvious self interest in making the point he was perfectly right.

The report of the Esher Committee was carried out more or less in its entirety though it took some two years to complete the changeover. It was the first major reorganisation of the War Office since the Crimean War despite all the Commissions and Enquiries that had taken place in the interim. The position of Commander in Chief was done away with. A Committee of Imperial Defence, chaired by the Prime Minister, where representatives of the army & the navy met with members of the Cabinet was established with a secretariat, and an Army Council with four military members and three civilians was set up within the War Office. The first military member was the new Chief of the General Staff. In addition to the Army Council there was an Inspector General of the Forces whose function was to inspect units and ensure that the policy of the Army Council was being carried out. This organisation provided the machinery so conspicuously lacking before the South African war for a proper collaboration between the civil and military authorities, and between the military heads of departments. A new General Staff was created to provide the planning capacity that the Commander in Chief had been unable to provide. To try and keep the War Office free to attend to its proper duties the United Kingdom was divided into a number of military districts and the administration of these districts

1 Cabinet Papers. PRO Cab 37/68 no.12.

was devolved to the generals commanding them who were given genuine power, including financial control with civilian assistance, in their districts.

Within the War Office the old antagonism between the civil and military branches was overcome by giving the military departments full control of their own affairs. The posts and departments of the Accountant General and the Director of Army Contracts were abolished and the elements subsumed under the appropriate military sections. The military departments were themselves reorganised. The Quartermaster General in addition to all his other duties took over the supply of clothing and ordnance stores to the forces. To assist him he had four Directors who were intended to leave him free of routine administrative duties. The Directors were for transport and remounts; movements and quarterings; supplies and clothing; and equipment and ordnance. The Director General of Ordnance was replaced by a Master-General of Ordnance who had responsibility for armaments, ordnance factories, fortifications and the maintenance of barracks and ranges. The post of Inspector General of Fortifications was abolished. Inspection of food supplies and ordnance stores of all types, both from the trade and from the ordnance factories, passed to the department of the Inspector General of the Forces.[1]

These changes reflected the most striking features of the administrative side of the South African war which were the utter inability of the War Office and the government to foresee and prepare for the scale and type of the conflict that they had at least four years' warning was coming, and

1 Ibid PRO Cab 37/71 no.88 and PRO Cab 37/74 no.16.

the success of the same War Office and the supply services of the army in the field to cope with it when it came. A force five times larger than any anticipated, and ten times larger than any that had left the country for a century, was maintained in the field in a huge, distant and often inhospitable country. The changes in material were minor, with the exception of the re-equipment of the artillery and the rationalisation of the peacetime dress of the soldier. The re-equipment of the artillery was under consideration in 1898 and would have occurred even without the war, though the experience of South Africa was invaluable in deciding which features the new guns should incorporate. Changes in the organisation of the supply departments of the army itself were equally small. All the major changes were made at the highest level of the War Office and in the defence machinery of the Cabinet. These reforms aimed to avoid any repetition of the situation at the outbreak of the South African war which might have caused a disaster far more serious than the reverses of December 1899. That no such disaster occurred and that adequate supplies were maintained was as great a success as any achieved in the war.

Appendix A

STANHOPE MEMORANDUM

Her Majesty's Government have carefully considered the question of the general objects for which our Army is maintained. It has been considered in connection with the programme of the Admiralty, and knowledge of the assistance which the Navy is capable of rendering in the various contingencies which appear to be reasonably probable, and they decide that the general basis of the requirements from our Army may be correctly laid down by stating that the objects of our military organisation are :-

a) The effective support of the civil power in all parts of the United Kingdom
b) To find the number of men for India that has been fixed by arrangement with the Government of India
c) To find garrisons for all our fortresses and coaling stations at home and abroad, according to a scale now laid down, and to maintain those garrisons at all times at the strength fixed for a peace or war footing
d) After providing for these requirements, to be able to mobilise rapidly for home defence two Army Corps of Regular Troops and one partly composed of Regulars and partly of Militia, and to organise the Auxiliary Forces not allotted to Army Corps or garrisons, for the defence of London and for the defensible positions in advance, and for the defence of mercantile ports
e) Subject to the foregoing considerations and to their financial obligations, to aim at being able in case of necessity, to send abroad two complete Army Corps, with Cavalry Division and Line of Communication. But it will be distinctly understood that the probability of the employment of an Army Corps in the field of any European war is sufficiently improbable to make it the pressing duty of the military authorities to organise our forces efficiently for the defence of this country.

E.S.

June 1st 1891

Appendix B

From: Return of horses and mules purchased by the Army Remount Department for South Africa from October 1899 to June 1902. Appendix 38a to Minutes of Evidence to the Elgin Commission PP Eng.1904 XLII p.259.

Source	Period	Mules	Horses	Percentage loss on voyage: Mules	Horses
UK	Oct 1899 - 31-3-00	133	18213	0.4	7.57
	Apr 1900 - 31-3-01	33	19929	-	5.52
	Apr 1901 - 31-3-02	1	32097	-	7.48
	Apr 1902 - 30-6-02	-	6591	-	3.6
	Total	167	76830		
Argentina	Nov 1899 - 31-3-00		11666		0.51
	Apr 1900 - 31-3-01		14276		0.51
	May 1902 - June 02		674		0.26
	Total		26616		
Canada	Apr 1900 - 31-3-00		3785		5.24
	Apr 1901 - 31-3-02		9777		3.94
	Apr 1902 - June 02		1049		0.49
	Total		14611		
Australia & New Zealand	Oct 1899 - 31-3-00		3432		2.2
	Apr 1900 - 31-3-01		6385		4.29
	Apr 1901 - 31-3-02		10014		5.01
	Apr 1902 - June 02		744		0.27
	c.i.f. 1901 - 1903		2961		
	Total		23536		
Cyprus	March 1900	128		Nil	
Hungary	May 1900 - 31-3-01		11541		3.02
	Apr 1901 - 31-3-02		30101		1.26
	Apr 1902 - June 02		18710		0.59
	Total		60352		
Italy	Oct and Nov 1899	7003		0.39	
Spain	Sep 1899 - 31-3-00	6940		0.72	
	Apr 1900 - 31-3-01	8291		5.41	
	Total	15231			
Uganda	June 1902	306		Nil	
USA	Nov 1899 - 31-3-00	18445	1248	3.23	1.97
	Apr 1900 - 31-3-02	33924	36088	2.99	4.67
	Apr 1901 - 31-3-02	25478	62405	1.08	2.34
	Apr 1902 - June 02	3677	10098	0.7	1.55
	Total	81524	109839		
Grand Total		104359	311784		

Appendix C

The Contracts Branch was divided into sections as follows:-

D.C.1

Tools
Machinery
Ironmongery etc.
Cutlery
Hollow ware
Tinware
Lamps
Electrical stores
Scientific instruments
Earthenware
Woodwork

D.C.2

Provisions
Forage
Gas, water and coal
Medicines
Building works
Vessels
Transport

D.C.3

Guns and small arms
Gun carriages
Ammunition
Explosives
Chemicals and disinfectants
Oils and paint
Soap, soda etc.
Metals
Timber

D.C.4

Clothing
Textile fabrics
Indiarubber goods
Harness and saddlery
Accoutrements
Boots and shoes
Leather goods
Brushes and brooms
Cordage etc.

Appendix D

Equipment Carried on the Soldier

Cavalry Soldier

1 helmet, 1 serge frock, 1 pair pants, 1 flannel shirt, 1 flannel belt, 1 pair socks, 1 pair boots and laces, 1 pair braces, 1 identity card, 1 field dressing, 1 haversack, 1 pair puttees, 1 seakit cap, 1 carbine, 1 cavalry sword, 1 lance (when carried), waist belt and slings, 1 bandolier, 50 rounds SAA, 1 water bottle and strap, 1 mess tin and strap, 1 knife and lanyard, 1 greatcoat and belt, 1 blanket, 1 fork and spoon, 1 pair spurs.

Rolled in waterproof sheet - 1 jersey, 1 pair socks, 1 housewife, 1 tin grease, 1 blanket, 1 flannel shirt, 1 pair canvas shoes, 1 towel and soap, stable cleaning kit.

In kit bag - 1 serge or drill frock, 1 pair socks, 1 pair drawers, 1 small book, 1 clothes brush, 1 field service cap, 1 pair serge or drill trousers, 1 flannel belt, 1 razor and brush, 1 pair boots and laces.

Infantry Soldier

1 helmet, 1 serge frock, 1 pair trousers, 1 flannel shirt, 1 flannel belt, 1 pair socks, 1 pair boots, 1 pair braces, 1 identity card, 1 field dressing, 1 knife and lanyard, 1 sea kit cap, 1 rifle and sling, 1 bayonet and scabbard, braces, waist belt and frog, 2 pouches, 100 SAA, 1 haversack, 1 water bottle and strap, 1 mess tin and strap, 1 fork and spoon, 1 greatcoat and strap, 1 blanket.

Rolled in waterproof sheet - 1 jersey, 1 pair socks, 1 housewife, 1 tin grease, 1 blanket, 1 flannel shirt, 1 pair canvas shoes, 1 towel and soap.

In kit bag - 1 serge or drill frock, 1 pair socks, 1 small book, 1 clothes brush, 1 field service cap, 1 pair serge or drill trousers, 1 flannel belt, 1 razor and brush, 1 pair boots and laces.

Defence Papers Additional Reprint of the Principal Army Order and Lines of Communication Orders from 1st August 1900 to 30th September 1900.
DD 7/204
L of C Order 3/9/00

Cape Town Archives

Appendix E

Distribution of Supplies at the end of November 1899.

Depot	Quantity	Men	Animals
Western Line:			
Orange River	3 months	2000	3000
De Aar	3 months	11000	4000
Cape Town	3 months	5000	1000
Midland Line:			
Naauwpoort	3 months	2000	1200
Port Elizabeth	3 months	5000	3000
Eastern Line:			
Queenstown	3 months	1800	900
East London	3 months	6000	1100
Natal:			
Durban to Colenso	3 months	24000	14000

Appendix F

Distribution of Supplies between the Orange and Modder Rivers February 1900.

Depot	Quantity	Men	Animals
Orange River	10 days	150,000	100,000
Honey Nest Kloof	10 days	3,000	1,500
Enslin	10 days	1,000	500
Graspan	10 days	6,000	500
Belmont	10 days	4,000	1,500
Witteputs	10 days	300	-
Modder River	60 days	20,000	7,000

Appendix G

Extracts from Army Standing Orders 6 November 1899.

1 The daily ration for troops in the field will be as follows:-

Meat - One pound fresh or preserved.
Equivalents:-
Cheese 2oz = 4oz fresh or 3oz preserved meat.
Bacon 4oz = 4oz fresh or preserved meat.
Maconachies ration = a ration of meat and vegetables.
NB When the supply of cattle is abundant the ration of fresh meat may, during active operations, be increased to 1¼ lb.

Breadstuffs - 1¼ lb fresh bread or one pound biscuit, flour or meal. When flour or meal is issued seven cakes of patent yeast will, if available, be supplied per 100 lb of flour.

Groceries - ⅔ oz coffee or ⅓ oz tea or half the ration of each or 1 oz chocolate, with 3 oz sugar, ½ oz salt and 1/36 oz pepper. The sugar ration includes any required for lime juice.

Vegetables - 1 oz compressed vegetables or ¼ lb onions or ½ lb potatoes or other fresh vegetables, or 2 oz split peas or 2 oz rice or one tin pea soup.

2 Emergency rations - One Field Service ration will be carried on the person by each officer and soldier for use only in extremity.

For occasional issues when available:-

Lime juice - ½ oz (1/10 of a gill) when fresh vegetables are not obtainable and the medical officer considers the issue necessary. (Issues of lime juice will not be made when a jam ration is issued.)

Spirits - One sixty fourth of a gallon (½ gill) at the discretion of general officers commanding divisions or detached bodies of troops, but not oftener than twice a week. (An extra ration of tea, or other equivalent, may be issued to abstainers in lieu of spirits whenever a ration is sanctioned for the troops.)

Jam or Marmalade - ¼ lb tin may be issued to the troops daily when a sufficient supply is available.

Tobacco - In quantities not exceeding 1 lb per man per month on repayment at 1d per oz.

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